
The Dark Side of Shared Leadership in Organizational Change Management and The Moderating Role of Automation and Type of Change as Contextual Variables.

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PhD in Management, specialization in Human Resources and Organizational Behavior

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**BUSINESS
SCHOOL**

Department of Human Resources and Organizational Behavior

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Resumo

Este estudo procura compreender a forma como a interdependência de tarefas, a ligação social, a partilha de conhecimentos e a cultura de liderança partilhada afetam as crenças dos trabalhadores sobre a mudança organizacional, incluindo os efeitos moderadores da automatização e do tipo de mudança organizacional. O estudo recorreu a um desenho sequencial explicativo para responder às questões de investigação. O estudo incluiu uma amostra de 500 trabalhadores de pequenas e médias empresas (PME) egípcias no Grande Cairo, através de dois estudos quantitativos seguidos de um estudo qualitativo. Os estudos quantitativos recorreram ao SPSS versão 22 para a análise demográfica e ao Smart PLS 4 para testar as hipóteses de investigação.

O teste de hipóteses revelou que a Interdependência de Tarefas possui um efeito positivo na crença dos trabalhadores sobre a mudança organizacional. De igual forma, a Ligação Social e a Partilha de Conhecimentos influenciam positivamente a convicção sobre a mudança organizacional. A Cultura de Liderança Partilhada não influencia significativamente a crença sobre a mudança, sugerindo que a simples distribuição de funções de liderança entre os membros da equipa, sem outros comportamentos organizacionais de apoio, não aumenta as perceções positivas da mudança. O estudo mostra também que a automatização modera a relação, aumentando o efeito positivo da Interdependência de Tarefas e da Ligação Social na crença de mudança positiva, diminuindo-a significativamente quando combinada com a liderança partilhada. A mudança transformacional modera a relação, aumentando o efeito positivo da conexão social na crença sobre a mudança. Este tipo de mudança modera negativamente o impacto da partilha de conhecimentos na crença sobre a mudança.

A abordagem qualitativa explora a forma como a Liderança Partilhada melhora a adaptabilidade da equipa e a qualidade das soluções propostas. Na gestão da mudança, a eficácia desafia processos bem estruturados, incluindo a elaboração da visão e revisões meticulosas do progresso, que asseguram respostas adaptativas ao longo do processo de mudança. As competências e os conhecimentos especializados dos funcionários são cruciais, com um enfoque significativo no reforço dos conhecimentos através de formação e educação direcionadas para ajudar os trabalhadores para as transições associadas à mudança.

Palavras-chave: Interdependência de tarefas, ligação social, partilha de conhecimentos, liderança partilhada, automatização, mudança organizacional, pequenas e médias empresas (PME) egípcias.

Abstract

This study examines how task interdependence, social connectedness, knowledge sharing, and shared leadership culture affect employees' beliefs about organizational change including the moderating effects of automation and the type of change. The study employed an explanatory sequential design to answer the research questions. The study targeted 500 employees from Egyptian small and medium enterprises (SMEs) in Cairo through two quantitative studies followed by a qualitative one. The quantitative studies used SPSS version 22 for demographic analysis, and Smart PLS 4 for testing the research hypotheses.

Hypothesis testing revealed that Task Interdependence shows a strong positive effect on employees' belief about organizational change. Similarly, Social Connectedness and Knowledge Sharing positively influence the belief about change. Shared Leadership Culture does not significantly influence the belief about change, suggesting that simply distributing leadership roles among team members without other supportive organizational behaviours do not enhance positive change perceptions. Automation moderates the relationship by enhancing the positive effect of Task Interdependence and Social Connectedness on positive change belief, significantly diminishing it when combined with shared leadership. Transformational change moderates by enhancing the positive effect of social connectedness on the belief about change. This type of change negatively moderates the impact of knowledge sharing on the belief about change.

The qualitative phase explores how Shared Leadership improves team adaptability and solution quality. In change management, effectiveness challenges on well-structured processes, including vision crafting and meticulous progress reviews, which ensure adaptive responses throughout the change process. Employee skills and expertise are crucial, with a significant focus on enhancing knowledge through targeted training and education to equip staff for transitions.

Keywords: Task interdependence, social connectedness, knowledge sharing, shared leadership, automation, organizational change, Egyptian small and medium enterprises (SMEs).

- J21: Labor Force and Employment; Size; and Structure.
- J22: Time Allocation and Labor Supply.
- J24: Human Capital; skills; Occupational Choice; Labor Productivity.
- L21: Business Objectives of the Firm.
- M50: General.

Table of Contents

Acknowledgments.....	i
Resumo	ii
Abstract	iv
List of Tables	xi
List of Figures	xiii
Chapter 1	1
1.1 Introduction	1
1.2 Background of the study.....	2
1.3 Research Problem.....	4
1.4 Relevance and significance	7
1.5 Research Questions	8
1.6 Research Aim	9
1.7 Structure of the thesis	12
1.9 Summary	15
Chapter 2	16
Literature Review and Theoretical Framework.....	16
2.1 Introduction	16
2.2 Overview of Change Management.....	17
2.3 Positive Belief about Change by Leadership capabilities	20
2.3.1 Factors Contributing to Positive Belief about Change.....	21
2.3.1.1 Fear.....	21
2.3.1.2 Inertia	23
2.3.1.3 Time and workload.....	24
2.4 Shared leadership	25
2.4.1 Why shared leadership?	27
2.4.1.1 Task Interdependence.....	29
2.4.1.2 Social connectedness.....	29
2.4.1.3 Knowledge sharing.....	29
2.4.1.4 Shared Leadership Culture	30
2.5 Studies Linking Shared Leadership with Resistance to Change	30
2.5.1 Shared leadership constructs with resistance to change.	31
2.5.2 Shared leadership contexts, antecedents, consequences, and moderators	33

2.5.3	Other Theoretical Frameworks	33
2.6	Hypotheses Development	37
2.6.1	Task interdependence (Shared leadership) and Positive belief about change (Fear, Inertia, Time and Workload)	37
2.6.2	Social connectedness (Shared leadership) and Positive belief about change (Fear, Inertia, Time and Workload).....	38
2.6.3	Knowledge sharing (Shared leadership) and Positive belief about change (Fear, Inertia, Time, and Workload).....	40
2.6.4	Shared leadership culture (Shared leadership) and Positive belief about change (Fear, Inertia, Time and Workload)	42
2.6.5	Moderating role of Automation between Shared leadership attributes and Positive belief about change	43
2.6.6	Moderating role of the type of change (strategic and incremental change) between Shared leadership attributes and Positive belief about change	47
2.7	Summary	52
Chapter 3	.....	54
Validation of Shared Leadership Model and the Relationship between Shared Leadership and Organizational Change Management Moderated by Automation – Quantitative Study (1)	.....	54
3.1	Introduction	54
3.1.1	Automation, Task Interdependence, Social Connectedness, Knowledge Sharing, Shared Leadership Culture.....	55
3.2	Research Methodology.....	56
3.2.1	Research Design.....	56
3.2.2	Research approach	57
3.2.3	Survey method	58
3.2.4	Sampling technique.....	59
3.2.5	Sample size and data collection procedure	60
3.2.6	Measurement scales and items.....	62
3.2.7	Validity	66
3.2.8	Practicability and accessibility.....	66
3.2.9	Suitability and viability.....	66
3.2.10	Data analysis	67
3.3	Results	68

3.3.1	Demographic information.....	68
3.3.2	Exploratory Factor Analysis (EFA)	70
3.3.2.1	Task interdependence, social connectedness and inertia	71
3.3.2.1.1	Common method bias (CMB)	71
3.3.2.1.2	Factor loadings	73
3.3.2.1.3	KMO and Bartlett's Test.....	74
3.3.2.2	Knowledge sharing and shared leadership culture.	75
3.3.2.2.1	Common method bias (CMB)	75
3.3.2.2.2	Factor loadings	77
3.3.2.2.3	KMO and Bartlett's Test.....	78
3.3.2.3	Time and workload, automation, fear of change implementation and fear about readiness to change.	78
3.3.2.3.1	Common Method Bias (CMB)	78
3.3.2.3.2	Factor loadings	81
3.3.2.3.3	KMO and Bartlett's test.....	84
3.3.3	Cronbach alpha (reliability analysis)	85
3.4	Structural Equation Modeling (SEM) using Smart PLS 4	86
3.4.1	The Model Fit	86
3.4.2	The Measurement Model (the Outer Model).....	87
3.4.2.1	Correlation Analysis and Measurement Model Loadings.....	89
3.4.2.2	Indicator Reliability.....	90
3.4.2.3	Internal Consistency Reliability	90
3.4.2.4	Convergent Validity	91
3.4.3	Assessment of Heterotrait-Monotrait Criterion	91
3.5	Checking structural path significance in Bootstrapping	95
3.5.1	P-values of outer loadings	95
3.5.2	Structural Equation Model.....	955
3.6	Summary	99
Chapter 4	.....	100
Automation, Type of organizational Change between Shared Leadership and Positive belief About Change - Quantitative Study (2)	.....	101
4.1	Introduction	101
4.2	Research Methodology.....	101
4.2.1	Measurement Scales.....	101

4.2.2	Data collection and sample	102
4.3	Results	102
4.3.1	Model 2: “Automation” as a Moderator	102
4.3.1.1	The Measurement Model (the Outer Model)	102
4.3.1.2	Measurement Model Loadings.....	103
4.3.1.3	Indicator Reliability.....	105
4.3.1.4	Internal Consistency Reliability	105
4.3.1.5	Convergent Validity	105
4.3.1.6	Heterotrait-Monotrait with Moderator	106
4.3.2	Checking outer loadings’ significance in Bootstrapping.....	109
4.3.3	Structural Equation Model.....	109
4.3.2.1	Moderator Effects of Automation	111
4.3.2.2	Adjusted Coefficient of Determination (R^2 Adjusted).....	114
4.4	Summary	120
4.5	Model 3: “Type of Change” as a Moderator	122
4.5.1	Structural Equation Model.....	122
4.5.1.1	The Measurement Model (the Outer Model)	123
4.5.1.2	Measurement Model Loadings.....	123
4.5.1.3	Indicator Reliability.....	125
4.5.1.4	Internal Consistency Reliability	125
4.5.1.5	Convergent Validity	125
4.5.1.6	Heterotrait-Monotrait with moderator as Type of Change.....	126
4.5.2	Checking outer loadings’ significance in Bootstrapping.....	129
4.5.3	Structural Equation Model.....	129
4.5.4	The Adjusted Coefficient of Determination (R^2 Adjusted)	133
4.6	Summary	139
Chapter 5	.....	142
Qualitative Findings	.....	142
5.1	Introduction	142
5.1.1	Different factors of shared leadership and the success or failure of organizational change implementations?.....	142
5.1.2	Individual and organizational factors and shared leadership dynamics (e.g., task interdependence, social connectedness, knowledge sharing, shared leadership culture) in the change management process.....	144

1. Task Interdependence	144
2. Social Connectedness.....	144
3. Knowledge Sharing.....	144
4. Shared Leadership Culture.....	144
5. Change Management Process	145
6. Individual and Organizational Factors.....	145
5.1 Research Methodology.....	147
5.1.1 Qualitative research method	147
5.1.1.1 Semi-structured interviews.....	147
5.1.1.2 Transparency and ethical considerations.....	148
5.2 Data analysis for Qualitative data	149
5.3 Results	149
5.3.1 Thematic analysis and coding	149
5.3.2 Demographic information.....	151
5.3.3 Development of Themes and sub-themes	154
5.4 Contextual Factors of Shared Leadership in Change Management	158
5.5 Cluster Bar Charts	162
5.5.1 Theme 1: Change Management	163
5.5.2 Theme 2: Employee Skills and Expertise	165
5.5.3 Theme 3: Environment of organization	166
5.5.4 Theme 4: Impact on organizational change	169
5.5.5 Theme 5: Implementation strategies	170
5.5.6 Theme 6: Organizational Culture and Social Dynamics.....	172
5.5.7 Theme 7: Organizational Role	174
5.5.8 Theme 8: Organizational Transformation.....	176
5.5.9 Theme 9: Programs and Schemes for Organizations	178
5.5.10 Theme 10: Resistance to Change	180
5.5.11 Theme 11: Shared Leadership Factors.....	183
5.5.12 Theme 12: Team Management	185
5.5.13 Theme 13: Size	187
5.5.14 Theme 14: Tools and Technologies	188
5.6 Word Clouds	190
5.7 Cluster diagram	191
5.8 Findings and practical implications.....	193

5.9	Summary	195
Chapter 6	.....	197
Discussion and Conclusion	.....	197
6.1	Introduction	197
6.2	Validation of the Shared Leadership in Organizational change.....	198
6.3	Integration of Quantitative and Qualitative findings.....	199
6.3.1	Task interdependence*automation – positive belief about change.....	199
6.3.2	Social connectedness*automation – positive belief about change	201
6.3.3	Knowledge sharing*automation – positive belief about change	203
6.3.4	Shared leadership culture*automation – positive belief about change.....	205
6.3.5	Task interdependence*type of organizational change – positive belief about change	207
6.3.6	Social connectedness*type of organizational change – positive belief about change	210
6.3.7	Knowledge sharing*type of organizational change – positive belief about change	212
6.3.8	Shared leadership culture*type of organizational change – positive belief about change.....	214
6.4	Managerial implications.....	220
6.4.1	Managerial implications for Egyptian SMEs.....	220
6.4.2	Managerial implications for Managers	221
6.4.3	Managerial implications for employees.....	223
6.4.4	Limitations of the study	224
6.4.5	Future directions	225
References	.....	228
Appendices	.....	246
	Appendix A: Themes and Sub-themes	246
	Appendix B: Theoretical Model before	247
	Appendix C: Theoretical Model after (Final)	247
	Appendix D: Literature review table (the relationship between SLC and PBC is moderated by the type of change)	248

List of Tables

Table 2.1: Theoretical frameworks that tried to link shared leadership constructs with resistance to change.....	32
Table 2.2: Shared leadership contexts, antecedents, consequences, and moderators.....	35
Table 3.1: Reliability scores for the constructs.....	61
Table 3.2: Measurement scales and items.....	62
Table 3.3: Demographic information.....	69
Table 3.4: Common method bias (CMB) for task interdependence, social connectedness, and inertia.....	72
Table 3.5: Factor loadings for task interdependence, social connectedness, and inertia (EFA).....	73
Table 3.6: KMO and Bartlett's test for task interdependence, social connectedness, and inertia.....	75
Table 3.7: Common Method Bias (CMB).....	76
Table 3.8: Factor loadings for knowledge sharing and shared leadership culture.....	77
Table 3.9: KMO and Bartlett's Test for knowledge sharing and shared leadership culture	78
Table 3.10: Common method bias (CMB) for time & workload, automation, fear of change implementation, and fear about readiness to change.....	80
Table 3.11: Factor loadings for time and workload, automation, fear of change implementation, and fear about readiness to change.....	82
Table 3.12: KMO and Bartlett's test for time & workload, automation, fear of change implementation, and fear about readiness to change.....	85
Table 3.13: Cronbach Alpha.....	86
Table 3.14: Indicators' reliability & validity.....	89
Table 3.15: Discriminant validity	94
Table 3.16: P-values of outer loadings.....	95
Table 3.17: Inner model path coefficients sizes and significance.....	97
Table 3.18: Summary of the Hypothesis.....	100
Table 4.1: Indicators' reliability & validity.....	104
Table 4.2: Discriminant validity.....	108
Table 4.3: Outer loadings' significance in Bootstrapping.....	110
Table 4.4: Inner model path coefficients sizes and significance.....	112

Table 4.5: Summary of the hypotheses.....	121
Table 4.6: Indicators' reliability & validity.....	124
Table 4.7: Discriminant validity.....	128
Table 4.8: Outer loadings' significance in Bootstrapping.....	130
Table 4.9: Inner model path coefficients sizes and significance.....	131
Table 4.10: Summary of the moderating hypotheses testing (The type of change).....	140
Table 5.1: Key Dynamics of Shared Leadership in Change Management Processes.....	145
Table 5.2. Demographic information.....	152
Table 5.3. Themes and sub-themes.....	156
Table 5.4. Addressing research questions.....	159
Table 6.1: Impact of Organizational Dynamics on Positive Belief about Change: A Shared Leadership Perspective.....	219

List of Figures

Figure 2.1: Conceptual Framework.....	52
Figure 3.1: Mixed methods research designs (Saunders et al, 2019).....	57
Figure 3.2: Structural Equation Modeling (Direct effects)	98
Figure 4.1: Automation x Task Interdependence → Positive belief about change.....	115
Figure 4.2: Automation x Social connectedness → Positive belief about change.....	117
Figure 4.3: Automation x Knowledge sharing → Positive belief about change.....	118
Figure 4.4: Automation x Shared leadership culture → Positive belief about change.....	119
Figure 4.5: Structural Equation Modeling (Moderating effect of Automation).....	120
Figure 4.6: Type of Change x Task Interdependence → Positive belief about change.....	135
Figure 4.7: Type of Change x Social connectedness → Positive belief about change.....	136
Figure 4.8: Type of Change x Knowledge sharing → Positive belief about change.....	137
Figure 4.9: Type of Change x Shared leadership culture → Positive belief about change.....	138
Figure 4.10: Structural Equation Modeling (Moderating effect of the type of change)	139
Figure 5.1: Change Management.....	164
Figure 5.2: Employees skills and expertise.....	166
Figure 5.3: Environment of organization.....	168
Figure 5.4: Impact on organizational change.....	170
Figure 5.5: Implementation strategies.....	172

Figure 5.6: Organizational culture and social dynamics.....	174
Figure 5.7: Organizational role	176
Figure 5.8: Organizational transformation.....	178
Figure 5.9: Programs and schemes for organizations	180
Figure 5.10: Resistance to change.	183
Figure 5.11: Shared leadership factors.....	185
Figure 5.12: Team Management	187
Figure 5.13: Size	188
Figure 5.14: Tools and technologies.....	189
Figure 5.15: Word cloud.....	191
Figure 5.16: Cluster diagram.....	192
Figure 5.17 Change Management Process.....	194

Chapter 1

Introduction

1.1 Introduction

With all the complications and failures associated with the implementation and management of organizational change it is important to understand its dynamics and think about the different elements that may contribute to reduction of such high rate of failure. This chapter aims to reach deep knowledge and understanding into these complex dynamics, revealing how shared leadership culture, social connectedness, knowledge sharing, and task interdependence interact to promote optimistic/positive beliefs about change. This chapter mainly discusses the research background, then identifies the research gaps from the previous literature studies and writes the problem statement. In addition, the study develops the research objectives and defines the rational contributions to the research. Additionally, this research aims to provide a thorough framework for organizations looking to navigate the turbulent waters of transformation in today's unstable business environment by shedding light on the moderating roles of the type of change and automation (Angonese & Lavarda, 2014; Burhan & Khan, 2024; Sellers-McGauley, 2024). Organizational evolution is intrinsically characterized by change, which has always presented opportunities and challenges (Ali et al., 2023; Çelikler & Aksan, 2016; Wang & Jin, 2023). Any change success is greatly influenced by how members of the organization perceive, accept, and adapt to change (Cheng et al., 2023; Ibe 2023). Therefore, it is crucial to understand the complex factors that influence these viewpoints and attitudes, especially in light of the quick-moving technological developments and global shifts that are constantly changing the business landscape. The internal organizational factors of task interdependence, social connectedness, knowledge sharing, and a shared leadership culture are particularly significant among these determinants (Jamshed & Majeed, 2023). Intricately woven into an organization's culture and daily operations, these components can be crucial in forming favorable beliefs about change.

The idea of task interdependence emphasizes how connected the roles and responsibilities of employees are (Jamshed & Majeed, 2023). Task interdependence necessitates more coordination and collaboration, which affect how changes are viewed and incorporated. However, during times of transition, social connectedness—the ties and networks that bind an organization's members—serve as a channel for assistance, communication, and mutual understanding. Organizations can

foster a culture where change is actively welcomed by combining knowledge sharing with the free exchange of information, insights, and expertise.

However, leadership is no longer solely the review of a select few in today's more democratic workplaces (Sellers-McGauley, 2024). The secret to fostering a more accepting attitude toward change may lie in shared leadership cultures, where leadership roles and responsibilities are shared and collective. After all, they are more willing to steer the ship in new directions if they feel they share responsibility for doing so.

1.2 Background of the study

The only constant element in the ever-progressing field of organizational development is change. The growing significance of adaptability and change readiness in organizations, a thorough understanding of the dynamics fostering a positive belief about change is essential (Chowdhury & Shil, 2022). The study examines the complex relationships that shape individual's attitudes toward change, highlighting the critical functions of task interdependence, social connectedness, knowledge sharing, and shared leadership culture. The degree to which employees depend on one another to complete their tasks is reflected by task interdependence. Its significance in the context of change cannot be overstated, as interdependent tasks impact the entire organization. It makes sense to assume that the degree of task interdependence can significantly affect employees' perceptions and readiness for change, given the interconnected nature of tasks in the organizational structures (Bordia et al., 2004). Any organizational culture must be based on social connections and interpersonal relationships. The relationships that people have with one another within an organizational setting are referred to as social connectedness, and it is crucial in determining how employees view change. According to the theory of Argote and Ingram (2000) knowledge transfer, which is based on social connections, is the basis for competitive advantage in businesses. A workforce with strong connections is more willing to accept and adapt to change favorably because they can draw on the strength of shared values and group cohesiveness.

Knowledge sharing in the context of organizational behavior refers to the sharing or transferring of knowledge between individuals, groups, or entire organizational units (Connelly & Kelloway, 2003). (Shan et al., 2023) highlight the importance of knowledge sharing in organizations and contend that knowledge-sharing mechanisms significantly impact organizational response to change. Employees are better equipped when information is freely exchanged, which increases their willingness to adapt to novel circumstances and procedures. According to Carson, (Marrone et al., 2007), shared leadership departs from conventional hierarchical models and emphasizes a distributed leadership model where multiple team members participate in the team's

leadership. D'Innocenzo et al., (2016) stressed that shared leadership forms can be favorably related to team performance. By its very nature, shared leadership encourages inclusivity, which can be crucial in fostering a favorable belief toward change. Shared decision-making, inclusivity in strategy development, and group problem solving result in more efficient change management procedures.

Broad-based or gradual change can occur within an organization. Armenakis & Bedeian (1999) distinguished strategic change, which is extensive and high-impact, and incremental change, which is subtle and gradual. The determinants above (task interdependence, social connectedness, knowledge sharing, and shared leadership culture) can significantly influence the positive belief about change depending on the nature of the change. Automation has changed in recent years from merely a tool for increasing productivity to becoming a crucial organizational strategy (Brynjolfsson & McAfee, 2014). Understanding the moderating impact of automation on the relationship between determinants like task interdependence, knowledge sharing, and positive beliefs about change is crucial as organizations depend more and more on it. Automation and change beliefs interact in complex ways, which calls for careful study (Chui et al., 2016), especially as innovations like AI and deep learning become more crucial to business operations. As a result, shared leadership may ultimately determine whether organizational change initiatives are successful or unsuccessful. Shared responsibilities significantly affect patient outcomes in hospitals (Aiken et al., 2011). Similarly, shared leadership gives organizations a strong mechanism to guide them through turbulent times of change (Cheng et al., 2023). Shared leadership models' inherent collective decision-making, diversity of viewpoints, and distributed responsibilities can improve an organization's capacity for change adaptation and resilience.

Changing the structure or culture of an organization is as hard and challenging as attempting to train an elephant to dance (Belasco, 1991; Whitehead, 2023). This fact is supported by the high percentage of failing organizational change plans (Ali et al. 2023). The nature of an organizational change context is often shrouded in uncertainty and ambiguity (Chaudhry & Song, 2014). These settings can trigger employees to reassess what they have been promised and what is being delivered (Cameron & Green, 2019). Organizational change is the key to reach the ability to adapt with market trends regardless of its backgrounds and severity (Wang & Jin, 2023). Large organizations have the financial ability to seek advice and support of management consultancy firms to assist them plan and implement their change initiatives, whereas small and medium enterprises (SMEs) do not usually have the financial capability to cater for this (Weiss & Hoegl, 2016).

The Egyptian growing and developing market consists mainly of small and medium enterprises (SMEs). Nearly 75% of the private sector employees in Egypt work for SMEs. This

sector employs 9.7 million persons (close to 10% of the population) (Statistics, 2020). For SMEs, organizational change is rather challenging and may lead to unplanned, or even undesired, results if poorly implemented. Managing organizational change involves three main elements: strategy, context, and multiple roles as top managers are usually responsible for implementing the changes that are required in order to improve the organization's performance (Ibe, 2023). This, however, is not the only role of those individuals. They are expected to ensure that the context of change is suitable enough to facilitate it. Nevertheless, managers should carefully select the change agents' team, ensure the organization is ready for the aimed type of change, and last, but not least, the desired change is properly communicated throughout the organization (Burhan & Khan, 2024; Johnson et al, 2008; Sellers-McGauley, 2024). This reflects the high complexity of change management that emphasizes the need for small and medium enterprises (SME) owners to understand the relationship between the different variables influencing organizational change. This understanding should help business owners reach the highest possible level of adaptability with market conditions.

To guarantee the best outcome of change, this study aims to identify the most adequate type of organizational change that business owners can utilize considering the extent of organizational readiness for it (Burhan& Khan, 2024; Sellers-McGauley, 2024). Contrary to our above argument about bureaucratic organizations and organization with inflexible vertical chain of command, it is also argued that vertical leadership is more flexible because it allows for more quick and effective decision-making process (Hmieleski & Ensley, 2006). However, it is significantly important to realize, and admit, the role of each employee during the organizational change process (Roberts, 2018) to minimize, or even eliminate, resistance. Realization of the role of employees is perceived to be best achieved through the implementation of a shared leadership model. Shared leadership is an effective method to align change with staff cognitive, emotional, and behavioral state (Burnes & Jackson, 2011). In shared leadership, tasks are assigned based on individual knowledge and capability of each employee (Burhan & Khan, 2024; Pearce & Conger, 2002; Sellers- McGauley, 2024). From the practical perspective of the researcher, this approach could boost each respective employee's moral by acknowledging her/his significance in the business process which, in turn, not only leads to distract the employee from resisting the new structure/process but goes beyond that to make her/him buy in the new change(s) and act as a pushing force for it.

1.3 Research Problem

Even though the studies presented an in-depth look into resistance to change, leadership styles, and various aspects of organizational culture in multiple contexts, there needs to be more

emphasis on the specific Egyptian context, particularly within SMEs. For instance, the studies by Elgohary and Abdelazyz (2020) and Mousa et al. (2020, 2021) precisely touch upon the Egyptian environment; however, they do not delve deeply into the role that task interdependence, social connectedness, and shared leadership culture play within SMEs. The research conducted by Hoch (2013, 2014) delves into the impact of shared leadership on innovation; however, there is a lack of clarity regarding how the dynamics of shared leadership, specifically knowledge sharing and social connectedness, interact in the change management process within SMEs. There needs to be a distinct distinction between the different types of change, such as strategic change and incremental change, as well as its moderating effect on important organizational variables. The need to understand how the different types of changes influence the relationship between task interdependence, social connectedness, knowledge sharing, and the overall organizational culture has led to a gap in the research that needs to be filled. Even though businesses worldwide are becoming increasingly digital, there appears to be a research gap concerning how automation plays a moderating role between important organizational variables, particularly in the context of SMEs (Kaber & Endsley, 2004). There is a research gap in offering a comprehensive study that amalgamates all of these aspects, particularly in light of task interdependence, knowledge sharing, and shared leadership culture. While individual articles may discuss factors such as inertia, workload, fear of change, and readiness to change (AlKayid et al., 2023), a research gap exists in offering a comprehensive study that amalgamates all of these aspects.

SMEs are significant to overall economic development as Egyptian business landscape constantly shifts and evolves. However, when it comes to implementing strategic and incremental changes, which are essential for the growth and adaptability of a business, they are frequently met with resistance. Despite the growing significance of task interdependence, social connectedness, knowledge sharing, and shared leadership culture, there needs to be more in-depth research investigating the collective impact these factors have on forming positive beliefs about change (Grieve et al., 2013; Hendrickson et al., 2011). In addition, even though we live in an era marked by significant technological advancements, more research needs to be done on the moderating influence of automation on the relationships. As a result, it is necessary to have a solid understanding of the complex dynamics underlying shared leadership, particularly the roles that social connectedness and information exchange play in the change management process. Therefore, this study aims to help bridge these research gaps by investigating the relationships above and the dynamics within the specific setting of Egyptian SMEs.

In addition, (Yukl & Chavez, 2002) identified leadership as a process that involves influencing others to agree on the necessary steps to achieve a certain goal. It can also facilitate

collective efforts to reach that objective. A study conducted on the literature on strategic leadership states that it is related to managerial leadership. Moreover, Ireland and Hitt (2001), argued that strategic leadership is a process that involves developing and implementing strategies and actions that can help improve the organization's performance. It can be described as a type of leadership that enables individuals to anticipate, envision, and maintain their flexibility. In other words, it aims to help the organization achieve its goals and improve its performance. This concept of cross fertilization raises the question as to how strategic leadership can be applied to organizational development. There are two types of leadership that are commonly used: vertical and horizontal. The former is a type of leadership characterized by powerful and charismatic individuals. Visionary, charismatic leaders can change organizations (Antonakis et al, 2016). Charismatic leaders use charm, persuasion, and communication to inspire and motivate followers creating an emotional connection. Team members are often enthusiastic and committed under this leadership. A study developed by Northouse, (2004) stated that vertical leadership helps organizations implement decisions on their own. It can also speed up organizational change (Fiol et al., 1999; Seyranian & Bligh, 2008). Vertical leadership is a hierarchical structure where top leaders make decisions and influence subordinates. This method emphasizes organizational authority, responsibility, and control. Vertical leadership uses formal power and position to manage teams (Christians, 2009)

Although shared leadership enables team members to encourage knowledge sharing, feel commitment to the goal, and become effectively involved in coordination activities (Han et al., 2021), but this does not necessarily have to be in a positive direction towards pushing for organizational change, rather, it could be towards resisting the desired change. Therefore, this research examines the way shared leadership affects organizational change and explores the mediating effect of both process automation and type of change on staff perceptions about change. The styles and leadership approaches that are commonly used in SMEs and organizations in general are complementary to the requirements of the respective operations. They can help shape a constant compromise between the various elements of the organization. However, due to the complexity of the environment, leaders are not always able to effectively address the multiple issues that arise (Binci et al., 2014). Shared leadership can be effectively implemented in environments that are inherently hierarchical. The ability to switch between different strategies and behaviors make a big difference in how effective a change program is (Vecchio et al., 2010). Without the ability to switch to shared leadership, a project's success can be severely affected.

1.4 Relevance and significance

Critical international studies on change resistance and management, such as those by Roth & Spieth (2019) and Oreg et al. (2011), highlighted the global nature of the topic as well as the specificities it presents in regional settings like Egypt. For example, Roth & Spieth (2019) and Oreg et al. (2011) found that people are more resistant to change when they feel threatened by it. Understanding how these dynamics operate, particularly in the SMEs of developing nations, is of significant relevance in light of the rapid pace of global technological and social change.

The concept of shared leadership, highlighted in the works of Hoch (2013, 2014), refers to a collaborative approach to leadership in which multiple team members actively participate in the team's leadership. Because of the interdependent nature of work in today's organizations, it is essential to understand how factors such as social connectedness, task interdependence, and knowledge sharing all influence shared leadership and, ultimately, the perception of change. Along these same lines, the investigation of the impact of such factors on positive beliefs about change, as well as the role of automation, as postulated by Huang and Rust (2018) and Parasuraman et al. (2000), could provide insights into the future of work and organizational transformation. Egypt, with its extensive history and rapidly shifting socio-political landscape, provides a one-of-a-kind setting for investigating organizational change. This is especially true in the SME sector, which constitutes a significant portion of Egyptian economy. The research conducted by Allam (2018) on the part that women played in the Egyptian revolution of 2011 highlights the influence that social and political factors have on the behaviors and beliefs of organizations. This research can reveal essential new insights about how organizations in economies undergoing transition perceive change, react to it, and manage it if it delves into the proposed goals for SMEs in Egypt. In turn, this has implications not just for academics but also for practitioners, policymakers, and business leaders looking to maximize the effectiveness of their organizations and the well-being of their employees in the face of unavoidable change.

The global economy went through drastic and severe conditions as a result of COVID – 19 pandemic. Lock downs, travel restrictions, and supply chains crisis are only few results to list that caused the global economy to change. Such change had direct reflection on almost every business in every part of the world. Organizations and businesses had no choice but to adopt some kind of change to ensure sustainability. Due to the seriousness of the COVID-19 pandemic and the need to rapidly transform their operations, many organizations have been forced into programs of radical change. In most cases, this resulted in a significant rethink of how work should be carried out. The

pandemic has raised questions about the role of values and interests in organizational change (Amis & Greenwood, 2020).

The effects of the pandemic on the workforce and the supply chains of organizations have caused a significant change in how people view and value work. This is also reflected in the structures of disadvantage and advantage that have become more prominent during the course of the pandemic (Amis et al., 2020). It is argued that the concept of power mapping in organizations was always part of the solution to achieving organizational change. However, it is now different due to the broader societal shift that has caused questions about the interests of the organization's stakeholders. The main factors that have been identified as contributing to the development of radical change are the dissatisfaction with the allocation of resources (Gehman, 2013). This issue has been shown to be linked to the use of power and the interests of the most privileged individuals. Despite the importance of interests in shaping organizational change, academic research has been relatively under-represented.

Although there is a wide variety of studies that have been conducted on the subject of power mapping, the lack of a systematic approach to integrating these findings into the theories of change has limited the scope of their study (Amis & Greenwood, 2020). According to a study, employees were more likely to feel frustrated or angry about the frequent and ongoing changes that they saw in the organization. The study also revealed that the frequent changes could affect the life cycle of the company. The importance of change is acknowledged by employees as a vital attribute that they consider when it comes to their work. The frequency of changes has been shown to affect their behavioral and attitudinal responses. From the perspective of the employee, the frequent and unpredictable nature of the changes can cause anxiety (Rafferty & Griffin, 2006). Moreover, the importance of human resources management (HRM) is acknowledged by every organization because its core objective is to increase the efficiency and effectiveness of its employees. This study aims to contribute to the development of effective HR practices that lead employees to develop positive belief (s) about organizational change, hence, act as a pushing force rather than a resisting one.

1.5 Research Questions

After the research gaps and problem statement, the study develops the research questions to be answered by using the mixed-method research (Quantitative research -Qualitative research). The study offers the research questions separately for quantitative research phase and then qualitative phase:

1. How do task interdependence, social connectedness, knowledge sharing and shared leadership culture affect positive belief about change (including fear of change and readiness to change, inertia, time and workload)?
2. How does the type of change (i.e., strategic change and incremental change) moderate the relationship between task interdependence, social connectedness, knowledge sharing, shared leadership culture and positive belief about change?
3. How does automation moderate the relationship between task interdependence, social connectedness, knowledge sharing, shared leadership culture and positive belief about change?

Now, the study offers the research questions for the qualitative phase:

1. To what extent different factors of shared leadership can contribute to the success or failure of organizational change implementations?
2. What individual and organizational factors affect the shared leadership dynamics (social connectedness and knowledge sharing) in the change management process?
3. To what extent can different aspects of shared leadership contribute to the success or failure of organizational change implementations?
4. To what extent shared leadership affect change management?

1.6 Research Aim

In the rapidly evolving business environment, the capacity of organizations to manage change effectively determines their survival and prosperity. This research aims to explore the intricate dynamics of shared leadership in organizational change and determine how various factors associated with shared leadership bolster or hinder successful change implementation. One of the primary objectives is to analyze the effect of task interdependence, social connectedness, knowledge sharing, and shared leadership culture on employees' positive beliefs about change. Factors like fear of change, readiness to change, inertia, time, and workload, as inferred from studies like Armenakis and Bedeian (1999), will be critically examined in the context of shared leadership dynamics. The study will investigate whether the type of change - strategic or incremental - moderates the relationship between shared leadership factors and positive beliefs about change. This will involve analyzing the dynamics of change processes and how shared leadership plays varying roles across them.

In light of the ever-increasing role of technology in organizations, this research will also seek to understand the interplay between automation and shared leadership dynamics. The advent of digital transformation has transformed business operations by incorporating advanced digital technologies into all aspects of an organization (Hausberg et al. 2019). It boosts efficiency, improves customer experiences, and promotes innovation artificial intelligence, cloud computing, and big data analytics are critical technologies (Hausberge et al., 2019, Nambisan et al., 2019) Drawing the findings from Kaber and Endsley (2004), we will explore how different levels of automation might influence the shared leadership dynamics in the context of change management. Specifically, the research will investigate whether automation moderates task interdependence, social connectedness, knowledge sharing, shared leadership culture, and positive belief about change. Central to the study is the question of the role of shared leadership in influencing the success or failure of organizational change implementations. Leveraging studies such as Elgohary and Abdelazyz (2020) that focus on employee resistance to change, this research intends to discern the impact of collaborative leadership models in overcoming such opposition, especially in sectors like e-government systems in Egypt. Furthermore, drawing insights from Mousa et al. (2020) and Mousa et al. (2021), we aim to understand how shared leadership can, or cannot, mitigate individual-level resistance to change, reduce organizational cynicism, and potentially harness organizational learning and resilience.

Investigating the determinants of shared leadership dynamics is crucial. Here, the research questions will probe into individual and organizational factors that shape shared leadership, focusing on elements like social connectedness and knowledge sharing. Studies like Argote and Ingram (2000) and Argote et al. (2003) provide a framework for understanding how knowledge transfer can bolster competitive advantage, while the importance of connectivity and networks in promoting shared leadership can be surmised from research like Mousa et al. (2020). Building upon the findings of Röth and Spieth (2019), which explored the sense-making perspective of resistance to change, this study will seek to understand the breadth to which shared leadership can affect the broader domain of change management. This will encompass the actual processes of implementing change and the perceptual dimensions, such as how shared leadership influences employees' attitudes toward change. In essence, this research aims to offer a holistic understanding of the shared leadership dynamics in organizational change, providing theoretical and practical insights that can help organizations navigate the complexities of the modern business landscape. By integrating findings from diverse literature, we seek to bridge existing gaps and present a comprehensive view of how shared leadership can be harnessed to foster effective change management.

Furthermore, this research aims to establish clear distinction between several types of organizational change and yet find out which type of organizational change is most effective for promoting and implementing a desired change. The study tool introduced different types of change methods to determine which of them is more familiar and commonly utilized by the selected sample, specifically: Reactive, Anticipatory, Incremental, and Strategic (Nadler et al., 1995). Reactive change management is a process that involves implementing changes after an unexpected event or need arises. It can be done in a structured manner or by creating a contingency plan (Reiss, 2012), while Anticipatory/proactive change occurs when an organization makes alterations in response to an anticipated event (Kretschmar, 2020). An incremental change is a sequence of deliberate actions that can be made over time to achieve a specific goal. It is commonly utilized by organizations and businesses to improve systems or processes (Wobodo & Zeb-Obipi, 2021). Finally, Strategic change is a process that involves careful management of a multitude of long-term changes in order to achieve an organization's goals and objectives (Alzubi, 2022; Busari et al., 2019).

Management should also take the time to understand the various learning needs of their employees so that they can support and participate in the planned changes. This can be done through the establishment of a supportive environment (Lin & Huang, 2020). This research also aims to study and understand the relationship between a number of attributes of shared leadership and the way they influence the positive belief about organizational change which in turn have direct impact on its success or failure. This should contribute to simplify the complexities associated with the implementation of a shared leadership model while managing organizational change. Defining and understanding the relationship between teams' task interdependence, social connectedness, knowledge sharing, and shared leadership corporate culture on one hand and teams' emotions associated with their positive belief(s) about organizational change, shall provide clear guidelines for top management and change management teams on the most effective way(s) and formula(s) of implementing the desired change. The findings of this research should pave the road for SME owners, in general and particularly in Cairo-Egypt, to identify and facilitate the most suitable tools aligned with the context of change within their respective organization(s) in such manner that reduces the high probability of failing organizational change implementation.

Despite the evident complexity of applying shared leadership model and managing organizational change, the entire process is mainly focused on the extent of adaption and/or resistance of humans to the aimed change (Steffens et al., 2020). Overall, the variables in this study are divided in three groups; Shared Leadership related, positive belief about change, and finally automation and the type of change as the moderating variables appearing from thorough field

analysis to define forces for and against change, all of which are somehow related to the human element. Studying the contextual elements is accomplished through analyzing the current organization culture to (i) address obstacles blocking change such as lack of proper infrastructure, the entrenchment of power structures, and the greed of certain individuals (ii) define aspects that push towards change and find ways to reinforce them (iii) find out what else needs to be introduced to implement change.

1.7 Structure of the thesis

Chapter 1: Introduction discusses shared leadership and its importance in the contemporary business landscape. It will set the context for the upcoming discussions by highlighting the prominence of organizational change and the role of leadership therein. A review of the current academic landscape to identify areas that need more adequately explored or gaps in knowledge related to shared leadership and organizational change. A concise articulation of the specific issues the research intends to address stemming from the identified research gaps. The research discusses the importance of the study in addressing the problem statement, its potential contributions to the academic and professional world, and the implications of its findings. Finally, the study clearly presents the main questions the research aims to answer. Ultimately, the study outlines the ethical guidelines followed during the investigation, ensuring the protection of participants' rights and the integrity of the research process.

Chapter 2: Literature Review and Theoretical Framework discusses the Comprehensive analysis of existing literature on shared leadership, organizational change, and relevant moderating factors. The study explores the foundational theories that underpin the concepts of shared leadership and organizational change. Finally, the study develops a conceptual model based on insights from the literature review, outlining the expected relationships between variables.

Chapter 3: Validation of Shared Leadership Model and the Relationship between Shared Leadership and Positive Belief about Organizational Change. – Quantitative Study (1) provides a brief context about the focus of the chapter. This chapter introduces and describes the proposed shared leadership model. This chapter also provides a detailed presentation of quantitative findings validating the model and elucidating the relationship between shared leadership and organizational change management. This chapter also shows how automation acts as a moderator in the relationship.

Chapter 4: Moderating effect of Automation and Type of organizational Change on the relation between Shared Leadership and Positive belief About Change - Quantitative Study (2) provides the context for the chapter's focus on the moderating role of the type of change. This chapter provides a complete presentation of quantitative findings showcasing the moderating role of the kind of organizational change.

Chapter 5: Qualitative Findings provides the Contextualization of the qualitative research component. The data from qualitative interviews provide qualitative data, such as interview excerpts or observational notes. The extraction and discussion of significant themes from the qualitative data provide a deeper understanding of shared leadership dynamics.

Chapter 6: Discussion and Conclusion parallels and contrasts the current research findings and existing literature. This chapter also discusses actionable insights for managers and leaders based on research findings. Moreover, the chapter shows the study's constraints and potential biases and highlights possible avenues for future research in shared leadership and organizational change.

Finally, this structure provides a cohesive flow for the reader, allowing a progressive build-up from introducing the topic to presenting findings and drawing meaningful conclusions.

1.8 Ethical considerations for both Quantitative and Qualitative approaches

1. Consent that is Informed Participants in the survey were provided with information regarding the purpose, procedures, and implications of the survey. They were given a consent form that outlined the objectives of the study, the fact that participation was voluntary, and the uses that would be made of the data collected from them. Before beginning a consultation, interviewees were verbally informed about the study's objectives, the approximate length of the interview, and their rights as participants in the study. They were also made aware that they were free to walk away from the interview at any time without facing any consequences.

2. Anonymity and Confidentiality: Survey Respondents were assured that their answers would be kept confidential and that no personal identifiers would be linked to their responses in any publications or presentations. Participants in the semi-structured interviews were informed that any quotes or information used from the interviews would be anonymized before the interviews were conducted. They were assured that the research would be confidential and that their identities would not be revealed in any outputs connected to the study.

3. Right to Withdraw: Participants in the survey were informed that they had the right to withdraw from the study at any time, even after it had been submitted, and there would be no repercussions. Participants in the semi-structured interviews were informed that they were free to leave the research process at any time, even after being interviewed, and that they would not be required to provide a reason.

4. Data Protection and Storage: Surveys All of the digital survey responses were saved to encrypted drives and were only accessible to the researcher. Any printed materials were placed in cabinets that had locks on them. All audio recordings, transcripts, and any notes taken during the interviews were safely stored. The digital files were protected with passwords and were held in encrypted formats. Any tangible materials were placed in storage under lock and key.

5. Preventing Harm through Surveys: these surveys were designed to steer clear of any questions that might contain sensitive or upsetting information. It was suggested that participants who experienced any sort of unease should either skip questions or end the survey altogether. The interviewer received training to approach potentially sensitive topics with care and respect. If a participant in the discussion displayed any signs of anxiety, the subject matter was immediately changed, or the interview was terminated. Participants were informed of the actual aims of the research, avoiding any deceitful tactics. 6. Transparency and Honesty Participants were informed of the actual aims of the research.

6. Interviews that Followed a Semi-Structured Format: The interviewees were provided with a detailed explanation of the study's objectives, ensuring they were not misled. They were also made aware of any potential risks involved, albeit ones considered minimal.

7. Feedback and Results: Surveys and Semi-Structured Interviews: Upon completion of the research, those participants who indicated interest will be provided with a summary of the research findings. This was done to ensure that they were aware of the contributions that their participation made to the academic community.

8. Cultural and Social Sensitivity: Surveys and Semi-Structured Interviews; The researcher ensured that no participant felt alienated or disrespected by considering cultural, social, and individual differences when formulating questions and during interactions. By adhering to these ethical considerations with meticulous attention to detail, the researcher ensured the integrity of the research process, protected the rights and well-being of the participants, and improved the validity and credibility of the research findings.

1.9 Summary

The introductory section delves into the evolving nature of organizational structures and the critical role shared leadership plays in driving organizational change. With the digital era ushering in rapid technological advancements, traditional leadership models are being challenged, creating an impetus for shared leadership frameworks. The chapter sheds light on how shared leadership can influence the outcomes of change management initiatives in contemporary organizational settings. While shared leadership has been explored in various contexts, there needs to be more literature addressing its integration with change management processes, especially in the backdrop of increased automation and varied organizational change types. This gap extends to understanding the nuances of shared leadership dynamics, such as social connectedness and knowledge sharing, in influencing change management outcomes. Given the critical role of leadership in navigating organizational changes, it is imperative to understand how shared leadership models can either facilitate or hinder the change process, with organizations undergoing continuous transitions—incremental or strategic—it becomes vital, to decode the synergy between shared leadership and change management.

This research holds paramount importance in an era where collaborative efforts and shared responsibilities are becoming the norm. By exploring the interplay between shared leadership and change management, organizations can derive actionable insights to optimize their change initiatives. Moreover, understanding the dynamics of shared leadership can offer a fresh perspective on managing resistance to change and fostering a conducive environment for transformations. The study is guided by pivotal research questions, including the extent to which shared leadership factors contribute to the success or failure of change implementations, the individual and organizational factors influencing shared leadership dynamics, and the role of automation in moderating the relationship between shared leadership and change outcomes. Upholding the integrity of the research process, the study adheres to a stringent set of ethical guidelines. Participants' informed consent was obtained before administering surveys and conducting interviews. Measures were taken to ensure data confidentiality, participants' anonymity, and their right to withdraw. Additionally, cultural, and social sensitivities were respected throughout the research process.

Next chapter talks about the studies that covered shared leadership and change management to provide an outlook on the current knowledge pertaining to the respective theories and gaps in the respective literature.

Chapter 2

Literature Review and Theoretical Framework

2.1 Introduction

This chapter discusses previous studies about shared leadership and change management aiming to provide an overview of current knowledge and identify relevant theories and gaps in existing research. Furthermore, it also aims to look into studies covering the association between shared leadership and positive belief about organizational change within the context of business processes automation and the type of organizational change implemented. Starting this chapter with the constructs was to enable the researcher to operationalize them and connect the theories and various theoretical frameworks linking these constructs together.

At the early stages of change planning and implementation, the top management team (TMT) and change management team (CMT) need to carefully study the different elements pertaining to the context of change. Contextual elements include the time needed to implement the change plan, scope of change or the extent of change required, preservation of organizational resources and characteristics, staff diversity, managerial and personal capability to implement change, capacity of change resources, staff readiness for change, and the power of the change leader to impose it (Johnson et al., 2008). All the eight elements of the context of change are directly or indirectly linked to the human element within the organization. For example, the time (duration) of the change plan is related to staff understanding and acceptance of the target change; the higher the understanding and acceptance the easier and faster the change implementation would be (Berry, 2007). Organizational resources and characteristics are mainly related to those who control and operate them, therefore, the more those agents were supportive to the change plan the better and more effective utilization and preservation of resources would avail – and so on for all the other elements. This means that both TMT and CMT need to effectively sell the change plan to the target employees/departments (Binci et al., 2019). However, as much as transparency is imperative and useful in promoting the change plan, it can function as a two-edged sword since some agents may use the disclosed information about the change plan to lobby against it. A rather tricky situation that brings up the confusion about the relationship between utilization of shared leadership to implement change initiatives. In other words, does shared leadership help or hinder the implementation of organizational change? With the complexities associated with the implementation of shared leadership and the implementation of organizational change, this question is far from being a simple and straight forward one.

Another factor for seeking to understand the details of the relationship between shared leadership and organizational change is the fact that the majority SMEs in Cairo do not possess a clear organization structure and/or human resources policies and procedures that help the CMT draw clear lines between people, paradigms, control systems, and power structures while planning for change (Mousa et al, 2020). Moreover, leaders and business owners do not have sufficient knowledge and skill in every corporate issue (Vecchio et al., 2010), this means that the predominant vertical leadership model may not be considered a pushing force toward the successful implementation of organizational change despite its advantageous ability to make decisions fast and in a relatively flexible manner should the leader/business owner buy in a new idea. Unlike the case in large organizations, SMEs' agents usually play multiple roles and yet CMT's attempt to understand the cultural web becomes rather challenging and, in many cases, confusing (Mousa et al., 2021). Therefore, this research is studying the interaction between several variables and the way this interaction influences the positive belief about change that, in turn, influences the success or failure of organizational change management initiatives.

To carry on with the implementation of organizational change, with all the associated complexity, CMTs need to split the plan into phases and each phase requires different leadership style depending on the respective context. How to balance leadership paradoxes while managing change within SMEs is one of the answers this research aims to answer (Binci et al., 2016).

2.2 Overview of Change Management

The idea of change management has played a significant role in the changing picture of organizational success for a long time. A thorough analysis of the available literature highlights the complexities and various approaches necessary for mastering change management in contemporary firms. By outlining the general theories and research that dominated the 1990s, Armenakis and Bedeian (1999) intricately delved into the world of organizational change in their seminal work. Their analysis clarified the importance of ground change initiatives in solid theoretical and historical frameworks. Chowdhury and Shil (2022), who issued a clarion call for the contemporary business world to review and improve their understanding of change management and emphasized its ongoing and crucial relevance in organizational dynamics, provided additional support for this idea. The undeniable impact of leadership on the course of change is a feature of the literature that strikes a deep chord with readers. Leadership can make or break the adoption of changes to evidence-based practice, according to Aarons et al. (2015). According to their research, effective leadership practices and organizational development initiatives can significantly ease the way for change. In support of this, Carson, (Marrone et al., 2007) investigated the idea of shared leadership

within teams and claimed that pre-existing circumstances and leadership effectiveness could significantly influence the results of change management initiatives. The many attitudes surrounding change must be understood to navigate its waters. This journey was started by Choi (2011), who shed light on how employees' perspectives on organizational change can significantly affect its outcome. Bordia et al. (2004) discussed how uncertainty is a necessary component of administrative change in line with this idea. The need for proactive management of the various uncertainties that arise during transitions was highlighted by their insightful proposals for navigating such uncertainties.

The role of knowledge transfer stands out as a crucial pillar of the change continuum. Argote and Ingram (2000) promoted that effectively transferring knowledge gives organizations a competitive edge, facilitating more seamless change processes. Using this as a foundation, Argote et al., (2003) crafted an integrative framework that emphasized the critical role of managing organizational knowledge, mainly when guiding businesses through the turbulent waters of change. Recent studies have focused on the wave of technological development and its effects on change management. Arntz et al., (2016) warned about job automation's looming opportunities and risks, particularly in the Organization for Economic Co-operation and Development (OECD) nations. In addition, Chui et al., research on machine-human interfaces in 2016 and 2018 emphasized the critical importance of comprehending and adjusting to technological advancements in organizational paradigms.

Additionally, human behavior and change are intrinsically linked. Atkins et al. (2017) provided a thorough overview of the Theoretical Domains Framework of Behavior Change, highlighting the framework's value in understanding implementation difficulties in change management. Cane et al., (2012) made a case for incorporating behavioral insights into the larger tapestry of change management, validating this approach by highlighting its applicability. Brynjolfsson and McAfee (2014) provided a deep dive into the changes brought about by technology, urging businesses to remain adaptable and knowledgeable in this digital age. They then moved from theory to practice. In addition, Cameron and Green (2019) put together a thorough manual complete with models and strategies that give practitioners a practical road map for navigating organizational change. The body of research presents a compelling picture of change management as a synthesis of leadership, knowledge dynamics, human behavior, and technological evolution. According to the literature, effective change management requires an integrative strategy that successfully unites these facets.

Having said that, it is also imperative to have accurate diagnoses of the problem (s) change is meant to solve to guarantee the success of any change plan (Roberts, 2018). Precisely diagnosing

the problem helps change management decide the change approach they should follow, economic or organizational development. While economic change focuses on creating value for shareholders, organizational development change has to do with the human capital through improving their skills, and consequently performance, and create loyalty and commitment towards the organization (Slocum & Hellriegel, 2007). Tools such as challenging the taken for granted (mindsets), changing business processes and routines, changing symbolic indicators, and manipulating power and political processes, are either fully, or partially utilized by CMTs to manage organizational change (Johnson et al., 2008). Out of personal observation of the researcher, the impact of utilizing those tools in SMEs is more influential than in large organizations. Due to the relatively smaller number of headcounts in SMEs, employees feel more exposed to the risks associated with organizational change especially that such move (Change) is usually initiated, and in many cases implemented, by the business owner who, as mentioned earlier, is not necessarily aware of all the operational details of the business. This lack, or shallow, awareness may lead the business owner to design the change plan in a way that forms direct threat to staff job security (Rafferty & Griffin, 2006). Regardless of the size of the organization, resistance to change may also occur because of doubts about losing one's influence and power within the organization or at least among peers. Therefore, studying staff personalities is a determinant element of a change plan's success or failure in SMEs (Oreg, 2007) as it helps CMTs tailor their plan in such manner that, if not eliminates, minimizes staff worries that lead them to resist change - intentionally or unintentionally.

There are several known models to apply organizational change, but the most predominant one is the three-step model of Kurt Lewin – unfreeze, change, and refreeze. According to Lewin (1958), before proceeding with any change plan, change management needs to deal with organizational mindsets and inertia (Hechanova et al., 2018). To achieve this in SMEs, Change should be clearly communicated with the employees in such way that explains its aim, scope, and the role each employee, or group of employees, expected to play to contribute to the success of the change plan. Such approach will reassure the employees about their job security since they have a role to play in the change process on one hand, and they were informed about their role after implementing the change plan.

In more specific terms, most management approaches for change use models of incremental progress. In order to create a sense of ownership and reduce resistance, staff members are encouraged to participate. A detailed vision of the organization's future is also developed before any major changes are implemented (Nadler et al., 1995). This applies to the incremental change which is a process that occurs in a period of environmental equilibrium or stability. It is part of a continuous process that aims to improve the fit of the organization's various components. However,

in case of discontinuous change that occurs when an organization is dealing with a significant change in its environment, creation of a new strategy and a whole new set of procedures are necessary. This type of shock is usually accompanied by various challenges that are related to discontinuity. In addition to learning new ways of working and acting, individuals and groups also have to unlearn the old habits and routines that have been in place for a long time. This can be very challenging and confusing for people (Nadler et al., 1995).

Finally, since the change decision was initiated by the business owner and TMT, it is important to consider the leadership element and its impact on the employees' readiness to accept change. If the leader was perceived as trustworthy by the staff, buying in the concept of change will be much easier (Metwally et al., 2019). Leadership in this context has nothing to do with organizational policies and procedures, rather, our focus is on the behavioral and personal traits of the business owner in small enterprises and the management team in medium and large enterprises that form the assumptions and expectations of the employees towards their leader (s) (Schneider et al., 2013). In interviews with several executives who have successfully managed major transformations, they found that the process was more emotionally draining and challenging than they anticipated (Nadler et al., 1995). In case of discontinuous change, the business owner/CEO is responsible for creating the case for change and prove that the pain of inaction is greater than the agony of transformation.

2.3 Positive Belief about Change by Leadership capabilities

The idea of change elicits a wide range of responses from various stakeholders, especially within an organization's context. A Positive Belief about Change is necessary for cultivating adaptability and resiliency in the face of a business environment that is constantly evolving. The importance of such a belief and the central part that leadership plays in forming it is brought into sharper focus by an in-depth analysis of the literature that has been supplied. It has been shown that shared leadership is a significant fuel for the success of construction projects and innovative behavior by Imam (2021) and Vandavasi et al. (2020). These studies shed light on how encouraging knowledge-sharing and decentralizing leadership roles foster an environment where change is positively perceived and foster an environment. This narrative is further amplified by Zhu et al. (2018), who present shared leadership as a contemporary framework for organizational behavior. They suggest that collaborative leadership models can bolster the general belief in the advantages of change. This sentiment is echoed by Han et al. (2021), who found tangible impacts of shared leadership on team performance. This further reinforces the concept that collective leadership structures cultivate an environment more conducive to embracing change.

The complex relationship between transformational leadership and the dissemination of information among workers significantly influences the employees' perspectives on change. Coun et al., (2019) shed light on how employees' self-determination, catalyzed by transformational leadership, mediates knowledge sharing among peers in a workplace setting. They argue that leadership styles like these can help cultivate a culture in which change is accepted and celebrated. In a similar vein et al., (2020) investigate the symbiotic relationship that exists between the sharing of knowledge and the interdependence of tasks in Information systems development (ISD) projects. They make a compelling argument, supported by their findings, for the necessity of robust knowledge-sharing practices in cultivating positive attitudes toward change initiatives.

In addition, Ali et al., (2023) present a social information processing viewpoint in their investigation of the relationship between shared leadership and the creative output of groups of people. Their examination through the lens of moderated mediation suggests that when effectively practiced, shared leadership can act as a conduit for promoting creativity and innovation within teams. They hypothesize that an atmosphere conducive to the flourishing of creative endeavors cultivates a group mentality in which individuals see change more as an opportunity than a problem. This viewpoint is supported by Salas-Vallina et al. (2021), who highlight how shared leadership and passion at work play a cross-level role in developing resilience and performance, particularly in challenging times. In analyzing the vast body of published research, it has become abundantly clear that optimistic beliefs regarding change are intricately woven with the fabric of organizational leadership dynamics. Shared leadership emerges as a linchpin in molding organizational attitudes toward change. This can be accomplished through shared leadership models, transformational leadership styles, or the facilitation of knowledge-sharing cultures. It is essential to foster a pervasive positive belief about the inevitability and benefits of change, and one of the most critical factors in doing so is a culture that is driven by leadership and emphasizes collaboration, creativity, and knowledge sharing.

2.3.1 Factors Contributing to Positive Belief about Change

There are multiple factors that contribute to the construction of a positive belief about change:

2.3.1.1 Fear

Even though most of the included literature review emphasizes the constructive ideas connected with leadership and the exchange of knowledge, there is an implicit recognition that fear is also a potent motivator. Bordia et al. (2004) discuss the uncertainty that arises during organizational change and the subsequent reactions that it generates in their article. When fear is managed correctly, it catalyzes individuals to seek clarity and understanding, which leads

individuals to rely more heavily on the guidance and practices of leadership and knowledge-sharing. Therefore, when leaders use shared leadership models and promote a culture of knowledge-sharing, as shown by Imam (2021), Vandavasi et al. (2020), and others, fear can inadvertently nurture a positive belief about change by driving individuals to seek out collaboration, understanding, and support. Fear motivates people to seek out other people's perspectives and opinions. These are only few reasons among many other that bring serious unanswered questions to people's minds once organizational change is initiated or even mentioned. Since this research focuses mainly on SMEs in Cairo, it is imperative to consider the turbulent and chaotic economic and political situation of the Middle East and North Africa (MENA) region during the past three decades starting 02nd August 1990 – the date Iraq invaded Kuwait - to realize the source and severity of such fears amongst employees in general and those of SMEs in particular. Governments in most MENA countries reduced expenditure on mega projects to cover the increasing financial liabilities resulting from currency fluctuations and debts which in turn effected the private sector's ability to retain workforce on fulltime basis. Employees, being the weakest link in this situation, started experiencing unprecedented levels of stress resulting from objective realization of the surrounding risks and interpreting the outcomes of those risks in a subjective manner leading to all kinds of negative psychological and behavioral reactions (Chirumbolo et al., 2020). Stressful work conditions, not only effect employees' psychological and physiological conditions, but they also result in lack, or poor, job satisfaction, low work engagement, and low organizational commitment and identification (Piccoli et al., 2017).

Focus on fear and insecurity results from the need to deal with the recipients of change (employees) as active influencers rather than merely passive element that is fully controlled by the TMT and/or CMT (Oreg et al., 2018). Logically, if the TMT and/or CMT failed to reassure staff about the benefit(s) of the proposed change and its safe outcome on the sustainability of their jobs (source of income), those employees will exert every effort and method to resist that change and consequently reduce, or prevent, its unknown (mostly perceived as threatening) outcome(s). Researchers have identified two dimensions of job insecurity; quantitative job insecurity (QTJI) and qualitative job insecurity (QLJI), where QTJI is related to staff perception of complete job loss and QLJI is related to the loss of job benefits such as health insurance, allowances, working conditions (Hellgren et al., 1999). If the employees sensed a QTJI they shall desperately resist change in such way that may lead to confrontational encounters with the management and change teams, whereas resistance will not be so fierce if the change was perceived to lead to QLJI. In both cases, the employees shall perform counterproductive activities against the organization's goals to pass a warning note about their fear hoping that this should lead the management to either give

them sufficient assurance to address, or even better, reverse fear or abandon the change plan in its entirety.

Employees may also encounter a different type of fear that shall eventually lead to resisting change, even if their job was secure; caused by uncertainty about their ability to cope with change (Kern & Zapf, 2020) and yet lose their influence and power amongst peers. The uncertainty associated with organizational change stimulates staff tendency to spread rumors about potential undesired results of change. This adds up to the stressful work atmosphere that in turn, effects staff performance and productivity (Bordia et al., 2004).

2.3.1.2 Inertia

Either organizational inertia, interpreted as a resistance to change or a tendency to keep things as they are, plays a distinctive part in cultivating positive beliefs regarding change. AlKayid et al. (2023) examine the idea of organizational inertia in the context of the service hotel industry and discuss how it relates to the concept of leader vision. When contrasted with visionary leadership, inertia can inadvertently bolster a positive belief about change. Effective leadership's clarity, purpose, and direction appear to be even more compelling and necessary in the context of organizations mired in inertia. This juxtaposition can enhance employees' appreciation for change, leading them to view it not as a threat but as an opportunity for improvement and growth. This is especially true when employees observe the limitations of remaining stagnant in their work environment. The Egyptian market is known to be one of the largest in the Middle East and North Africa (IMF GDP data, 2023). This is why Egyptian entrepreneurs usually aim to operate locally with high cognitive focus on a particular product/service offered for a well-defined clientele. In many cases, those businesses are not only limited to the country, but they are even limited to a particular governorate or city within a governorate. This strategy leads to highly stable operational environment where each employee and each business unit operates according to specific, almost fixed, process(es) that remain stable for years if not decades (Mohamed Adel et al., 2020). This stability results in considerable level of organizational inertia that in many cases turn into rigid organizational culture. For further clarity of this point, reference is made to the cultural inertia defined by researchers as “tendencies to oppose changes when one’s culture is perceived to be static and/or stable” (Zárate et al., 2011).

In addition to frequency of change, the direction of change also impacts the organizational reaction developed from inertia: if the proposed change was challenging the existing norms, resistance will be at its highest levels, if neutral, staff will not sense a threat and yet will not resist (but will not support either), finally, if the planned change was perceived as friendly, staff will support it and will function as pushing force (Aksom, 2021). Regardless staff reaction, institutional

inertia responds to change in three ways; resistance, obstruction, and reversal of change to the previous routine situation (Aksom, 2021). The continuous effect of inertia even after organizational change has occurred provides an explanation for the reason why organizational change plans keep recurring without reaching a stable point where focus is on development and improvement rather than replacement and adjustment. In order to foster open dialogue, it is important to organize meetings where staff members can talk about the change, share their feedback, and participate in surveys. Moreover, disseminating information about the change can help employees be more informed about its effects. Open dialogue can also help organizations develop a culture that encourages people to express their feelings and overcome the stigma associated with seeking emotional support (Warrick, 2022). It also explains why change initiatives fail in so many cases despite extensive planning and resource allocation prior and during change. No matter how radical change was, it will not be able to eliminate the impact of inertia while attempting to adapt new policies and/or procedures unless the existing social culture within the organization was either adjusted to suit the aimed change or completely altered (Aksom, 2021). To deal with the existing organizational social culture, TMT and CMT need to put emphasis on the need for change to overcome a turbulent situation that could be threatening to the very existence of the organization. Doing so, will cause staff accept change being their lifebuoy rather than attempting to sustain a culture that could be the core cause of the risk facing the organization (Amis et al., 2004). This notion brings us back to the impact of fear over change, but fear in this case is functioning as pushing force rather than a cause of resistance.

2.3.1.3 Time and workload

Using the literature provided, time and workload influence beliefs about change. Kaber and Endsley (2004) investigated the effects of automation levels on human performance, situation awareness, and workload in a dynamic control setting. Their insights suggest that in environments where workloads are high and time is limited, the introduction of beneficial changes, such as automation, can be perceived positively. When employees are stretched thin due to intense workloads or time pressures, changes that promise more efficient processes or reduced work burdens can foster a strong positive belief in such shifts' necessity and potential benefits. This perspective underscores the value of change as an avenue to improve work conditions and enhance performance outcomes. Change is a stressful process in itself that is usually perceived in a negative way. Unless clearly communicated, a sense of uncertainty and ambiguity amongst staff prevails. Since change should be time bound, multiple and rather complex tasks need to be accomplished within the set period for completion and implementation. During the introduction and

implementation of the new rules/procedures, work does not stop, and employees are expected to meet their respective duties efficiently and in a timely manner.

Karasek et al. (1998) identified five primary sources of occupational stress: psychological demands, lack of decision latitude, insufficient social support, physical demands, and job insecurity. Researchers also listed another six; workload, lack of control, low reward, inadequate community/social factors, Unfairness, and inappropriate values (Maslach & Leiter, 2008). Hence, Faragher et al. (2004) identified the following causes of stress; work relationships, work-life balance, Overload, job security, Control, resources, and communication, and pay and benefits.

Based on the person–environment (P–E) fit theory, stress is a result of a conflict between employee’s abilities and their obligations in light of the supplies provided by the respective corporate environment (Edwards et al., 1998). During the transition phase of change implementation, employees struggle to synchronize their standard productivity level with the demands to perform under the unfamiliar new changes – at this stage of change, employees experience high level of stress that leads many of them to resist change. The conflict between the amount of work and the time allowed to complete it is present in the above lists of causes of stress, although in different terms (overload, workload, and physical demands).

2.4 Shared leadership

Shared Leadership is defined as “a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals, or both” (Pearce & Conger, 2002, p. 1). Shared leadership is a dynamic and cooperative process that divides up the roles and responsibilities of leadership within a team by having multiple team members lead and influence one another. Instead of relying solely on a single, hierarchical leader, it is characterized by peer influence and shared leadership responsibilities. According to Zhu et al. (2018), Han et al. (2021), Salas-Vallina et al. (2021), and Holcombe et al. (2023), shared leadership refers to a situation in which multiple people use their leadership skills in an interdependent manner to advance the team's or organization's overall goal. In shared leadership, task interdependence is crucial. Interdependent team members depend on one another's skills and contributions to complete tasks. Because of this interdependence, there is a need for shared leadership, in which different people assume leadership positions according to their skills and job demands. No one person can successfully lead the team by themselves due to the interconnected nature of the tasks, so leadership and decision-making must be done collectively (Lee et al., 2020). Shared leadership is built on a foundation of social connectedness. Team members are more willing to share leadership responsibilities if they have strong social ties and trust. People are more likely to collaborate effectively, communicate clearly, and share ideas when they feel socially connected.

Shared leadership can flourish when team members are willing to follow their peers' leadership and have faith in one another (Roundy, 2020).

Sharing leadership is closely related to knowledge sharing. The notion that various individuals bring distinctive expertise and perspectives is a fundamental tenet of shared leadership. Team members must be eager to share their expertise, wisdom, and insights for shared leadership to be successful. In addition to ensuring that decisions are made with the most excellent understanding possible, this information exchange fosters a culture of respect for one another and continual learning. When team members share knowledge, it solidifies the collective leadership dynamic, reinforcing that everyone has valuable contributions to make (Imam, 2021; Ahmad & Karim, 2019). A culture that promotes shared leadership recognizes and values its members' diverse talents, skills, and experiences. In such cultures, hierarchical boundaries are fluid, allowing different individuals to assume leadership roles based on the situation and their expertise. This type of culture encourages collaboration, collective problem-solving, and mutual respect. Shared leadership cultures foster environments where individuals feel empowered to contribute, knowing their perspectives will be valued. It cultivates a sense of collective ownership over decisions and outcomes, leading to increased commitment and engagement from all members (Holcombe et al., 2023; Salas-Vallina et al., 2021).

The relationship between shared leadership and organizational change was addressed in quite several studies, but never in the context of the Egyptian SMEs. As indicated earlier, shared leadership is neither a familiar nor welcomed concept in this sector due to several reasons, the most predominant of which is the business culture. SMEs usually follow strict vertical leadership model where the business owner is the ultimate, and in many cases the only, source of instructions needed to run the business (Sukkar, 2017). This approach is supported by the tendency of business owners to hire inexpensive labor who do not usually possess enough professional skills to decide what is best in any given situation. Furthermore, there is another tendency of hiring part-timers to avoid the financial burdens and obligations imposed by the labor law for the private sector such as social security and in some cases health insurance. This leads to high turnover in most SMEs due to business owners desire to snatch skilled labor from other employers to improve their organizational performance. Likewise, employees aim to improve their work conditions by moving to new employers after gaining experience with their current employer. This unstable situation makes it hard for SMEs business owners to delegate authorities or adopt a distributed/shared leadership model (Elgenidi, 2021).

2.4.1 Why shared leadership?

Since this research focuses on small and medium enterprises, then, we are dealing with business environments where all staff members are known to each other – up to some extent - depending on the level of organizational interaction between them. This makes sharing leadership relatively easier than the case with large enterprises, since SMEs strive to survive the fierce competition and highly turbulent market conditions by being proactive and dynamic (Mathieu et al., 2000). Therefore, Penrose (1960) defines the shared leadership dynamic as “the interaction between an organization's internal resources and capabilities and the external environment to the organization, as perceived by its managers (p. 16)”. This gives an indication that sharing leadership in SMEs is a strategic choice enforced by the need to react to the market conditions effectively, efficiently, and in a timely manner (Pitelis & Wagner, 2018). The interpersonal relations and dynamic characteristics of the organization are important elements for staff members to clearly communicate the need for change, and the associated amended or new processes, to be able to cope with novel market conditions and unforeseen emergent situations (e.g., COVID 19 pandemic) (Pitelis & D Wagner, 2018). However, researchers also warned against leaders misusing their influence by creating resistance to change that does not satisfy their personal or even professional ambitions (Knippenberg & Sitkin, 2013). Organizations and business owners may handle this situation through the distinction between higher and lower hierarchical levels leaders where the higher hierarchical levels leaders have better and clearer understanding of the overall situation of the organization whereas the later are more into micro detailed knowledge of the situation (Gavetti, 2005). By utilizing shared leadership style to promote the sense of need and urgency for the aimed change, both leadership levels may exchange knowledge to reduce, or even eliminate, resistance (Pitelis & D Wagner, 2018). Knowledge exchange between the different management levels helps them overcome their professional limitations (Binci et al., 2014).

Imam (2021) posits that shared leadership, autonomy, and knowledge sharing significantly contribute to construction project success. Thus, shared leadership facilitates the execution of tasks, leading to higher project completion and success rates. Vandavasi et al. (2020) argue that shared leadership can foster innovative behavior within teams. This could be especially valuable for SMEs, which often need creativity and agility to compete with larger businesses. Ali et al. (2023) further enhances this argument by illustrating how shared leadership, viewed through a social information processing lens, can spur team creativity. Coun et al. (2019) found that transformational and shared leadership practices encourage knowledge-sharing among peers. Knowledge sharing is crucial for SMEs as it allows them to leverage collective intelligence and make informed decisions (Ahmad & Karim, 2019). Lee et al. (2020) emphasizes the role of task interdependence and social capital in

knowledge sharing, suggesting that knowledge flows more effectively in a shared leadership environment where tasks are interdependent.

On the other hand, Zhu et al. (2018) provides an evidence of shared leadership, highlighting its benefits and offering an agenda for future research. Such broad perspectives give a roadmap for SMEs to understand the benefits and practical implementation strategies of shared leadership. Han et al. (2021) demonstrated that shared leadership directly affects team performance. Since SMEs often rely on small, close-knit teams, enhancing team performance is critical. Salas-Vallina et al. (2021) emphasizes how shared leadership fosters resilience and performance, especially during turbulent times. SMEs, given their limited resources, often face challenges and uncertainties. Hence, strength becomes a key factor for survival and growth. Holcombe et al. (2023) examined the role of shared leadership in higher education, particularly as a framework for responding to global changes. This suggests that shared leadership equips organizations, including SMEs, with the agility to respond to external changes and shifts. Roundy (2020) introduces the concept of transitive memory systems in entrepreneurial ecosystems, suggesting that shared leadership can cultivate an environment where diverse skills and knowledge are effectively stored and accessed.

As evidenced by multiple studies, shared leadership offers myriad benefits for organizations, particularly SMEs. It facilitates knowledge sharing, encourages innovation, boosts team performance, and helps organizations navigate uncertainties (Vandavasi et al., 2020). In an ever-changing global landscape, adopting shared leadership in SMEs ensures sustainability and fosters growth and resilience (Dobbs & Hamilton, 2007). For example, researchers argue that a vertical leadership model fits more with heterogeneous management team when decisions need to be made firmly and swiftly (Hmieleski & Ensley, 2007). Nevertheless, there are situations when the unofficial authority resulting from shares leadership is more effective and long lasting for the best interest of the change plan (i.e., recurring resistance caused by inertia).

According to a wide range of studies, being able to experience shared reality with others can help develop social connections. For instance, being able to feel understood by others can help boost a person's positive perceptions of their social interactions. Besides being motivated by their own curiosity, being able to feel understood by others also helps people relate to one another. Individuals tend to seek out generalized reality when interacting with others, whether they are close friends or strangers. The extent to which people can achieve this is associated with their success in building social connections (Baek & Parkinson, 2022). In light of the above, this study shall focus on four elements/variables associated with shared leadership that have social and cultural implications to explore whether, or not, there is a relation between those variables and the implementation of organizational change on one hand, and if there was a relationship, the type of

this relation and the way it affects it on the other. Therefore, shared leadership includes the factors that contribute to its overall dynamics:

2.4.1.1 Task Interdependence

Shared leadership mediates the link between team performance and reward interdependence (Gu et al., 2022). On the other hand, team average psychological ownership significantly impacts this relationship on shared leadership as shared leadership can help improve team performance. It is also consistent with the findings of previous studies (Nicolaidis et al., 2014; Wang et al., 2014) that show that reward interdependence is a central component of shared leadership. The positive effects of reward interdependence on team performance can be attributed to the level of psychological ownership on the team (Gu et al., 2022). Managers should encourage the sharing of leadership among their team members, and they should emphasize the cooperative behavior of the group. In line with a study by Small (2007), this type of leadership can help improve the team's performance by motivating the members and increasing collective efforts. Although some employees are uncomfortable with the concept of task interdependence, they are positive about it when it is self-initiated. To effectively implement this concept, managers should educate their team members about the importance of working together in a context of shared leadership (Ullah & Park, 2013).

2.4.1.2 Social connectedness

The insights gained from shared leadership can be used to develop effective group structures and processes, which can help improve the group's performance. Changes in shared leadership can also benefit the group through building trust among its members (Bligh et al., 2006; Wang et al., 2014). The concept of trust refers to a person's willingness to accept the vulnerability of another party without being able to guarantee their actions. An increase in shared leadership can be a sign that members are willing to accept the other's influence, which creates opportunities for building trust. Conversely, a decline in shared authority can result in a constriction of control and influence, decreasing opportunities for building trust and undermining it. Trust, in turn, promotes cooperation that enables collective action (Drescher et al., 2014).

2.4.1.3 Knowledge sharing

The success of a project depends on the shared leadership approach, which involves motivating team members to reach their goals (Han et al., 2021). Project managers and professionals should be aware of the importance of leadership and be able to empower their team members through sharing their roles (D'Innocenzo et al., 2016). The project manager should also make sure that the sharing of leadership responsibilities within the team enhances knowledge sharing and helps clarify the project's deliverables. Culture of knowledge sharing can also help members manage

stress levels. Project managers should need to, regularly, share project-related information with their team members so that they can track the project's progress. This can help them identify areas of improvement to enhance their performance (Imam & Zaheer, 2021).

2.4.1.4 Shared Leadership Culture

Positive feedback from peers can influence a person's proactive behavior. Having a supportive culture can help motivate a team to perform at its best. Managers can inspire their employees by establishing an environment that values their team's members. This type of manager can encourage team members to adopt a proactive mindset even during a difficult time in the organization's restructuring. Conversely, in cultures that are more focused on control and hierarchy, employees may be more reluctant to take part in decision-making. The negative perceptions of shared leadership that these cultures have on team members can lead to a lower level of proactivity. This is why managers should regularly monitor and promote the effectiveness of their team processes (Erkutlu, 2012).

Drawing from the literature, shared leadership culture is a progressive organizational paradigm wherein leadership responsibilities and decision-making are distributed among members rather than centered on a single individual. Such a culture fosters innovation, as seen the link between shared leadership and innovative behavior (Vandavasi et al., 2020). This collaborative environment prioritizes knowledge sharing, with Imam (2021) highlighting its contribution to project success and Coun et al. (2019) emphasizing its role in peer interaction. Zhu et al. (2018) offer a comprehensive perspective, suggesting that shared leadership's contemporary importance stems from its ability to cultivate resilience, adaptability, and holistic responses to global changes. This dynamic leadership model not only boosts team performance, as outlined by Han et al. (2021) but also ensures a responsive and agile organizational structure suitable for the evolving challenges of the modern business landscape.

2.5 Studies Linking Shared Leadership with Resistance to Change

It is hard to avoid resistance to change in organizations nowadays. What can be practically done is to reduce resistance to change to a manageable level. Declan Fitzsimons in an article published at Harvard Business review in 2016 said that change management teams, virtual teams and new startup teams have shown that teams in which leadership is shared, rather than vested on a single individual, can be very effective, demonstrating through quantitative methods that shared leadership can, and does, lead to improved organizational performance (Fitzsimons, 2016). This section tries to focus on various theoretical frameworks that tried to link shared leadership constructs with resistance to change constructs.

2.5.1 Shared leadership constructs with resistance to change.

Table 2.1 summarizes the various meta-analyses conducted on the topic of shared leadership. It also reveals the contradicting findings of the studies and the associated variables. For instance, Nicolaides and D'Innocenzo (2016) found that the link between team performance and social network techniques is more vital when assessing shared leadership. Wang et al. (2014) noted that the measurement methods used for assessing shared leadership did not influence the link between team performance and shared leadership. Similar contradicting findings were found when examining other variables, such as task interdependence and team setting.

Recognizing how recent studies have contributed to and shaped these debates is crucial. To this end, the objective of this table is to identify and understand the conflicting findings from past studies. Since studies reflected conflicting results, it is necessary to understand the mediating effect (s) of different contextual elements on the implementation and outcomes of shared leadership. A study by Chiu et al. (2016) characterized shared leadership as team members' trust in one another. It also involves sharing accurate and legitimate information (knowledge sharing). Moreover, social interactions can influence the behaviors promoted and rewarded in the workplace (Salancik & Pfeffer, 1978). The essence of shared leadership is the exchange of knowledge, enabling members to expand their ideas (Ali et al., 2021). The various types of task interdependence (initiated and received) can contribute to the performance of distributed agile teams. Although received task interdependence may result in a reduced focus on the team, it can also positively affect performance as it increases one's self-awareness and clarity of their role in the process. The role clarity of oneself and others is influenced by the initiated and acquired task interdependence, yet the outcome of shared leadership within the organization (Wong & Gils, 2021).

Social connectedness is also an essential construct of this research since it contributes to properly implementing shared leadership. Social connectedness is an individual's awareness of being in a close relationship with the world around them. It is an attribute of oneself that reflects this closeness. Unlike social engagement or support, SC is not related to specific constructs. The lack of social support may be linked to specific events, such as losing a loved one. It can also indicate a difficulty in connecting with the social world. Social connectedness is distinct from belongingness, which is the idea that one is part of a group. A study by Lee et al. (2001) has shown that social connectedness is associated with a person's self-esteem and social competence. It can also help reduce anxiety and depression (Capanna et al., 2013). Lee et al. (2001) defined *social connectedness* as the ability to connect with others. It is a global feature of one's self that reflects various attitudes and beliefs about relationships and other people.

Table 2.1: Theoretical frameworks that tried to link shared leadership constructs with resistance to change:

Variables	Sub variables	Conflicting Findings	Reference
Based on the argument that managing organizational change mainly effects and is affected by the individuals within the organization, it is important to deeply investigate the correlation between shared leadership and team outcomes (Wu et al., 2020). In 2014, three analytic reviews about shared leadership were conducted [(D’Innocenzo et al., 2016), (Nicolaidis et al., 2014), (Wang et al., 2014)], but they came up with conflicting results in terms of shared leadership assessment Task interdependence	High interdependence	Stronger relationship is found under conditions of higher versus lower levels of interdependence.	Nicolaidis et al. (2014)
	Low approaches and comparing variables like team setting, task interdependence, and team performance measures as reflected in the below table: Past Meta-Analytic Reviews in the Shared Leadership Interdependence	The results do not provide support for the moderating effect of task interdependence.	D’Innocenzo et al. (2016)
Shared leadership measurement techniques	Aggregation	The relationships between shared leadership and team performance are stronger when shared leadership is measured with social network techniques than aggregation-based methods.	D’Innocenzo et al. (2016); Nicolaidis et al. (2014)
	Social network analysis	Shared leadership measurement approaches have no influence on these relationships.	D. Wang et al. (2014)
Team setting	Classroom/lab simulation	Sample studied in the field exhibited higher effect sizes than that in the classroom or lab.	D’Innocenzo et al. (2016)
	Data collected in the field	Fail to find support that these relations would be stronger when sample is studied in the field rather than classroom or lab.	Nicolaidis et al. (2014); D. Wang et al. (2014)
Team performance measures	Subjective performance	Stronger relationship is found under conditions of higher versus lower levels of interdependence.	Nicolaidis et al. (2014)

	Objective performance	The results do not provide support for the moderating effect of task interdependence.	D’Innocenzo et al. (2016)
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Source: Wu et al., (2020)

2.5.2 Shared leadership contexts, antecedents, consequences, and moderators

Table 2.2 shows the various studies that examined shared leadership in organizations, such as manufacturing groups, entrepreneurial ventures, and decision-making teams. They also looked into the factors that contributed to its emergence. The study revealed that task ambiguity and internal team settings could serve as predictors of this type of leadership. A study looked into the link between task interdependence and leadership development, while some studies looked into shared leadership's effect on specific team outcomes, like proactivity, creativity, and performance. Researchers looked into the moderating effects of shared leadership on team outcomes, such as team capability's role in the link between proactivity and shared leadership effectiveness. They also studied the influence of culture on the proactivity-sharing leadership relationship (Wu et al., 2020).

Unfortunately, these studies are only focused on a narrow and limited range of topics, making it hard to understand how shared leadership can affect teams. A critical literature analysis must provide a comprehensive overview of this concept. The Meta-Analytic study concluded that; for firms to enhance team results, they need to utilize shared leadership. The study also highlighted aspects of creating shared purpose and social support to create a suitable environment for shared leadership. Moreover, team heterogeneity and task interdependence promote the emergence of shared leadership among team members (Wu et al., 2020). Additionally, only studies that contained report sample sizes, correlations, and statistical results adequate to compute a correlation coefficient or effect size between shared leadership and its antecedent or consequence were accepted. Studies describing conceptual models (Hoch & Dulebohn, 2017; Ramthun & Matkin, 2012) and present theoretical propositions (Wu & Cormican, 2016a) were excluded. Since shared leadership is a team practice, the researcher excluded articles that studied shared leadership as an individual phenomenon (Drescher & Garbers, 2016). Finally, the researcher included the studies in an organizational or industrial setting or student studies simulating this environment only.

2.5.3 Other Theoretical Frameworks

As suggested by the title of this research, the aim is to understand the relationship between shared leadership and resistance to change in the moderator role of contextual variables. To do so, it is essential to understand the frameworks of studying shared leadership since we need to examine its overall impact on the success or failure of the implementation of any organizational change plan.

The two main theoretical frameworks for studying shared leadership are the Aggregation and the Social Network Theory (Ali et al., 2023; Carson et al., 2007; Coun et al., 2019). Since shared leadership consists of a complex combination of several elements, most related research, and studies use the aggregation framework because it provides results of the combined shared leadership elements' impact (Sweeney et al., 2019). While adopting this framework, the most predominant measures are aggregated behavioral scales of five leadership styles; aversive, directive, transactional, transformational, and empowering (Hoch & Dulebohn, 2017). Still utilizing the aggregation framework, others used alternative leadership tools to assess the entire team rather than individuals (Avolio et al., 1996). Even though aggregation frameworks are constantly utilized in shared leadership research, there is evident disagreement about what measures should be aggregated. This indicates a lack of clarity and understanding of what elements of behavior, management, and leadership researchers measure (Fausing et al., 2015). Some scientists criticized the aggregated framework because the holistic approach of measuring shared leadership elements dissolves team members' individual contributions (Wang et al., 2014). Moreover, research following this approach "have adopted inherently vertical leadership (VL) themes, such as transactional, directive and empowering leadership" (D'Innocenzo et al., 2016).

Researchers utilize the social network theory framework because shared leadership is based on the relationships between team members (Liu et al., 2017). Unlike the aggregated framework, studying shared leadership from the social network theory perspective allows individual relations and contributions to be recognized as measurement units (Sparrowe et al., 2001). Under this framework, each team member is requested to rate the other members' leadership traits, which allows leadership to be studied as a shared activity considering the exchanged influence of teammates (Sweeney et al., 2019). The main downside of this framework is its complexity on the participants and the complexity of the method itself (Conger & Pearce, 2002). Since this research examines multiple constructs of shared leadership and change management, it will be challenging to collect enough proper data for analysis and helpful in addressing the main research question and objectives.

Furthermore, the research is not specific to any industry, gender, age group, or employment/managerial segment. Therefore, individual differences may serve a different purpose than the study. Alternatively, the generic framework of the research will enable more comprehensive coverage and yet a better position to generalize the finding and managerial implications. The main social networks measures is "density" which is defined as "the overall level of interaction of various kinds reported by network members" (Sparrow et al., 2001, p. 317), and

centralization, defined as "Who is the most important or central person in this network?" (Molontay & Nagy, 2021).

Although the above frameworks were valuable tools for researchers, with the tools to identify the extent to which shared leadership is occurring (aggregation) and where in the work unit the leadership influence is located (social network theory), they may not satisfactorily reveal the nature of the 'dynamic interactive influence process' referred to by Conger and Pearce (2002, p. 1) and that a more sophisticated approach is required (Sweeney et al., 2019). Research has shown that information sharing, and knowledge sharing are mediating factors in the link between team performance and shared leadership. Other factors that can help improve team cohesion and social integration include increased networking behaviors and awareness of team members' capabilities. By fostering a culture that values innovation, shared leadership can help improve team creativity. Formal leaders can encourage members to develop their shared leadership techniques by providing resources and guidance. For instance, transformational, participative, and collaborative leadership styles are linked to the use of shared leadership. Because formal leaders are expected to involve their followers in decision-making, they can delegate authority over team activities to encourage more collaborative leadership. (Ali et al., 2021). Therefore, a research framework is needed to enable researchers to examine the hidden and complex interactions between individuals sharing leadership responsibilities.

Table 2.2: Shared leadership contexts, antecedents, consequences, and moderators

Context	Antecedents	Moderators	Consequences	Studies
Inter-organizational Teams	NA	Knowledge sharing	Team creativity	Gu et al. (2016)
		Task interdependence		
Work teams	Demographic diversity	Knowledge sharing	Team performance	Hoch (2014)
	NA	Group cohesion	Working conditions and well-being	Nielsen and Daniels (2012)
		Meaningful work		
		Social support		
		Role conflict		
	Fair reward	NA	NA	Grille et al. (2015)
	Psychological Empowerment			

	Team leader behavior			
	Leader humility	Team capability	Team effectiveness	Chiu et al. (2016)
	NA	NA	Team's organizing and planning effectiveness	Choi et al. (2017)
Decision-making Teams	NA	NA	Team functioning	Bergman et al. (2012)
Commercial bank Teams	NA	Organizational culture	Team proactivity	Erkutlu (2012)
E-learning Environment	NA	Task variety	Team creativity	Lee et al. (2014)
		Task analyzability		
Software project Teams	Team demographics	NA	Team performance	Muethel et al. (2012)
Online simulation	NA	Group Trust	Group trust	Drescher et al. (2014)
Student simulation Teams	Internal team environment	NA	Team performance	Serban and Roberts (2016)
	Task ambiguity		Team satisfaction	
Knowledge and manufacturing teams	Empowering leadership	NA	Team performance	Fausing et al. (2015)
	Task interdependence			
Manufacturing teams	NA	Team autonomy	Team performance	Rolfen et al. (2013)
		Team function		
Entrepreneurial teams	Team diversity and Composition	NA	Team performance	Zhou (2016)
Sales teams	NA	Leader-member exchange differentiation	Team effectiveness	Wang et al. (2017)

Source: Wu et al. (2020)

2.6 Hypotheses Development

2.6.1 Task interdependence (Shared leadership) and Positive belief about change (Fear, Inertia, Time and Workload)

Task interdependence is "the degree to which group members rely on each other to perform their tasks effectively given the design of their jobs or the interconnection between the tasks of group members" (Saavedra et al., 1993, p. 61). It is also defined by Grabner et al. (2022) as "the degree to which a team designs its creative tasks in an interconnected way such that team members by design depend on one another when performing their tasks." Reward interdependence is an essential component of shared leadership, and it plays a vital role in advancing team performance (Gu et al., 2022). Managers and organizations must pay attention to the design of reward systems and be aware of this. Reward policies encouraging members to work together to reach team objectives can help develop shared leadership and improve team performance. Moreover, managers should recognize the psychological ownership of their employees. According to a study, the link between team performance and reward interdependence depends on members' average level of psychological ownership.

Task interdependence is related to almost every business process in the organization. It may be distributed within one team or department or different teams and departments in the organization. In both cases, two types of task interdependence; initiated and received. The initiated task interdependence is one's awareness of the role of others, whereas the received task interdependence is one's awareness of own role within any given business process (Wong & Gils, 2021). Received task interdependence results in a better collaborative environment led by the individual's desire to excel and perform in a manner that fulfills his/her job requirements to avoid being defined as a cause of interruption.

On the other hand, initiated task interdependence may mislead the employee by focusing on the performance of other teammates without recognizing any shortcomings in his/her own (Wong & Gils, 2021). It is therefore argued that received task interdependence contributes to the alignment of staff/team members and improves their interpersonal relations through sensing each player's extent of sincerity and dedication to performing his/her duty in such a way that contributes to the collective outcome of the entire team (Wong & Berntzen, 2019). Moreover, such understanding enhances the interpersonal relationship among staff, particularly those whose jobs are interdependent but remotely stationed from each other. In this case, team members tend to consult with each other to make decisions related to the business process(es) they are involved in since making autonomous decisions becomes a liability should such decision(s) prove to cause any damage to the other team members in any way (Magpili & Pazos, 2018). It is essential to realize

that the longer the time is, performance in interdependent teams tends to break the individual job description barrier, and team-mates' focus turns to be on the team's outcome rather than the deliverables of each member. This means that team members are prepared to go out of their way to ensure that the team performance is at its optimal level rather than focus on the individual contribution of each one. However, unless the team members possess good team skills, they will not be able to reach such a high level of self-denial and team spirit (Hoda et al., 2013).

Task interdependence leads team members to interact with each other and the overall business environment in a multi-level complex manner that goes beyond the organizational processes and strategic or tactical objectives. In other words, this element necessarily leads to personal and psychological interactions among team members regardless of their physical location – close or remote from each other (Rossi, 2008). Therefore, the chances of task interdependence influencing another variable in the conceptual framework of this research are significant, particularly those associated with implementing a shared/distributed leadership model. For further clarity on the reason behind this assumption, we should consider the knowledge interdependence aspect (Raveendran et al., 2020), which leads to the creation of direct tacit (understanding and appreciation) or explicit (verbal or written) communications. The research argues that knowledge interdependence increases the chances of employees exceeding the officially set goals by the organization (Raveendran et al., 2020).

H1. There is a positive relationship between Task Interdependence (TI) and positive belief about change in Egyptian SMEs.

2.6.2 Social connectedness (Shared leadership) and Positive belief about change (Fear, Inertia, Time and Workload)

Social connectedness is "the feelings of belongingness and affiliation that emerge from interpersonal relationships within social networks" (RachelGrieve & NenaghKemp, 2015). Therefore, humans do not live as self-contained beings; they act and react according to the surrounding circumstances, situations, and experiences (Endres & Weibler, 2016). Considering the way shared leadership functions, it contributes to strengthening social connectedness amongst teammates, which, in turn, helps individuals express and communicate their fears and anxieties about the outcomes of any ongoing or future organizational change. The concept of cheerful inter-group disposition, triggered by the workers' self-categorization and social identity, extends beyond establishing regulations and policies aimed at managing and controlling workplace diversity (Basuo, 2022). Organizations must focus on developing frameworks and systems that will help

address the concerns and perceptions of their workers about their outer-group members. This can be done through the strengthening of communication and collaboration.

Developing a cheerful inter-group disposition aims to align the workers' beliefs and values with the organization's goals and culture. This process can be done by establishing an organizational system to help manage the differences between workers from different groups. Through the development of trust and understanding between the various groups, the organization can effectively harness the creativity and skills of its employees.

Despite the argument that task interdependence brings employees closer to each other and contributes to higher appreciation amongst team members, it may also result in serious conflicts between them. Suppose two or more members of the same team tend to lead or be jealous of some teammates. In that case, task interdependence shall be utilized negatively to damage their rivals' productivity and reputation. Therefore, it is essential to keep individual personal traits in mind while studying the interactive elements among team members (Wellman, 2017). Team members share views and opinions about processes and situations they are commonly exposed to, and with time those views, opinions, and reactions become a groupthink unique for this group member (Kozlowski & Bell, 2003). Such groupthink is a blind that consists of individual attitudes and reactions that result from each team member's social, cultural, and educational background.

Moreover, the reactions and opinions of group members are governed by the context of the situation, which influences team members' organizational behavior (Johns, 2006). For example, team members will accept modifications in business processes in times of high corporate performance and profitability. In contrast, they will have reservations and perhaps resistance against the same modifications if introduced during crises and layoffs. In addition to the contextual effect, team members' reactions and interactions are influenced by the shared goal(s). Team members shall manipulate their behavior among each other to contribute to the achievement of their common goal(s) (Wellman, 2017). Individual perceptions and subsequent behaviors are formed by any situation's social realities (Epitropaki et al., 2016). Therefore, team members' relations and connectedness result from subjective interpretations of whatever circumstantial situations they are subjected to (Epitropaki et al., 2016). With this in mind, leadership within a group is not only determined by the professional competency of its members whereby the most competent takes the leadership; instead, it shifts from one group member to another depending on the group's collective perception of who is the most suitable member to take the lead while facing specific situation (Packendorff et al., 2014). Relational Social Constructionist Leadership (RSCL) model provides a clear explanation of such rotating leadership roles. In RSCL, three elements shape and control the emergence of the overall leadership process; the first element is the social construction of the

relation between team members. Here, team members map their actions and reactions towards each other based on subjective interpretations of peers' personalities and observations of specific behavioral patterns. The second element is the high-quality implicit and explicit communication between team members which contributes to forming ties that determine perceptions of who would be the best fit to lead in any given situation. The third element is the influence that results from social construction and communications and gradually materializes in the manifestation of leadership (Endres & Weibler, 2017).

Social connectedness is the medium through which individuals develop cognitive implicit knowledge about the personal traits of a potential leader. A team member perceived by his/her peers as intelligent, self-confident, dedicated, and charismatic shall most likely be the designated team leader, even if such assignment is informal and limited to the team members (Wellman et al., 2016).

H2. There is a positive relationship between Social Connectedness (SC) and positive belief about change in Egyptian SMEs.

2.6.3 Knowledge sharing (Shared leadership) and Positive belief about change (Fear, Inertia, Time, and Workload)

Knowledge Sharing is a culture of social interaction, including the exchange of knowledge between employees of the organization; this creates an everyday basis for the need for cooperation (Sa`adah & Rijanti, 2022). If TMTs and CMTs are to benefit from shared leadership attributes, the element of knowledge sharing amongst the individuals influenced by change must be present. Relying on unofficial leaders to convey messages about the reason and extent of change and messages to address the staff members' concerns cannot be achieved in an environment lacking knowledge sharing (Imam, 2021). Besides being the medium to convey a message, knowledge sharing articulates exchanged trust among organization members. If the corporate culture does not encourage knowledge sharing, the ownership of the necessary knowledge to facilitate change shall remain restricted to certain organizational levels and individuals when it needs to turn public (Yuan, 2022). Based on the above, task interdependence, social connectedness, knowledge sharing, and shared leadership culture are considered driving forces for organizational change. On the other hand, the research studies the elements of resistance that contribute to the failure of organizational change and are also directly related to employees' emotions and psychological state of mind.

Organizations usually initiate change plans to guarantee sustainability on several levels (examples may be operational and financial advantages and workforce accumulated experience) and adaptation to internal and external challenges (Roberts, 2018). Unless the employees were convinced of the necessity of change, they would resist it in every possible manner, especially if

the proposed change was vague or was implemented in such a way that triggered sensations of fear and job insecurity (Bordia et al., 2004). Fear and insecurity may lead some key staff to leave the organization with priceless knowledge and work experience and shift to another employer. If their knowledge was tacit, the organization should incur material losses while attempting to recover the lost knowledge – either by reassuring and rehiring the shifted employee or training others to gain the same knowledge (but never the hands-on experience). This is why knowledge sharing is an essential aspect of shared leadership that significantly contribute to the success of any organizational change plan.

Scientists acknowledge the mediating factors of the level of trust between parties (social connectedness), formal and informal managerial practices (shared leadership), and information technology (IT) (automation) in use, organizational knowledge management (KM), and knowledge-oriented leadership (KOL) (task interdependence) (Castillani et al., 2019). On the other hand, scholars identified several barriers that stand against the utilization of tacit knowledge sharing: First, if an employee is fully occupied with what s/he is assigned to do as part of her/his job description, there will be no time to allocate for knowledge sharing, even if the interpersonal relation was at its best (O'Dell & Grayson, 1998). Second, lack of tacit knowledge sharing may also be a result of staff's poor awareness of its importance, yet, throughout the term of their employment, the notion does not occur to their minds (Probst et al., 2000). Third, if the corporate culture was too formal. Staff relations were strictly governed by processes and obligations only; chances of sharing tacit knowledge in such cases are next to zero. Knowledge transfer among staff members is stimulated by mutual trust and positive informal reciprocal interaction between them (Castillani et al., 2019). Fourth, demographic differences such as educational level, ethnic group, and in some cases, gender can result in poor or no, tacit knowledge sharing (Anand & Walsh, 2016). Fifth, poor communication skills among peers result in poor tacit knowledge sharing due to potential misunderstandings and yet prevention of TKS wholly or partially (Sveiby & Simons, 2002). Sixth, eventually, if team members do not trust each other, they will not share knowledge. Finally, in a rigid vertical organizational structure, informal communications are not usually encouraged, and the management usually follows predefined communication channels between different organizational units and hierarchal layers. In such an environment, knowledge sharing can be considered a threat since subordinates may attempt to use the shared knowledge to climb to higher positions in the organization. On the one hand, knowledge sharing does not have added value due to the inflexible predefined business processes (Michailova & Husted, 2003; Long & Fahey, 2000).

Knowledge management is a sensitive area that is key for implementing a shared leadership model; however, unless the corporate culture promotes it, the chances of achieving it are minimal

(Yuan, 2022). Promoting tacit knowledge sharing (TKS) needs to be embedded in such a way that guarantees sustainability and, at the same time, does not backfire in any way. For example, if the organization offered financial rewards against TKS practice, it would suffer in financial crises when there are insufficient funds for incentives and motivations. Alternatively, organizations can encourage TKS through job rotation programs where team members share knowledge and experience to maintain team productivity and performance (Finke & Will, 2003).

H3. There is a positive relationship between Knowledge Sharing (KS) and positive belief about change in Egyptian SMEs.

2.6.4 Shared leadership culture (Shared leadership) and Positive belief about change (Fear, Inertia, Time and Workload)

The importance of fostering a supportive culture is acknowledged by the results of a study, which suggest that it helps motivate and inspire team members. It also shows that managers can help their teams perform at their best by developing a supportive environment (Shamir et al., 1993). Moreover, due to work commitments, managers may need help to develop meaningful relationships with their team members. However, with limited contact time with staff members, they benefit from the findings. For instance, when working in a team-based environment, managers can help facilitate team behavior by developing a supportive culture that provides adequate justification and truthfulness (Erkutlu, 2012).

According to studies by various researchers, shared leadership can be linked to team and individual effectiveness. Social networks can also help team members find solutions and discuss problems. In addition, participating in decision-making can improve employees' motivation and energy levels (Erkutlu, 2012; Drescher et al., 2014). Although a leader has the best intentions and action plan, some employees may be unable, or need help, to utilize the control they are given. This can be due to various reasons, such as the employees' need for more expertise or experience. Some employees blame their lack of confidence on their preference for being given tasks and instructions rather than being responsible for making critical decisions. One can try motivating the employee, providing rewards, and encouraging them to become more critical thinkers to overcome this issue. In order to establish a more collaborative and inclusive leadership culture, employers should regularly assess their managers' abilities. There is no scientific method for assessing a leader's capabilities, as shared leadership traits tend to come naturally to some people. An effective way to develop positive exchange between the employees and their peers, on the one hand, and their leaders is through promoting shared leadership culture that develops based on openness to other people's ideas, transparency, and autonomy (Masaeid & Upadhyay, 2023).

Passion at work can be linked to positive relationships between shared leadership and individual job outcomes. It also shows that combining passion and team leadership can help employees improve their performance. There are various connections between performance and passion at work. For instance, individuals can develop resilience through team members' interactions and shared leadership. According to a study by Jensen and colleagues (2018), physicians can develop their resilience by having solid professional networks. This can help them expand their thought-action repertoire and improve their performance. HR managers and department heads should consider the passion of their teams when it comes to work. They should delegate leadership responsibilities to team members and encourage staff members to be proactive. Moreover, the heads of corporate divisions/departments should create job descriptions that clearly define the responsibilities and roles of their employees. According to Ali and colleagues (2020), having shared leadership can help team members become more confident and develop their value for guidance.

H4. There is a positive relationship between Shared Leadership Culture (SLC) and positive belief about change in Egyptian SMEs.

2.6.5 Moderating role of Automation between Shared leadership attributes and Positive belief about change

The three factors that affect organization design decisions are the corporate environment, technology, and strategy (Slocum & Hellriegel, 2007). This research focuses on the moderating role of the technological factor represented by automation. Manual business processes are being replaced with computer-based substitutes. Computers were used for primary and straightforward transactions such as calculations and typing. Nowadays, people have become familiar with smart devices, and simple processes (such as grocery shopping and delivery) heavily rely on some form of computer (Wesche & Sonderegger, 2019). However, computers are not slaves anymore, as human-computer interaction (HCI) has sometimes turned computers into partners and even leaders (Wynne & Lyons, 2020). Studies on computers and automated systems use them as mediums and communicators rather than affective and active agents. In contrast, the increasing utilization of automated systems and computers has demonstrated that computers play leaders in processes involving humans (Wesche & Sonderegger, 2019).

When implementing organizational process automation, TMTs must follow three leadership behaviors: goal setting, performance monitoring, and social presence (Wesche & Sonderegger, 2019). By setting clear and specific goals, agents adjust their performance and utilize their experience and knowledge to achieve the stated target. Researchers found that the more complex

the goals, the higher the performance (Locke & Latham, 2002). In most cases, monitoring leads to performance improvement. The same applies to electronic monitoring systems (Khan, 2016), which can release alerts and even state penalties for not meeting deadlines or fulfilling specific tasks. Humans interact with computers like their counterparts (humans). They deal with interactive systems precisely as if they are dealing with other humans (Derrick & Elson, 2018). Therefore, it is essential to study the impact of computers and automated systems on employees since they interact as humans to humans.

The adoption of enterprise resource planning (ERP) systems has increased rapidly over the past decade. These systems are widely used in private and public organizations to manage their core business processes. Various factors have contributed to the increasing number of organizations adopting these systems (Gabryelczyk & Roztock, 2017; Simone et al., 2018). Due to the increasing need for improving business performance and maintaining competitive advantages, many organizations are now adopting ERP systems instead of developing their information systems. This has led to the widespread acceptance of these systems globally (Wingreen et al., 2014). The information systems infrastructure of any organization should be designed to work seamlessly with the core business processes to deliver the services and products that the company needs. An ERP system can help improve the efficiency of an organization by integrating different functions (Davenport, 1998; Somers & Nelson, 2004). Integrating various enterprise processes can help improve the efficiency of an organization's operations. (Nwankpa, 2018). Despite the various advantages of implementing an ERP system, its capacity to deliver on its promise is still open to question due to the numerous implementation failures and cost overruns that have been reported (Hall, 2002, p. 264). Despite the advantages of implementing an ERP system, the literature has reported a high failure rate when implementing this technology. This is due to various factors including lack of industry, senior management commitment, communication with users, user support and change management (Alsayat & Alenezi, 2018; Simone et al., 2018).

ERP systems are different from traditional IT systems in that they are designed to work seamlessly with different applications (Rajgopal et al., 2002). In addition to having the proper equipment and software, implementing an ERP system requires proper management and planning (Rajgopal et al., 2002), as this discipline involves managing change and technological innovation. (Kumar et al., 2002). Implementing an ERP solution can be very expensive, and the process may take a couple of years. However, it depends on the requirements of the organization and the modules that will be implemented. According to studies, projects can still fail even before they go live. This is why the time factor must be considered when implementing an ERP system (Davenport, 1998; Ehie & Madsen, 2005). This research ranks organizational culture as one of the most challenging

issues in evaluating ERP implementation. Organizational culture refers to employees' various beliefs, behaviors, and principles. The findings of previous studies suggest that it significantly impacts the success of an ERP implementation. Ainin and Dezdar (2012) published a study that found a strong relationship between an organization's culture and its success when it comes to implementing an ERP system. Similarly, Ramayah and Suki (2008) found that a good rapport between vendors and staff members is essential when implementing an ERP system. In order to be successful, an organization needs to develop a culture conducive to learning and development (Ke & Wei, 2008). According to a study conducted by Zaglago et al. (2013), employees' motivation can be improved through organizational culture. This can help them avoid experiencing failure while implementing an ERP system. They also identified various cultural factors that can hinder the success of an ERP implementation. The findings of this study revealed that culture is critical when it comes to implementing an ERP system. It can help employees make informed decisions and avoid experiencing failure.

Team empowerment is one of the most critical factors that top management should consider when implementing an ERP system. The implementation of an ERP system can be carried out with the help of team empowerment. However, it is still essential to have the necessary skilled individuals to use the system efficiently (Sarker & Lee, 2003). Skilled and team-oriented people are essential factors that can help organizations successfully implement an ERP system. Unfortunately, the organization does not have enough trained HR professionals to handle an ERP system's various tasks and functions. This can lead to the failure of the individuals to use the system's advanced functions. A massive knowledge gap will be created if a critical ERP individual leaves an organization (Kumar et al., 2003). To effectively carry out their efforts, organizations must focus on the training and development of their employees. Moreover, it is imperative to answer how different types of automation can affect employees. STARA awareness measures how employees perceive the role of Smart Technology, Artificial Intelligence Robotics, and Algorithms in their workplace. They see novel technologies like STARA as a threat to the stability of the workplace, leading to higher insecurity and skepticism against organizational change (Brougham & Haar, 2018).

Recent studies have shown that the rapid emergence and evolution of automated technologies could lead to significant changes in the job market (Arntz et al., 2016; Frey & Osborne, 2017; Spencer, 2018). This study suggests that employees are more likely to experience job insecurity if they are more aware of the technologies used in their workplace. According to the studies, the adverse effects of STARA awareness on the behavior, well-being, and work attitude of employees could lead to a reduction in performance (Callea et al., 2016; Laszlo et al., 2010; Sverke

et al., 2002). This study also provides managers with valuable insights into how to address the increasing job insecurity caused by this technology. Workers who expect to be retrained after being replaced by STARA technology are less likely to experience job insecurity. Companies should consider offering retraining opportunities to their workers.

Task interdependence often requires clear communication and collaboration (Lee et al., 2020). When teams have to depend on each other, the success of the process or project may hinge on everyone adapting to changes seamlessly. Automation streamlines tasks and reduces manual steps that need coordination (Kaber & Endsley, 2004). If automation can be introduced effectively, the need for interdependence may be altered, potentially leading to a stronger belief in the positive outcomes of change. In Egyptian SMEs, where the landscape is rapidly evolving, automation's ability to influence traditional working relationships becomes even more pronounced (Mousa et al., 2020; Elshaer et al., 2023). Therefore, the study proposes a research hypothesis:

H5: Automation significantly moderates the positive relationship between Task Interdependence and positive belief about change in Egyptian SMEs and whether the automation level is high or low.

Social connectedness can lead to shared perceptions and attitudes toward organizational changes (Bordia et al., 2004). When teams feel connected, they are more likely to view changes positively. Automation alters the dynamics of social interactions by reducing the frequency of manual interactions but can also provide tools that facilitate better communication and social connection (Chui et al., 2016; 2018). In SMEs, where tight-knit relationships are common, automation's potential to reshape how individuals connect is significant (Elgohary et al., 2020). Therefore, the study proposes a research hypothesis:

H6: Automation significantly moderates the positive relationship between Social Connectedness and positive belief about change in Egyptian SMEs, whether the automation level is high or low.

A knowledge-sharing culture fosters adaptability and preparedness for changes (Vandavasi et al., 2020; Ahmad et al., 2019). When teams share knowledge, they better understand and navigate changes. Automation tools can enhance knowledge sharing by providing platforms and databases that store and disseminate information more efficiently than traditional methods (Argote et al., 2003). With the growth of digital tools and the push for modernization, Egyptian SMEs may increasingly rely on automated systems for knowledge management (Mousa et al., 2020). Therefore, the study proposes a research hypothesis:

H7: Automation significantly moderates the positive relationship between Knowledge Sharing and positive belief about change in Egyptian SMEs, whether the automation level is high or low.

Shared leadership cultures distribute decision-making and responsibilities, fostering a more adaptable and responsive change environment (Zhu et al., 2018). Automation can support shared leadership by offering tools that enhance collaboration, task distribution, and feedback mechanisms (Carson et al., 2007). As these enterprises navigate the challenges of the modern business landscape, the integration of automation tools in a shared leadership environment can instill a stronger belief in the benefits of change (Holcombe et al., 2023; Salas-Vallina, A. et al., 2021). Each of these hypotheses, grounded in the provided literature, suggests a dynamic interplay between automation and various organizational facets, emphasizing how automation can shape beliefs about change. Therefore, the study proposes a research hypothesis:

H8: Automation significantly moderates the positive relationship between Shared Leadership Culture and positive belief about change in Egyptian SMEs, whether the automation level is high or low.

2.6.6 Moderating role of the type of change (Strategic and Incremental change) between Shared leadership attributes and Positive belief about change

Due to the increasing number of organizational changes, the pressure on leaders has become more prominent. This can affect the effective implementation of these changes (Pawar & Eastman, 1997). According to a survey by the American Management Association, leadership was identified as the most vital factor to lead to successful change. Other factors included communication and corporate values (Gill, 2003). A successful leader not only creates a vision and strategy for the organization, but s/he also motivates and empowers the staff (Gill, 2003). The field of change management has been heavily focused on developing transformational leaders. These leaders are regarded as visionary and charismatic individuals who can inspire and motivate their employees. According to studies, these leaders can help improve employee outcomes when implementing organizational changes (Herscovitch & Meyer, 2002; Paulsen et al., 2013). Transformational leadership can help organizations implement change. It can create a strong vision and allow employees to think outside their self-interests. It can also encourage them to think critically about their work and improve their confidence in adapting to a new environment (Carter et al., 2013; Herold et al., 2008).

According to previous studies, one of the most internal communication critical factors that can affect a change initiative's success is the clear and proper communication; this may pave the road for a change initiative to succeed (Elving, 2005). Effective internal communication is essential

for change implementers as it allows them to provide their employees with the necessary information to make informed decisions. According to studies, high-quality communication can help reduce the perceived uncertainty surrounding a change and decrease employees' resistance (Allen et al., 2007; Elving, 2005). This study aims to identify the factors contributing to effective internal communication development. Studies have shown that employee trust and positive outcomes can be achieved through transparent communication (Jiang & Luo, 2018; Rawlins, 2008), corporate reputation (Men, 2014), and employee-organization relationships (Men & Stacks, 2014). Although there has been much research on the role of transparency in facilitating change, it has yet to be able to thoroughly explore the effects of this type of communication on employees' reactions. This research explores the various factors influencing an employee's openness to a change effort (Miller et al., 1994).

The relevance of task interdependence, particularly in collaborative ventures such as construction or IT projects, hinges on how individuals or teams perceive their roles in broader organizational objectives (Lee et al., 2020). The literature highlights how task interdependence impacts knowledge sharing, indicating a close association between task-related dependencies and the flow of information (Lee et al., 2020). Additionally, Elgohary and Abdelazyz (2020) emphasize the significance of employee perceptions and attitudes in successfully implementing changes, specifically in e-government systems in Egypt. This suggests that the nature of change - incremental (small and continuous adjustments) or strategic (significant shifts in organizational direction) - might affect how interdependent tasks influence the perception of, or belief, in that change. Finally, the study develops a research hypothesis:

H9: Type of change significantly moderates the positive relationship between Task Interdependence and positive belief about change in Egyptian SMEs, whether the type of change is strategic or incremental.

Like social capital, social connectedness influences knowledge sharing in projects (Lee et al., 2020). When individuals feel socially connected, they are more likely to share knowledge, collaborate, and believe in the collective direction, including changes the organization is undertaking. However, the degree to which this social connectedness translates to positive beliefs about change might vary based on whether the change is incremental or strategic. For example, in the context of the Egyptian Revolution, the role of women demonstrated the profound impact of social connections in bringing about strategic change (Allam, 2018). Thus, while incremental changes might benefit from existing social networks, strategic changes might demand deeper connection and collaboration.

H10: Type of change significantly moderates the positive relationship between Social Connectedness and positive belief about change in Egyptian SMEs, whether the type of change is strategic or incremental.

Numerous studies emphasize the importance of knowledge sharing in various contexts, from construction projects to broader organizational setups (e.g., Imam, 2021; Vandavasi et al., 2020). Argote and her colleagues highlight that knowledge transfer forms a basis for competitive advantage (Argote & Ingram, 2000). This suggests that in environments where knowledge is freely shared, employees are more informed and can better understand and believe in the reasons for change. However, the type of change might influence how this knowledge is received and perceived. Incremental changes, which are minor and continuous, might be more readily understood and accepted with regular knowledge sharing. In contrast, strategic changes, which often entail significant organizational shifts, might require more intensive knowledge dissemination efforts to foster positive beliefs.

H11: Type of change significantly moderates the positive relationship between knowledge sharing and positive belief about change in Egyptian SMEs, whether the type of change is strategic or incremental.

Shared leadership emphasizes a collective approach to leadership roles and responsibilities within a team or organization (Carson et al., 2007). As documented by various researchers, this collaborative approach enhances team performance and fosters innovative behavior (e.g., Vandavasi et al., 2020; Han et al., 2021). Within the context of change, a culture of shared leadership can facilitate a collective understanding and endorsement of change initiatives. However, the extent to which shared leadership influences positive beliefs about change could be contingent upon the nature of the change. While shared leadership might easily navigate incremental changes due to its collaborative nature, strategic changes could pose challenges requiring deeper alignment and collective vision within the leadership ranks.

H12: Type of change significantly moderates the positive relationship between Shared Leadership Culture and positive belief about change in Egyptian SMEs, whether the type of change is strategic or incremental.

Finally, the study develops a theoretical framework by an integrative review of the literature covering and managing organizational change, focusing on the variables of the research's conceptual framework. The listed variables are believed to impact the success or failure of a change program. For instance, the equity theory is related to the variables that affect shared leadership (Adams, 1965) and assumes that humans prefer equal output and input compared to their peers. The

concept of task interdependence refers to the willingness of team members to help one another in times of need. It is also linked to the organization's culture of citizenship (Elshaer et al., 2023). The extent to which teammates can help one another overcome anxiety resulting from organizational changes is determined by the level of task interdependence. The goal of achieving equality within the team is to help each member react positively to any new situation that emerges from the organization's change initiative. This can be done by developing a culture of trust and cooperation. In addition, it can be done by putting aside negative feelings about job insecurity and a lack of desire to collaborate (Schoenherr, 2017).

Employees are likely to feel stressed out at work due to current affairs. Implementing an organizational change can add to this stress, triggering feelings of potential burnout and uncertainty. Social constructionist leaders can help ease these negative feelings by connecting people with their surroundings. The quality of relations between staff and peers can influence various aspects of an organization's operations. In addition to affecting the perceptions of the management team and the organization's goals, intersubjective social reality can also act as a brake or driver on an organizational change initiative (Endres & Weibler, 2016). Knowledge sharing is one of the most critical factors that can help an organization succeed. This process can appear as a part of the organization's change process instead of formulating a policy. It is because employees are the ones who can influence the outcome of the change. Social psychology states that to achieve efficiency, a defensive system makes single-loop learning happen. On the other hand, to achieve flexibility, double-loop learning is created. This can be done through knowledge sharing, which helps organizations implement changes (Asma Al-Mulla, 2019).

This research examines several factors contributing to resistance when implementing a change program, such as fear, inertia, and the time versus workload ratio. When faced with a change, employees are also more likely to feel uncertain about their future job position (Shoss, 2017). Employees must be aware of the potential impact of organizational changes on their job security. This can be triggered by employees' subjective evaluations regarding the changes. However, different ideas about how to cope with this issue can be applied to different groups of employees. For instance, the employee's age, the type of contract they have, the support they provide, and the trust they have in the company may all affect their perceptions of job insecurity. The main focus of job insecurity is the various factors affecting an organization's performance, such as staff turnover, absenteeism, and job satisfaction. However, little is done to analyze the individual antecedents of this issue (Çalışkan & Özkoç, 2020).

Another common cause of resistance is inertia. This occurs when a company's internal politics and external regulations prevent it from effectively carrying out its activities. Organizations

that can withstand intense competition and pressures typically have a better chance of performing well (Mikale et al., 2020). High-fidelity reproduction is expensive, and structural inertia can significantly prevent organizations from achieving their goals. Understanding the impact of social connectedness, task interdependence, and knowledge sharing on the inertial intentions of peers is essential to improve organizational change's effectiveness (Hannan & Freeman, 1984). New job demands are typically triggered by introducing new resources in an organization. This can lead to higher stress levels and eventually lead to employee turnover. Unfortunately, no resources are available to support the development and implementation of new job demands, which can cause people to feel overwhelmed and unhappy. Highly stressful work situations can lead to employees having higher intentions to leave. It is, therefore, essential to understand the role that burnout plays in the relationship between turnover intention and resistance to change (Srivastava & Agrawal, 2020).

To address the diverse contextual elements that influence organizational change, we consider the moderating roles of automation and the type of change (e.g., incremental change and strategic change). This study also explores how these factors can be used to enhance the effectiveness of change management. According to some researchers, a larger team structure can help develop new organizational trends as it increases decision-making efficiency and the ability to process information. Others claim that it negatively affects the members' satisfaction. The controversy surrounding shared leadership is a crucial research gap that should be studied to understand better the impact of this type of leadership on the development and implementation of organizational change plans. It involves the interactions between teams and the people involved in the organization (Sweeney et al., 2018).

The process of altering goals can result in confusion and disarray in the workplace, reducing the company's performance. This is why organizations must have the resources and strategies to fend off the adverse effects of strategic changes. Large organizations' technology and management teams can effectively deal with the effects of strategic change. The teams with diverse backgrounds positively affected the company's performance. However, age and gender diversity did not seem to have a moderating effect. Companies must regularly check the composition of their executive teams. (Naranjo-Gilet et al., 2008). Every industry has various business processes that affect different aspects of an organization, such as staffing, assets, and operating capital. While implementing a new strategy, would these processes serve as a driving force or a stumbling block to the desired change? In addition, how can an organization communicate the change and facilitate the workforce's adaptation? (Georgiadou et al., 2022). The data collected by computers can be used to create rules. These rules can be used to automate tasks with no resistance to change, though it is not

clear how realistic this approach is (Raisch & Krakowski, 2021). Finally, Figure 2.1 shows the theoretical framework:

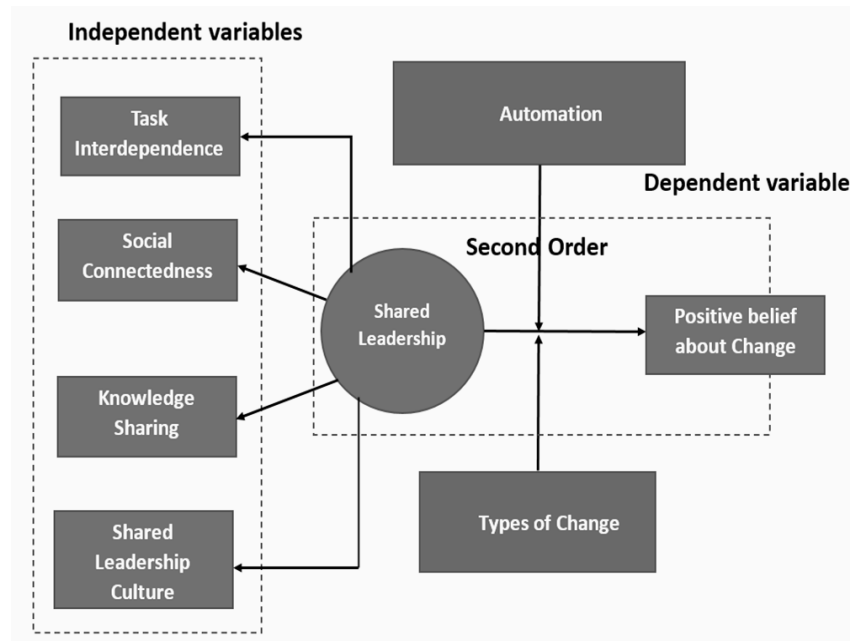


Figure 2.1: Conceptual Framework

2.7 Summary

In the context of Egyptian small and medium-sized enterprises (SMEs), the review of the relevant literature traces the interaction of various organizational factors and the role that these factors play in shaping employees' beliefs regarding organizational change. Studies conducted by Lee et al. (2020) and Elgohary and Abdelazyz (2020) suggest that task interdependence and the flow of knowledge play a pivotal role in influencing employee perceptions and attitudes towards change. This profound understanding emerges from the findings of these two sets of studies. This influence is not independent of other factors. As well as knowledge-sharing practices, the interconnectedness of employees, also known as their social connectedness, can act as catalytic force in shaping their beliefs (Allam, 2018; Imam, 2021; Vandavasi et al., 2020). In addition, the organizational leadership style, more specifically shared leadership, can be responsible for creating an environment that is receptive to change (Carson et al., 2007). Despite this, a topic that keeps coming up in the research is the moderating role that the "type of change" – incremental or strategic – plays in determining how these relationships develop.

The central tenet that employees' positive beliefs about change are influenced by a confluence of factors, including task interdependence, social connectedness, knowledge sharing, and shared leadership culture, is the anchor of the theoretical framework constructed from this body of literature. The 'type of change' acts as a moderating variable in this framework, potentially

amplifying or diminishing the impact of these factors on positive beliefs about change. This places the 'type of change' at the center of the framework. This model is founded on the sociological and psychological constructs of organizational behavior, with significant contributions from the theories of social capital, knowledge management, and shared leadership. The framework's purpose is to provide an all-encompassing perspective on the complex web of organizational dynamics and how these dynamics collectively shape the perceptions and attitudes of employees toward change within the context of the particular cultural and economic environment of Egyptian small and medium-sized enterprises (SMEs). Hypothesis H1 to H4 will be tested in chapter 3 whereas H1 to H12 will be tested directly and indirectly in chapter 4.

Chapter 3

Validation of Shared Leadership Model and the Relationship between Shared Leadership and Positive Belief about Organizational Change.

Quantitative Study (1)

3.1 Introduction

This chapter discusses the research methodology sections to conduct quantitative research, including the direct impacts of task interdependence, social connectedness, knowledge sharing and shared leadership culture on positive belief about change. A research methodology is a process utilized to solve a scientific problem (Saunders et al., 2019). It can be viewed as a kind of science that focuses on how scientific research is carried out. In this process, we study the various steps involved in performing a study. It is very important for researchers to have the necessary knowledge about the various techniques and methods used in their studies. Besides knowing how to develop a particular test or index, they also need to know the relevance of these to their research. This includes knowing the difference between the relevant and non-relevant techniques. Before a researcher starts working on a study, s/he should first understand the various assumptions that are involved in the process. This means that they have to make sure that the procedures and techniques will work for the specific problem. It is also important that the researcher have the necessary knowledge about the multiple problems that will be presented in the study (Patel & Patel, 2019).

This study also designs the research methodology, including validation of the shared leadership model and the relationship between shared leadership factors and organizational change management moderated by business process automation (Elgohary & Abdelazyz, 2020). The study also discusses the measures used for data analysis, population, sample size, survey procedure, and validation process, including exploratory factor analysis (validity) and Cronbach alpha (reliability). This chapter discusses the exploratory factor analysis (EFA). EFA includes testing sample adequacy and relevancy in KMO and Bartlett's test, common method bias (CMB) in checking the amount of variance, and factor loadings of each factor in the model. Finally, the findings are drawn on testing the validity and reliability of the factors in the model. In the end, the study tests the research hypotheses as the study examines the direct impacts of task interdependence, social connectedness, knowledge sharing and shared leadership culture on positive belief about change.

3.1.1 Automation, Task Interdependence, Social Connectedness, Knowledge Sharing, Shared Leadership Culture

Task interdependence reflects the extent to which organizational tasks are intertwined and reliant upon one another (Lee et al., 2020). In Instructional Systems Development (ISD) projects, where tasks are interconnected, knowledge sharing is pivotal in ensuring project success, underlining task interdependence's importance in technological advancements and organizational change. Moreover, Elgohary and Abdelazyz (2020) investigated employees' resistance to e-government systems in Egypt, signifying the influence of automation on perceptions of change. Kaber and Endsley (2004) further elaborated on the dynamics of automation, suggesting that varying levels of automation indeed affects human performance and, by extension, their perception of change. Thus, the interaction between task interdependence and automation likely influences the positive beliefs about change in SMEs.

Social connectedness, defined as the relationships and networks that individuals build within and outside their organizations, profoundly affects their perceptions and attitudes (Hendrickson et al., 2011). International students, for instance, exhibited different levels of homesickness and satisfaction based on their friendship networks and social connections. Given its capacity to transform how individuals connect and communicate (Kaber & Endsley, 2004), automation reshapes these networks, potentially influencing the belief systems surrounding change. Particularly in cultural contexts like Egypt, where social dynamics play a significant role in shaping perceptions, the intersection of social connectedness and automation becomes crucial. Knowledge sharing is a pivotal organizational activity, influencing various outcomes ranging from innovative behavior to project success (Imam, 2021; Vandavasi et al., 2020). Ahmad and Karim (2019) underscored the myriad impacts of knowledge sharing, calling for further research into its implications. In environments undergoing technological transformation, the mechanisms of knowledge sharing are redefined, often through automation (Kaber & Endsley, 2004). When individuals perceive that automation aids or hinders knowledge dissemination, their belief in change, especially in dynamic markets like those of Egyptian SMEs, can be achieved.

Shared leadership is a burgeoning paradigm where leadership responsibilities are distributed among team members, leading to enhanced team performance and resilience (Salas-Vallina et al., 2021; Zhu et al., 2018). Han et al. (2021) empirically established the positive effects of shared leadership on team outcomes. Given the transformative nature of automation on organizational structures and dynamics (Kaber & Endsley, 2004), its influence on shared leadership frameworks cannot be overlooked. In cultures valuing collective leadership, such as Egyptian SMEs, automation might redefine leadership roles, thus influencing beliefs about change. Therefore, the cited literature

provides a firm grounding for the proposed hypotheses, emphasizing the profound interactions between automation and various organizational elements in shaping beliefs about change, particularly in the unique context of Egyptian SMEs.

3.2 Research Methodology

3.2.1 Research Design

The mixed methods research involves using the quantitative and qualitative procedures and techniques in the current study. It is based on the philosophical assumptions about data collection with ontology, epistemology, and methodology. Critical realism and pragmatism are two of the most common philosophical positions associated with the mixed methods approach (Saunders et al., 2019). Concurrent mixed methods research is generally more practical and provide richer data than sequential mixed methods. They also tend to be shorter in timescale and more accurate. A sequential explanatory mixed methods research process involves collecting and analyzing multiple data phases. This type of design allows the researcher to expand upon the initial findings by using one approach with another. A mixed method research design can lead to two different types of research strategies. One of these is a quantitative method followed by a qualitative one.

In studying Egyptian SMEs, mixed methods research, particularly sequential explanatory design, has many advantages over quantitative or qualitative research alone. Quantitative methods oversimplify or miss key insights in SMEs due to their nuanced complexities and contextual richness. Mixed methods research can study complex phenomena like Egyptian SMEs, according to empirical evidence. Creswell and Plano Clarck (2017) and Johnson and Onwuegbuzie (2004) demonstrated how mixed methods research allows researchers to triangulate findings across data sources and methods, improving study validity and reliability. Sequential explanatory design allows researchers to qualitatively explore initial quantitative findings, gaining a complete understanding of the research problem. The mixed method approach provides a solid framework for studying Egyptian SMEs' complex nature, combining quantitative rigor and qualitative depth to yield actionable insights for academia and practitioners.

Mixed methods are often complex and multi-phased research. They involve collecting and analyzing data from multiple sources. For instance, quantitative methods followed by qualitative analysis will be used (Saunders et al., 2019). Figure 3.1 shows the systematic sequence of a mixed method research:

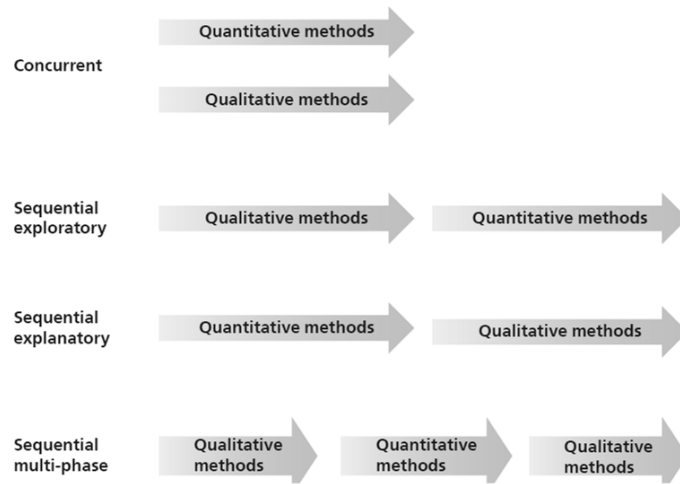


Figure 3.1: Mixed methods research designs (Saunders et al, 2019)

Finally, the study used a quantitative research methodology in this chapter and presents the findings according to first phase of quantitative research method by testing the moderating role of automation between the attributes of shared leadership and positive belief about change.

3.2.2 Research approach

The research approach is a process used by scholars in the initial stages of their doctoral studies to formulate questions focused on the relationship between independent and dependent variables (Saunders et al, 2019). This type of reasoning is only limited to the conscious creation of ideas and is not related to data analysis. On the other hand, the research approach is about deciding whether to pursue the study. The research approach aims to develop a new theory or construct a new one related to a relationship. In addition, the researcher can also test or invalidate an existing theory (Ganesha & Aithal, 2022).

Deductive research is a technique utilized to test or verify an existing theory regarding the relationship between independent and dependent variables in a research question. Scholars may use this approach if they have stated a set of hypothetical assumptions while developing their research question. This method would help confirm or reject their hypotheses (Ganesha & Aithal, 2022).

The survey strategy is often associated with a deductive business and management studies approach. It is commonly used to answer questions such as "who," "where," "how much," and "how many." It is also utilized for descriptive research. One of the most common survey strategies is questionnaires, which allow for gathering data from many individuals. Most individuals also perceive them as being very authoritative. A news bulletin, a newspaper, or a website reports the results of a survey every day. The survey gathers information about a group's attitudes and behavior toward a particular issue. (Saunders et al., 2019). Compared to other types of reasoning,

deductivism requires less research time. This is one of the main reasons why it is being widely followed among researchers.

According to Burns and Jackson (2011, p. 133), "One of the most remarkable aspects of organizational change efforts is their low success rate. There is substantial evidence that some 70% of all change initiatives fail. This article explores the argument that a potentially significant reason for this is a lack of alignment between the value system of the change intervention and those members of an organization changing." Although the focus of the quoted article/statement is on "the value system" of change, what matters for us in this research is the organization members affected by the change. The research is an exploratory attempt to understand how the adaptation of a shared leadership style over the success or failure of implementing an organizational change plan. To quantify and yet, measure both shared leadership (in its capacity as the independent variable) and organizational change management (as the dependent variable); the researcher selected elements that are directly related to human psychology and state of mind. In the case of shared leadership, the research shall measure task interdependence, social connectedness, and knowledge sharing. In contrast, for change management, the research shall measure fear (job insecurity), inertia, and time and workload.

3.2.3 Survey method

While reviewing the literature related to this research constructs, the researcher focused on the pattern(s) of methodologies for conducting similar studies. Accordingly, the initial stage was performing an exploratory study using quantitative data collection with qualitative data collection (Nagpal et al., 2021). Upon satisfying the quantitative studies, a qualitative study was followed to elaborate on the insights obtained from the quantitative studies (Clarke & Draper, 2020). Creating a new survey for this research was not a choice for the researcher due to the tedious validation requirement that includes running a pilot study on a considerable scale and seeking government and security permits to collect data on such a large scale (Johnson et al., 2019). Alternatively, surveys from previous literature were utilized to measure the constructs of the study.

An Egyptian consultancy firm was contracted to collect the data, especially since the target sample was more significant than the researcher's ability to handle it in person. The first round of data collection that relied on electronic forms turned negative reliability scores. This was referred to the sensitive nature of the questions and needing clarification about the respondents' understanding of the items related to the surveys were all filled through person-to-person meetings.

In the quantitative phase, the survey questionnaire was drawn 3 times to achieve the threshold values for reliability and validity measures. The initial rejection of the first round (1st

survey distribution) of data collection was due to unreliability, which emphasizes the importance of reliable data in empirical research.

Negative reliability usually indicates a major issue with the data collection method or measurement instruments, such as questionnaire design or response biases (Depp & Jeste, 2006). Unreliable data can invalidate conclusions and damage research credibility (Johnson & Cook, 2019). Thus, the advisor's rejection of the first round of data collection follows data integrity-focused research practices.

The second attempt improved reliability to 0.6, but it was still below the advisor's 0.7 threshold. Many social science studies use this threshold to ensure moderate internal consistency, which is essential for data analysis and interpretation (Miller et al., 2003). In some exploratory research contexts (as per this current phenomenon), a reliability coefficient of 0.6 is acceptable (Kalkbrenner, 2021), but the advisor recommended a higher threshold of > 0.70 to ensure the study's robustness and reliability. Thus, the study's validity and potential contribution to the field were strengthened by collecting the data a third time to meet this methodological rigor.

3.2.4 Sampling technique

Convenience sampling in each study round is justified by its accessibility and cost-effectiveness. Convenience sampling reduces the logistical and financial burdens of stratified or random sampling by selecting participants who are easily accessible to the researcher (Liu & Schwarz, 2020). In studies with budget and time constraints, this method works well. Convenience sampling allows researchers to quickly gather preliminary data for exploratory research that aims to gain a broad understanding rather than generalize findings to the entire population (Dawson et al., 2019). Therefore, this study follows the principles of a convenient sampling technique.

The potential for sampling bias is a drawback of convenience sampling. Because the sample may not accurately represent the population, results may be skewed and not universally applicable (Suryavanshi et al., 2023). Despite these limitations, convenience sampling can be useful in exploratory or limited-generalization studies to gain initial insights that can inform future, more rigorous studies. Convenience sampling's speed and hypothesis testing often outweigh its representativeness drawbacks (Pandey et al., 2021).

In studies with multiple data collection rounds, like this one, convenience sampling can help maintain methodological consistency. Comparative analysis across data collection phases requires this consistency. Although limited by sampling method biases, it lets researchers track cohort changes over time (Dellafiore et al., 2021). Convenience sampling has drawbacks, but its benefits make it a good choice for preliminary research, studies with limited resources, and studies that require consistency across multiple data collection rounds.

3.2.5 Sample size and data collection procedure

The researcher utilized a simple random sampling technique (probability sampling); selection was without replacement. To cover all the constructs in the conceptual framework, the survey was, eventually, long and consisted of 64 survey items/questions. To ensure acceptable confidence in the research outcome, the researcher needed five respondents, at least per question (75×5 per question = 375) as suggested by Hair et al. (2019), with an additional 150 units to cover any incomplete/accurate answers, leading us to a sample size of 500. The researcher targeted a random sample of 500 (Five Hundred) completed surveys. The researcher contracted with a specialized Egyptian company to collect the target data from respondents within Cairo (DAAM Group W.L.L). Prior release of the survey, DAAM ran a pilot study to identify challenges, ambiguities, and possible weaknesses in the survey. Based on the pilot study, the researcher provided a clear definition for each of the variables, made clear written and verbal statements about the purpose of the survey, and acknowledged the nondisclosure and confidentiality of the collected answers. The different organizational change methods listed in the demographics section were also clearly defined.

DAAM is a reputable regional research consultancy that performed market viability and feasibility studies for many sectors. Over 300 employees at DAAM specialize in market research, competitive analysis, and customer profiling, ensuring rigorous and reliable data collection (<https://daamgroup.com/>). The company possesses experience managing large projects working with KPMG, PWC, and other high-profile clients shows the company's ability to provide high quality, accurate data for the research study. DAAM's extensive portfolio of successful projects, including market studies for IEC, Maxim Real Estate Investment, and the Ministry of Education, lends credibility. Complex market overviews, competitive analysis, customer profiling, and revenue forecasting showed DAAM's market knowledge and ability to meet diverse client needs. With its integrity, excellence, and evidence-based insights, DAAM is a trusted partner for survey data confidentiality and accuracy, justifying its selection for this crucial research task.

Since the conceptual framework contained nine different constructs, the survey was, eventually, long and consisted of 64 (Sixty-Four) questions. Therefore, the researcher anticipated a challenge to achieve the target number in the first place and in a timely manner in the second. To address these doubts, all answers were collected through personal one-to-one sessions where the purpose of the survey was explained, and respondents were assured of confidentiality. The one-to-one method proved time-consuming because the target number of complete surveys (500) took ten weeks, although data was only collected from Cairo – Egypt. Since the tool was utilized in previous

research, testing validity was unnecessary; however, upon running a reliability test (Cronbach Alpha), the results were not only low but negative.

Expanding the scenario to include an electronic survey format and the exclusion of incomplete responses, the third attempt used digital methods to improve data collection efficiency and reliability. Using an electronic form can reduce data entry errors and speed up response collection (Foley et al., 2018). Electronic forms often have validation checks to prevent incomplete surveys, ensuring data accuracy and usability (Aditya et al., 2021). Only complete surveys are often included in survey research to maintain data quality. Incomplete data can bias findings and reduce reliability. The researchers could improve the analysis's credibility and avoid nonresponse bias and skewed results by including only fully completed surveys (Sperber et al., 2023).

The collection of 499 fully answered surveys in 17 days shows the efficacy of digital data collection. This rapid data collection indicates effective survey distribution, participant engagement, participant accessibility and ease of completion (Harper et al., 2019). Efficiency is crucial in time-sensitive research contexts where timely data collection can greatly impact research relevance and applicability. The third data collection phase's methodological rigor, shown by a higher reliability score, indicates a strong approach to overcoming initial shortcomings. This adjustment may have met the advisor's reliability threshold, enabling data analyses and interpretations (Nardi, 2018) (see Table 3.1).

Table 3.1: Reliability scores for the constructs

Factor	Items	Cronbach Alpha
Task interdependence	TI2, TI3, TI4, TI5, TI6, TI10, TI11	.893
Social connectedness	SC12, SC13, SC14, SC15	.926
Inertia	IN63, IN64	.820
knowledge sharing	KS24, KS25, KS26	.877
Shared leadership culture	SLC29, SLC30, SLC31, SLC32, SLC33	.907
Time & workload	TWL35, TWL38, TWL39, TWL40, TWL41	.871
Automation	AUT45, AUT46, AUT47	.900
Fear of change implementation	FEAR48, FEAR49, FEAR50, FEAR51, FEAR53, FEAR55	.935
Readiness to change	FEAR60, FEAR61, FEAR62	.923

Source: Developed by the researcher

Table 3.2: Measurement scales and items

Part 1: Demographics

الجزء الأول: البيانات الديموغرافية

Female أنثى	Male ذكر	Gender الجنس

Over 55 55 فوق	55 – 46 55 الى 46	45 – 36 45 الى 36	35 – 26 35 الى 26	25 – 17 25 الى 17	Age السن

Top Management الإدارة العليا	Middle Management الإدارة الوسطى	Supervisor مشرف	Employee موظف	Position الدرجة الوظيفية

Over 1000 أكثر من 1000	250 – 999 999 الى 250	50 – 249 249 الى 50	10 – 49 49 الى 10	Less than 10 أقل من 10	Number of Employees عدد الموظفين

Other أخرى	Education & Training التعليم و التدريب	Healthcare الرعاية الصحية	Retail التجزئة	Banking & Insurance بنوك و تأمين	Contracting المقاولات	Tourism السياحة	Business Activity النشاط التجاري

What kind of change did your organization go through?

ما هو نوع التغيير المؤسسي المنتهج في مقر عملك؟

- 1= Reactive تفاعلي
- 2= Anticipatory توقعي/وقائي
- 3= Incremental تدريجي
- 4= Strategic استراتيجي
- 5= Don't know لا اعلم

Part 2: Variables

الجزء الثاني: المتغيرات

Construct	Items	
Task Interdependence	1. I must coordinate my efforts with others frequently. لا بد لي من تنسيق انشطتي مع الزملاء باستمرار. 2. My performance is dependent on receiving accurate information from others. يعتمد أدائي الوظيفي على مدى دقة المعلومات التي أتلقيها من الزملاء. 3. The way I perform my job has a significant impact on others. طريقة تأديتي لمهام عملي تؤثر بصورة كبيرة على الزملاء. 4. My work requires me to consult with others fairly frequently. طبيعة عملي تتطلب أن استشير الزملاء بشكل متكرر. 5. I perform my work independently of others. أنا أقوم بتأدية مهام عملي بمعزل عن الزملاء. 6. In my job I am frequently called on to provide information and advice. أثناء تأدية عملي عادة ما يطلب مني تقديم المعلومات والنصيحة. 7. In my job I somewhat work independently from the others عادة ما أتولى تأدية مهام عملي بشكل مستقل عن الزملاء.	(Pearce & Gregersen, 1991)
Social Connectedness	8. My manager encouraged collaboration. مديري المباشر يشجع التعاون بين الزملاء. 9. My manager encouraged open communication. مديري المباشر يشجع فتح قنوات التواصل. 10. I feel close to my colleagues at work. أشعر بأنني قريب من زملائي في العمل. 11. I get help from my colleagues at work. أنا أتلقي المساعدة من زملائي في العمل.	(Carmeli et al., 2009)
Knowledge Sharing	12. I ask my colleagues about their abilities when I need to learn something. أقوم بالاستفسار من زملائي حول إمكانياتهم المهنية في حال كنت أسعى لتعلم شيء جديد. 13. When a colleague is good at something, I ask them to teach me. أطلب من زملائي الأكفاء مساعدتي لتعلم مهارات جديدة. 14. I like to be informed of what my colleagues know. أفضل أن أكون على دراية بما يمكن لزملائي القيام به.	(van den Hooff & de Leeuw van Weenen, 2004)

Shared Leadership Culture	15. All team members proactively made constructive suggestions for improving how things operate within the team. جميع أعضاء الفريق يقدمون مقترحات استباقية ببناء لتطوير طريقة أداء العمل. 16. All team members initiated actions to make the team more effective. جميع أعضاء الفريق بادروا بإجراءات لرفع كفاءة الفريق. 17. All team members asked other team members for advice. جميع أعضاء الفريق استعانوا بزملائهم لطلب المشورة. 18. All team members sought information from other team members about external influences that could affect their own work. جميع أعضاء الفريق سعوا للحصول على معلومات من زملائهم بشأن العوامل الخارجية التي قد تؤثر على عملهم. 19. All team members sought information from other team members about aspects of their work accomplishment that could affect their own work. جميع أعضاء الفريق سعوا للحصول على معلومات من زملائهم بشأن عوامل الانجاز التي قد تؤثر على عملهم.	(Muethel et al., 2012)
Time & Workload	20. We see this change as timely. نرى ان هذا التغير جاء في الوقت المناسب. 21. We know what resources we need to complete this change. ندرك ما هي الموارد المطلوبة لإتمام هذا التغير. 22. We know what each of us has to do to implement this change. ندرك المطلوب من كل واحد منا لتنفيذ هذا التغير. 23. We have the equipment we need to implement this change. لدينا الأدوات اللازمة لإنجاز هذا التغير. 24. We have the expertise to implement this change. لدينا الخبرة اللازمة لإنجاز هذا التغير.	(Shea et al., 2014)
Automation	25. Most of the admin staff have utilized automated business transactions. غالبية موظفي الإدارة استخدموا إجراءات عمل مميكنة. 26. Automated communication systems reduce the quality of interaction between staff. أنظمة الاتصال الالكترونية تخفض جودة التواصل بين الزملاء. 27. Automated office systems affect employees' feelings of identity with organizational goals. أنظمة العمل المميكنة تؤثر في مدى تجانس الموظفين مع أهداف العمل.	(Olson & Lucas, 1982)

Fear	28. I believe in the value of this change. أؤمن بقيمة هذا التغيير. 29. This change is a good strategy for this organization. يمثل هذا التغيير استراتيجية جيدة للشركة. 30. I think that management is making a mistake by introducing this change. (Reversed) أعتقد أن الإدارة ترتكب خطأ بتبني هذا التغيير. (معكوس) 31. This change serves an important purpose. هذا التغيير يؤدي غرضاً مهماً. 32. I have no choice but to go along with this change. ليس لدي خيار عدى مسايرة التغيير. 33. I have too much at stake to resist this change. لدي الكثير من المخاطر لمقاومة هذا التغيير. 34. I do not think it would be right of me to oppose this change. لا أعتقد أنه من الصواب ان اعارض هذا التغيير. 35. It would be irresponsible of me to resist this change. مقاومة التغيير سيمثل تصرف غير مسؤول من قبلي. 36. I would feel guilty about opposing this change. سأشعر بالذنب إذا ما عارضت هذا التغيير.	(Herscovitch & Meyer, 2002)
Inertia	37. Timely completion of tasks. أحرص على انجاز العمل في الوقت المحدد. 38. Achievement of work goals أحرص على تحقيق الأهداف المطلوبة في العمل.	Researcher

Source: Developed by the researcher

All measurement scales, except the “Type of Change”, were measured on 5-point Likert scale ranging 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The five-point Likert scale is a popular and effective method for measuring attitudes and perceptions, as it provides a balanced range of response options that capture varying degrees of agreement or disagreement. This scale format is simple for respondents to understand and apply, which improves the reliability and validity of the data collected (Joshi et al. 2015). It provides enough granularity to detect subtle differences in responses without the complexity and potential respondent fatigue associated with larger scales (Allen & Seaman, 2007). In addition, the Type of Change is measured as categorical dummy values including 1 = Transformational Change and 2 = Incremental Change.

3.2.7 Validity

Upon completing the survey, the researcher shared it with his advisor - an academic expert specializing in human resources and organizational behavior - who approved it for data collection. This was the initial screening, and the survey was then translated from English to Arabic, and the Arabic translation was sent to two different external translators to translate it back into English. This step was necessary to ensure the conformability, accuracy, and clarity of the Arabic translation of the original English version of the survey-back-translation (Saunders et al., 2019). The researcher made clear written and verbal statements about the survey's purpose and acknowledged the collected answers' nondisclosure and confidentiality. The different types of organizational change listed in the demographics section were also clearly defined.

3.2.8 Practicability and accessibility

The practicality and accessibility of survey questionnaires, especially electronic ones, make them popular in social sciences and business research. Electronic surveys are more accessible and easier to administer, which helps collect data efficiently. Baltar and Brunet (2012) found that electronic surveys via social media or email can boost response rates and data collection speed compared to paper-based methods. This data collection method is useful for reaching geographically dispersed demographic groups. Electronic questionnaires allow researchers to collect large amounts of data quickly, as shown by 499 complete responses in 17 days.

Electronic survey tools often improve data management and analysis. These tools automatically compile data into a usable format, saving time and reducing errors, according to Wright (2005). In the study, mandatory fields and validation checks were added to electronic surveys to reduce incomplete responses and improve data quality. This feature makes the data more complete and improves its reliability, which the advisor stressed by requiring a reliability score of 0.7 or higher. Electronic surveys enable fast and reliable data collection, meeting the study's practical needs while meeting the research objectives' methodological rigor.

3.2.9 Suitability and viability

Survey questionnaires, especially electronic ones, are flexible and adaptable to different research contexts, making them suitable. Studies that assess opinions, behaviors, or demographic characteristics across a large population benefit from surveys. The electronic format allows for diverse question types—from multiple-choice to open-ended responses—that can be tailored to the research needs, improving viability (Wright, 2005). In the study, the

survey format's adaptability likely helped collect nuanced data across multiple data collection phases, which is essential for understanding complex behaviors or patterns that change over time. Electronic surveys are also easy to modify and redistribute, making them ideal for sequential data collection rounds where preliminary findings or feedback from initial rounds require adjustments.

In addition, survey questionnaires are useful for research analysis. Electronic data collection systems often integrate with data analysis software, simplifying the process (Couper, 2008). This integration reduces data transcription errors and allows real-time data tracking and analysis, making it essential for fast-turnaround, accurate studies. This capability was especially useful in the study, given the advisor's strict reliability requirements and the need to address earlier rounds of concerns quickly. The ability to quickly analyze data and adjust methodologies or survey questions between rounds shows how efficient and scientifically rigorous electronic survey methodologies are.

3.2.10 Data analysis

Within the scope of this investigation, several statistical examinations were carried out by utilizing the SPSS program version 21. In the beginning, descriptive statistics were used to provide a summarized overview of the primary features of the dataset. This allowed for a clearer understanding of the general patterns and distributions exhibited by the data (Field, 2013). Descriptive statistics are foundational and crucial when it comes to assisting researchers in depicting and representing data in a meaningful way. They provide a snapshot of the sample characteristics, including central tendency and variability measures. First, the study checked the common method bias (CMB) to verify the dataset suitability and validity for further analysis. Second, the study conducted factor analysis using a principal component analysis (PCA) as suggested by Hair et al. (2019).

By using structural equation modeling (SEM) in Smart Least Squares regression (PLS) 4, the algorithm and bootstrapping techniques were carried out (Henseler et al., 2015) to evaluate the direct effects of the suggested connections between the variables. The specific needs of this study and the benefits of the referenced literature studies justify using Smart PLS 4 to test validity, reliability, and hypotheses. Smart PLS, which is efficient in handling complex models and robust in handling small to medium sample sizes, is ideal for this study's nuanced analysis of leadership styles and organizational change in SMEs. Smart PLS's ability to manage complex models with multiple constructs and paths is a major benefit. According to Hair et al. (2019), Smart PLS is adept at handling complex relationships, making it ideal for this study,

which involves complex interactions between leadership styles, technological factors, and organizational change. Ringle et al. (2015) noted that Smart PLS's ability to produce reliable results with smaller sample sizes is especially useful for SME-focused research, where large sample sizes are difficult to obtain. This research's exploratory and predictive nature, which seeks practical and actionable insights for SME managers, matches this software's focus on prediction and component-based structural equation modelling, unlike covariance-based methods in other software.

According to Sarstedt et al. (2014), Smart PLS-based user-friendly interface and graphical presentation capabilities make results interpretation and communication easier, which is crucial in managerial research. This makes the findings statistically sound and understandable to SME practitioners and stakeholders. According to Henseler et al. (2015), Smart PLS is used for reflective and formative constructs, making it a versatile tool for this study's leadership, organizational culture, and change dynamics constructs. Therefore, Smart PLS 4 was chosen for this study due to its robust analytical capabilities, suitability for complex models, effectiveness with smaller sample sizes, and user-friendly result interpretation features. These qualities make it suitable for a nuanced analysis of SME leadership and organizational change dynamics.

3.3 Results

3.3.1 Demographic information

Table 3.3 shows the demographic information about the respondents. The sample has a reasonably balanced gender distribution, though it slightly leans towards males. 56% of the respondents are male, while 44% are female. This distribution can be representative if it reflects the gender distribution within the targeted organizations or the industry. The age distribution indicates a concentration in the middle-aged categories. Most respondents (81%) fall within the 26-45 age range, with the 36-45 age group being the most prominent at 45%. The younger (17-25) and older (Over 55) age groups are minimally represented, making up only 2% and 1% of the sample, respectively. This could suggest that the majority of the workforce or those impacted by the change are in their prime working years. A notable majority of respondents (51%) occupy supervisory roles. Employees constitute 12%, while a significant portion (33%) are in middle management. Only 4% are in top management positions. This distribution suggests that the study has captured the perspectives of those directly involved in supervisory and mid-management roles, likely those overseeing or implementing day-to-day operations and changes.

Meanwhile, most represented organizations are small-to-medium enterprises (SMEs) or medium-sized companies. 44% have 50-249 employees, while 32% have 10-49 employees. More giant corporations with 250-999 and over 1000 employees are lesser represented, at 18% and 2%, respectively. Banking & Insurance (33%) and Contracting (29%) are the dominant sectors in the sample. Tourism and Retail have moderate representations at 11% and 12%, respectively, whereas sectors like Healthcare, Education & Training, and others are less represented. This suggests a possible focus or relevance of the study's topic within the financial and contracting sectors. A significant portion of respondents (48%) indicated that the changes they experienced were strategic. This was followed by Anticipatory changes at 24% and Reactive changes at 12%. Only 15% identified the changes as Incremental. Interestingly, a minimal portion (1%) was unsure about the type of change, indicating that the majority are well-aware and informed about the nature of changes in their organizations.

The demographic information provides valuable insights into the sample's characteristics. Most respondents are middle-aged, holding supervisory and middle management positions, mainly in the Banking & Insurance and Contracting sectors. This demographic composition suggests that the study predominantly captures the perspectives of those in decision-making and implementation roles within SMEs and medium-sized companies. The emphasis on strategic changes underscores the importance of long-term planning and transformation in the current business environment. The data can help understand how various demographics perceive and interact with organizational change, though it is essential to consider these demographics when generalizing the findings.

Table 3.3: Demographic information

Factor	Percentage				
Gender	Male			Female	
	56%			44%	
Age	17 - 25	26 – 35	36 - 45	46 – 55	Over 55
	2%	36%	45%	15%	1%
Position	Employee	Supervisor	Middle Management	Top Management	
	12%	51%	33%	4%	
Number of Employees	< 10	10 – 49	50 - 249	250 – 999	> 1000
	4%	32%	44%	18%	2%

Business	Tourism	Contracting	Banking & Insurance	Retail	Healthcare	Education & Training	Other
	11%	29%	33%	12%	10%	5%	1%
Type of Change	Reactive	Anticipatory		Incremental	Strategic		Don't know
	12%	24%		15%	48%		1%

Source: Developed by the researcher

3.3.2 Exploratory Factor Analysis (EFA)

Employing an exploratory factor analysis (EFA) with a recommended threshold value of 0.60 for factor loadings is widely used in the social sciences, psychology, and other fields (Hair et al., 2019; Tabachnick and Fidell, 2013). This threshold value is often used because it suggests that the underlying factor can explain a considerable proportion of the variance in an observed variable. Hair et al. (2019) indicate that factor loadings should be at least 0.60 to be considered significant. Loadings at this level or above indicate that over 36% of the observed variable's variance is explained by the underlying factor, providing substantial support for the factor structure. Tabachnick and Fidell (2013) also recommend using a minimum factor loading of 0.60. Comrey and Lee (1992) propose a guideline for interpreting factor loadings where values above 0.60 are considered "good", and values above 0.70 are considered "very good." This guideline indicates that using a 0.60 threshold for factor loadings is appropriate to ensure the factor structure is robust and reliable.

On the other hand, Costello and Osborne (2005) advocate using factor loadings of 0.60 or higher to ensure the stability of the factor structure. Worthington and Whittaker (2006) also suggest that factor loadings should be greater than 0.60 to achieve validity and increase the reliability of the analysis. Therefore, the study used 0.60 as a threshold for factor loadings in EFA. It is well-supported by multiple literature references, indicating that it provides a strong and stable validity that accounts for a significant proportion of variance in the observed variables.

The study employed exploratory factor analysis (EFA) of all 9 factors (Task interdependence, social connectedness, Inertia, Knowledge sharing, Shared leadership culture, Time & workload, Automation, Fear of change implementation and Fear about readiness to change). The study runs EFA in three rounds. In the first run, the study takes 3 factors (Task interdependence, social connectedness, and Inertia) using 11 items for task interdependence (TI1, TI2, TI3, TI4, TI5, TI6, TI7, TI8, TI9, TI10, TI11), 4 for social connectedness (SC12, SC13, SC14, SC15), and 5 for Inertia (INERTIA16, INERTIA17, INERTIA18, INERTIA63,

INERTIA64). In the second run, the study takes 2 factors (Knowledge sharing and Shared leadership culture) using 8 items for knowledge sharing (KS19, KS20, KS21, KS22, KS23, KS24, KS25, KS26) and 8 items for shared leadership culture (SLC27, SLC28, SLC29, SLC30, SLC31, SLC32, SLC32, SLC34). Furthermore, in the third run, the study takes 4 factors (Time & workload, Automation, Fear of change implementation and Fear about readiness to change) using 10 items for time & workload (TWL35, TWL36, TWL37, TWL38, TWL39, TWL40, TWL41, TWL42, TWL43, TWL44), 3 items for automation (AUTOMATION45, AUTOMATION46, AUTOMATION47), 11 items for fear of change implementation (FEAR48, FEAR49, FEAR50, FEAR51, FEAR52, FEAR53, FEAR54, FEAR55, FEAR56, FEAR57, FEAR58) and 4 items for fear about readiness to change (FEAR59, FEAR60, FEAR61, FEAR62). EFA for each runs is discussed below:

3.3.2.1 Task interdependence, Social Connectedness and Inertia

3.3.2.1.1 Common method bias (CMB)

Table 3.4 shows the results of a Principal Component Analysis (PCA) used to assess a study's common method bias (CMB). Common method bias occurs when the data collection or measurement method influences the study's findings, leading to inflated relationships between the examined variables (Podsakoff et al., 2003). To assess CMB, researchers typically use statistical techniques like Harman's single-factor test, PCA, or Confirmatory Factor Analysis (CFA) (Podsakoff et al., 2003). The PCA results display the eigenvalues and percentages of variance explained by each principal component. The Cumulative % column shows the percentage of total variance the components explain sequentially (Richardson et al., 2009). The Initial Eigenvalues column provides information about the total variance explained by each factor: task interdependence, social connectedness, and inertia. Task interdependence explains 50.004% of the total variance, social connectedness explains 12.023%, and inertia accounts for 10.864%. Together, these three factors account for 29.606% of the total variance which is lower than 50%. To assess common method bias, the study considers the variance explained by the first factor. If a single component (usually the first one) accounts for a substantial proportion of the total variance (typically around 50% or more), it could indicate that common method bias is present. In this case, the first component accounts for 29.606% of the variance at the threshold. However, the second and third components also account for a significant proportion of the variance, with a combined total of 29.416%. Considering these findings, the common method bias is not present. This suggests that only one underlying factor influences the relationships between task interdependence, social connectedness, and inertia.

Table 3.4: Common method bias (CMB) for task interdependence, Social Connectedness, and Inertia.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>
1	6.500	50.004	50.004	6.500	50.004	50.004	3.849	29.606	29.606
2	1.563	12.023	62.027	1.563	12.023	62.027	3.824	29.416	59.022
3	1.412	10.864	72.891	1.412	10.864	72.891	1.803	13.869	72.891
4	.780	6.001	78.892						
5	.587	4.519	83.411						
6	.457	3.517	86.928						
7	.420	3.231	90.160						
8	.353	2.719	92.879						
9	.271	2.086	94.964						
10	.244	1.875	96.839						
11	.190	1.462	98.301						
12	.127	.976	99.277						
13	.094	.723	100.000						

3.3.2.1.2 Factor loadings

In the first run, the study takes 3 factors (Task interdependence, Social Connectedness, and Inertia) using 11 items for task interdependence (TI1, TI2, TI3, TI4, TI5, TI6, TI7, TI8, TI9, TI10, TI11), 4 for social connectedness (SC12, SC13, SC14, SC15), and 5 for Inertia (INERTIA16, INERTIA17, INERTIA18, INERTIA63, INERTIA64). The Rotated Component Matrix presents the factor loadings after conducting principal component analysis (PCA) and applying Varimax rotation with Kaiser Normalization (Hair et al., 2019; Kline, 2014; Tabachnick & Fidell, 2013). As previously mentioned, a threshold of 0.60 for factor loadings is widely used in the literature, and loadings at this level or above indicate that over 36% (0.62) of the observed variable's variance is explained by the underlying factor. Based on the provided context, the study focuses on the three components related to Task Interdependence, Social Connectedness, and Inertia. Finally, Table 3.5 shows that 7 items (TI2, TI3, TI4, TI5, TI6, TI10, TI11) of task interdependence have higher factor loading than 0.60; however, the remaining 4 items (TI1, TI7, TI8, TI9) deleted from the model due to lower factor loadings. These items have factor loadings above 0.60, suggesting they adequately represent the underlying factor. Meanwhile, all 4 items of social connectedness (SC12, SC13, SC14, and SC15) have higher factor loadings than 0.60, indicating that they contribute significantly to the Social Connectedness factor. And the Inertia items are INERTIA16, INERTIA17, INERTIA18, INERTIA63, and INERTIA64. However, these items (INERTIA16, INERTIA17, INERTIA18) were deleted from the model due to lower factor loadings, so Inertia includes 2 valuable items (INERTIA63 and INERTIA64), suggesting that they represent the underlying factors well. Finally, table 3.2 shows the final valid items after deleting the lower factor loadings.

Table 3.5: Factor loadings for Task Interdependence, Social Connectedness, and Inertia (EFA)

Items	Task interdependence	Social connectedness	Inertia
2. I must coordinate my efforts with others frequently.	.62		
3. My performance is dependent on receiving accurate information from others.	.74		

4. The way I perform my job has a significant impact on others.	.79		
5. My work requires me to consult with others fairly frequently.	.80		
6. I perform my work independently of others.	.70		
10. In my job I am frequently called on to provide information and advice.	.63		
11. In my job I somewhat work independently from the others	.66		
12. My manager encouraged collaboration.		.89	
13. My manager encouraged open communication.		.84	
14. To what extent you feel close to your colleagues at work?		.82	
15. To what extent you get help from your colleagues at work?		.85	
63. Timely completion of tasks			.87
64. Achievement of work goals			.91

3.3.2.1.3 KMO and Bartlett's Test

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity are two statistical tests used to assess the suitability of data for conducting an exploratory factor analysis (EFA) (Çelikler & Aksan, 2016). The KMO index measures the degree of common variance among variables and ranges from 0 to 1 (Kaiser, 1974). A higher value indicates that the variables share more common variance and are more suitable for factor analysis. The obtained KMO value is 0.842. According to Kaiser (1974), KMO values vary from 0.00 to 0.49 = Unacceptable, 0.50 to 0.59 = Miserable, 0.60 to 0.69 = Mediocre, 0.70 to 0.79 = Good, 0.80 to 0.89 = Great, and 0.90 to 1.00 = Superb. Based on this interpretation, a KMO value of 0.842 is considered "great," suggesting that the data are well-suited for factor analysis. On the other hand, Bartlett's Test of Sphericity tests the null hypothesis that the correlation matrix is an identity matrix, meaning that the variables are unrelated and unsuitable

for factor analysis (Supardi et al., 2019). A significant *p-value* (less than 0.05) indicates that the null hypothesis can be rejected, and the correlation matrix is suitable for factor analysis. In the provided table, Bartlett's Test of Sphericity yields an approximate chi-square value of 4747.023 with 78 degrees of freedom and a significance level (*p-value*) of 0.0. Given that the *p-value* is less than 0.05, the test result is statistically significant, indicating that the variables are correlated and suitable for factor analysis. Finally, the KMO Measure of Sampling Adequacy (0.842) and Bartlett's Test of Sphericity ($p < 0.05$) both suggest that the data set is suitable for exploratory factor analysis (EFA).

Table 3.6: KMO and Bartlett's test for Task Interdependence, Social Connectedness, and Inertia

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.84
Bartlett's Test of Sphericity	Approx. Chi-Square	4747.02
	Df	78
	Sig.	.00

3.3.2.2 Knowledge sharing and shared leadership culture.

3.3.2.2.1 Common method bias (CMB)

In Table 3.7, the Initial Eigenvalues column provides information about the total variance explained by each factor: knowledge sharing and shared leadership culture. Knowledge sharing explains 45.033% of the total variance, while shared leadership culture explains 28.228%. Together, these two factors account for 73.228% of the total variance. The remaining factors explain a smaller proportion of the variance. To assess common method bias, the study considers the variance explained by the first factor. In this case, the first factor accounts for 45.033% of the variance which is also lower than 50%. In addition, the second component also accounts for a significant proportion of the variance (28.195 %). Considering these findings, it is easy to conclusively determine that there is no common method bias in this study. This suggests that only one underlying factor influences the relationships between knowledge-sharing and shared leadership culture.

Table 3.7: Common Method Bias (CMB)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>
1	5.015	55.719	55.719	5.015	55.719	55.719	4.053	45.033	45.033
2	1.576	17.509	73.228	1.576	17.509	73.228	2.538	28.195	73.228
3	.677	7.527	80.755						
4	.513	5.698	86.453						
5	.379	4.215	90.668						
6	.263	2.926	93.594						
7	.251	2.788	96.382						
8	.192	2.137	98.520						
9	.133	1.480	100.000						

3.3.2.2.2 Factor loadings

Table 3.8 presents the results of a Principal Component Analysis (PCA) with Varimax rotation applied to knowledge-sharing and shared leadership culture variables. The rotated component matrix displays the factor loadings for each variable on the two components. Variables with factor loadings below 0.6 were removed from the analysis. For knowledge sharing (KS19, KS20, KS21, KS22, KS23, KS24, KS25, KS26), three items (KS24, KS25, and KS26) have high factor loadings. The high loadings indicate that these items are closely related to the underlying construct of knowledge sharing. For shared leadership culture (SLC27, SLC28, SLC29, SLC30, SLC31, SLC32, SLC33, SLC34), five items (SLC29, SLC30, SLC31, SLC32, and SLC33) have high factor loadings than 0.6. The high loadings suggest that these items are closely related to the underlying construct of shared leadership culture. Therefore, the PCA with Varimax rotation identified two distinct components: knowledge sharing and shared leadership culture. The remaining items (KS19, KS20, KS21, KS22, KS23, SLC27, and SLC28) were removed from the analysis because their factor loadings were lower than 0.6, respectively, which suggests that these items might not be as strongly related to the underlying constructs as the retained items.

Table 3.8: Factor loadings for Knowledge Sharing and Shared Leadership Culture.

Items	Shared Leadership Culture	Knowledge Sharing
24. I ask my colleagues about their abilities when I need to learn something.		.90
25. When a colleague is good at something, I ask them to teach me.		.85
26. I like to be informed of what my colleagues know.		.85
29. All team members proactively made constructive suggestions for improving how things operate within the team.	.88	
30. All team members initiated actions to make the team more effective.	.85	
31. All team members asked other team members for advice.	.82	

32. All team members sought information from other team members about external influences that could affect their own work.	.88	
33. All team members sought information from other team members about aspects of their work accomplishment that could affect their own work.	.73	
34. All team members initiated actions to make the team more effective.	.62	

3.3.2.2.3 KMO and Bartlett's Test

In Table 3.9, the KMO value is 0.857, which indicates that the dataset is suitable for factor analysis and that there is a substantial proportion of common variance among the variables. On the other hand, Bartlett's Test of Sphericity yields an approximate chi-square value of 3139.511 with 36 degrees of freedom and a *p-value* (Sig.) of 0.0. Since the *p-value* is less than 0.05, we can reject the null hypothesis, concluding that the variables are related and that the dataset is suitable for factor analysis. Therefore, both the KMO measure and Bartlett's Test of Sphericity suggest that the dataset is appropriate for conducting factor analysis. These tests indicate that there is a sufficient degree of common variance among the variables and that they are related, making factor analysis a suitable technique to explore the underlying structure of the data.

Table 3.9: KMO and Bartlett's Test for Knowledge Sharing and Shared Leadership Culture.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.85
Bartlett's Test of Sphericity	Approx. Chi-Square	3139.51
	Df	36
	Sig.	.000

3.3.2.3 Time and Workload, Automation, Fear of Change implementation and Fear about Readiness to Change.

3.3.2.3.1 Common Method Bias (CMB)

Table 3.10 presents the results of a Principal Component Analysis (PCA) conducted to examine common method bias in a study investigating the relationship between time & workload (1), automation (2), fear of change implementation (3), and fear about readiness to change (4). The Initial Eigenvalues column provides information about the total variance

explained by each component. Time & workload explains 26.018% of the total variance, while automation explains 18.758%, fear of change implementation accounts for 14.196%, and fear about readiness to change explains 13.269% of the total variance. Together, these four factors account for 72.241% of the total variance. In this case, the first factor accounts for 29.018% of the variance that is also lower than 50%, including all other factors explain the total variance less than 50%. Considering these findings, it is clear that there is no common method bias because the value is lower than 50% of the total variance (Table 3.10 below).

Table 3.10: Common method bias (CMB) for Time & Workload, Automation, Fear of Change Implementation, and Fear about Readiness to Change.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>
1	10.387	49.462	49.462	10.387	49.462	49.462	5.464	26.018	26.018
2	1.952	9.294	58.755	1.952	9.294	58.755	3.939	18.758	44.775
3	1.548	7.374	66.129	1.548	7.374	66.129	2.981	14.196	58.971
4	1.283	6.112	72.241	1.283	6.112	72.241	2.787	13.269	72.241
5	.913	4.347	76.588						
6	.733	3.490	80.078						
7	.571	2.721	82.799						
8	.525	2.501	85.301						
9	.464	2.209	87.510						
10	.404	1.925	89.435						
11	.365	1.738	91.173						
12	.325	1.548	92.721						
13	.267	1.271	93.992						
14	.252	1.200	95.192						
15	.230	1.095	96.287						
16	.175	.833	97.120						
17	.169	.803	97.923						
18	.132	.627	98.550						
19	.129	.612	99.162						
20	.096	.459	99.621						
21	.080	.379	100.000						

3.3.2.3.2 Factor loadings

Table 3.11 presents the results of a Principal Component Analysis (PCA) with Varimax rotation applied to a set of variables related to time & workload (TWL), automation (AUTOMATION), fear of change implementation (FEAR), and fear about readiness to change (FEAR). For time & workload (TWL35, TWL36, TWL37, TWL38, TWL39, TWL40, TWL41, TWL42, TWL43, TWL44), five items (TWL35, TWL38, TWL39, TWL40, and TWL41) have high factor loadings. These items represent the organization's readiness to implement change, such as perceiving the change as time and having the necessary resources, knowledge, equipment, and expertise. The high loadings indicate that these items are closely related to the underlying construct of time & workload. For automation (AUTOMATION45, AUTOMATION46, AUTOMATION47), all three items (AUTOMATION45, AUTOMATION46, and AUTOMATION47) have high factor loadings. These items represent the impact of automated systems on staff interactions, feelings of identity with organizational goals, and the utilization of automated business transactions. The high loadings suggest that these items are closely related to the underlying construct of automation. For fear of change implementation (FEAR48, FEAR49, FEAR50, FEAR51, FEAR52, FEAR53, FEAR54, FEAR55, FEAR56, FEAR57, FEAR58), six items (FEAR48, FEAR49, FEAR50, FEAR51, FEAR53, and FEAR55) have high factor loadings. These items represent various aspects of individuals' perceptions of the change's value, purpose, and consequences, as well as their feelings of having no choice but to go along with it. For fear about readiness to change (FEAR59, FEAR60, FEAR61, FEAR62), three items (FEAR60, FEAR61, and FEAR62) have high factor loadings on Component 4. These items represent individuals' feelings of responsibility, guilt, and the perceived appropriateness of opposing the change. The remaining items (TWL36, TWL37, TWL43, TWL44, FEAR52, FEAR54, FEAR57, FEAR58, and FEAR59) were removed from the analysis due to their factor loadings being lower than 0.6, which suggests that these items might not be as strongly related to the underlying constructs as the retained items.

Table 3.11: Factor loadings for time and workload, automation, fear of change implementation, and fear about readiness to change.

Items	Fear of change implementation	Time & workload	Automation	Fear about readiness to change
35. We see this change as timely.		.61		
38. We know what resources we need to complete this change.		.61		
39. We know what each of us has to do to implement this change.		.61		
40. We have the equipment we need to implement this change.		.73		
41. We have the expertise to implement this change.		.76		
42. We have the time we need to implement this change.		.66		
45. Most of the admin staff have utilize automated business transactions.			.84	

46. Automated communication systems reduce the quality of interaction between staff.			.87	
47. Automated office systems affect 1s' feelings of identity with organizational goals.			.76	
48. I believe in the value of this change.	.72			
49. This change is a good strategy for this organization.	.65			
50. I think that management is making a mistake by introducing this change.	.77			
51. This change serves an important purpose.	.62			
53. I have no choice but to go along with this change.	.67			
55. I have too much at stake to resist this change.	.73			

56. It would be too costly for me to resist this change.	.73			
57. It would be risky to speak out against this change.	.68			
58. Resisting this change is not a viable option for me.	.71			
60. I do not think it would be right of me to oppose this change.				.90
61. It would be irresponsible of me to resist this change.				.80
62. I would feel guilty about opposing this change.				.83

3.3.2.3.3 KMO and Bartlett's test

In this case, the KMO value is 0.887, considered very good. This indicates that the variables in the dataset share a sufficient amount of common variance for factor analysis to be an appropriate method (Table 3.12). In this case, Bartlett's Test of Sphericity is highly significant (Chi-Square = 9016.283, df = 210, Sig. = 0.0). This result further supports the use of factor analysis, as it suggests that there are significant relationships between the variables in the dataset. Therefore, the KMO measure and Bartlett's Test of Sphericity indicate that the dataset is suitable for factor analysis. The high KMO value suggests that the variables share enough common variance, while the significant Bartlett's Test result indicates the presence of

significant relationships between the variables. These findings support the use of factor analysis to explore the underlying structure of the dataset and identify possible latent constructs.

Table 3.12: KMO and Bartlett's test for time & workload, automation, fear of change implementation, and fear about readiness to change.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.88
Bartlett's Test of Sphericity	Approx. Chi-Square	9016.28
	Df	210
	Sig.	0.00

3.3.3 Cronbach alpha (reliability analysis)

Table 3.13 presents the Cronbach's Alpha values for various scales used in the study, measuring internal consistency, and indicating the reliability of the items within each scale (Brown, 2002). Generally, a Cronbach's Alpha value above 0.7 is considered acceptable, with values above 0.8 indicating good reliability and above 0.9 indicating excellent reliability (Brown, 2002; Tavakol & Dennick, 2011). The findings showed that task interdependence has a Cronbach's Alpha of .893, suggesting good reliability. This scale consists of seven items measuring the extent to which team members depend on one another to complete their tasks. Social connectedness demonstrates excellent reliability with a Cronbach's Alpha of 0.926. This scale includes four items that assess the level of social connectedness among team members. Inertia shows good reliability with a Cronbach's Alpha of 0.82. This scale contains two items measuring the resistance to change in organizations.

The reliable measure of inertia in the present study can help examine the factors that may hinder organizational change and development. Knowledge sharing has good reliability with a Cronbach's Alpha of 0.877. This scale includes three items that assess the extent to which team members share knowledge and information. The reliable measure of knowledge sharing can provide insights into the role of knowledge sharing in fostering innovation and growth within the organization. Shared leadership culture displays excellent reliability with a Cronbach's Alpha of 0.907. This scale consists of six items measuring the extent to which team members share leadership responsibilities and collaborate effectively. Time and Workload (TW) also has a Cronbach's Alpha of 0.871, indicating good reliability. This scale includes six items measuring the time and workload constraints during type of organizational change. The

reliable measure of time and workload can provide insights into the challenges faced during change implementation and how they affect change outcomes.

On the other hand, automation demonstrates excellent reliability with a Cronbach's Alpha of 0.9. This scale consists of three items assessing the impact of automation on staff interactions and identification with organizational goals. Fear of change implementation has a Cronbach's Alpha of 0.935, indicating excellent reliability. This scale includes nine items measuring employees' concerns and resistance to change. Fear about readiness to change has a Cronbach's Alpha of 0.868, suggesting good reliability. This scale consists of three items assessing employees' concerns about their preparedness to implement change. The reliable measure of fear about readiness to change can provide insights into the factors that may affect employees' ability to adapt to organizational change. Finally, all scales used in this study demonstrate acceptable to excellent reliability, making them suitable for assessing the constructs they represent. The findings from these scales can contribute to our understanding of the factors that influence team dynamics, type of organizational change, and innovation.

Table 3.13: Cronbach Alpha

Variables	Items	Cronbach Alpha
Task Interdependence	7	0.893
Social connectedness	4	0.926
Inertia	2	0.820
Knowledge Sharing	3	0.877
Shared Leadership Culture	6	0.907
Time and workload	6	0.871
Automation	3	0.9
Fear of change implementation	9	0.935
Fear about readiness to change	3	0.868
Fear of change (total)	12	0.923

3.4 Structural Equation Modeling (SEM) using Smart PLS 4

3.4.1 The Model Fit

"Unlike CB-SEM, PLS-SEM does not optimize a unique global scalar function. Some scholars have traditionally considered the lack of a global scalar function and the consequent lack of global goodness-of-fit measures drawbacks of PLS-SEM, but we do not take this position. When using PLS-SEM, it is important to recognize that the term fit has different

meanings in the contexts of CB-SEM and PLS-SEM (Hair et al., 2017; Rigdon et al., 2017). Fit statistics for CB-SEM are derived from the discrepancy between the empirical and the model-implied (theoretical) covariance matrix, whereas PLS-SEM focuses on the discrepancy between the observed (in the case of manifest variables) or approximated (in the case of latent variables) values of the dependent variables and the values predicted by the model in question (Hair et al., 2019; Henseler et al., 2014). While researchers have proposed various model fit measures for PLS-SEM (Schuberth et al., 2018; Tenenhaus et al., 2005), their efficacy for identifying mis-specified models is highly limited (see Exhibit 6.2 for a discussion of the measures and their limitations). As a consequence, to judge the model's quality, researchers using PLS-SEM rely on alternative measures that assess the model's predictive capabilities (Shmueli, et al., 2016; Shmueli et al., 2019), both in-sample and out-of-sample (Hair, 2020)." (Hair et al., 2022, pp. 92-93).

According to the above literature, we will be using the Standardised Root Mean Square Residual (SRMR) as our Model Fit indicator. The SRMR is defined as the difference between the observed correlation and the model implied correlation matrix. Accordingly, it allows assessing the average magnitude of the discrepancies between observed and expected correlations as an absolute measure of (model) fit criterion. A value less than 0.10 or of 0.08 (in a more conservative version; see Hu and Bentler, 1999) are considered a good fit. Henseler et al. (2014) introduce the SRMR as a goodness of fit measure for PLS-SEM that can be used to avoid model misspecification. For our model, the SRMR value for the Saturated/Estimated model is 0.102 which is slightly above the acceptable value as a good fit.

3.4.2 The Measurement Model (the Outer Model)

The Measurement Model (Outer Model) analysis provides a comprehensive insight into the relationships between latent variables and their respective indicators within the context of a Partial Least Squares Structural Equation Modeling (PLS-SEM) framework. This model is particularly useful in social sciences, marketing, and organizational studies, where latent variables (unobservable constructs) are often measured indirectly through observable indicators. The analysis indicates a robust model with significant loadings and correlations, suggesting a strong relationship between the latent variables and their indicators. The algorithm's convergence after 12 iterations is an excellent indication of the model's stability and reliability. This convergence implies that the estimated parameters in the model are a good fit for the observed data. In PLS-SEM, the number of iterations required to achieve

convergence is a key indicator of model efficiency and precision. Fewer iterations generally denote a well-specified model.

The outer model loadings represent the strength of the relationships between the latent variables and their corresponding indicators. In this case, the high loadings observed for most indicators confirm the appropriateness of the chosen indicators for their respective latent variables. For instance, the "task interdependence" latent variable highly correlates with almost all its indicators. The presence of one indicator with a moderate correlation (less than 0.7) is independent of the overall strength of the latent variable, as the other indicators maintain strong correlations. Similarly, the latent variables "social connectedness" and "knowledge sharing" demonstrate exceptionally high correlations (above 0.85) with all their indicators. These high correlations indicate that the indicators highly predict the latent variables, suggesting that the constructs are well-defined and measured.

The "shared leadership culture" and "positive belief about change" latent variables also show strong relationships with their indicators. However, like "task interdependence," each has one indicator with a moderate correlation, which is a common occurrence in empirical research and does not significantly undermine the validity of the overall model. Indicator reliability assesses whether each indicator of a latent variable is a reliable measure of that construct. The reliability values greater than 0.4 for almost all indicators suggest that the measurements are generally reliable. Most indicators closely approach or exceed the preferred level of 0.7, indicating strong reliability. However, two indicators, "TI6" for "task interdependence" and "total inertia" for "Positive Belief about Change," fall below this threshold, suggesting that they might not be as reliable as the others. Despite this, the overall reliability of the measurement model remains robust. Internal consistency reliability, measured through composite reliability (RhoA), replaces the traditional Cronbach's alpha in PLS-SEM. This measure assesses the consistency of the indicators that comprise a latent variable. The high composite reliability values for all latent variables, well above the preferred level of 0.7, indicate strong internal consistency. It suggests that the indicators consistently represent their respective latent variables. Convergent Validity, assessed through the Average Variance Extracted (AVE), measures the amount of variance a latent variable captures from its indicators about the amount of variance due to measurement error. The AVE values exceeding the threshold of 0.5 for all latent variables confirm strong convergent validity. It indicates that a significant portion of the variance in the indicators is explained by the latent variables, supporting the validity of the measurement model.

The different analyses carried out for the measurement model indicate that all the indicators used are the correct indicators for their latent variables with almost all the loadings above the threshold of 0.6. Using the t-statistic to test for the loadings indicate that all the loadings are significant at a 5% significance level indicating that the correlation between the indicators and their latent variables is significant.

3.4.2.1 Correlation Analysis and Measurement Model Loadings

- The algorithm converged after 12 iterations indicating that the estimation is very good.
- According to the outer model loadings, the correlations between the “Task Interdependence” latent variable and almost all of its indicators (questions) are high. Only one indicator has moderate correlation (less than 0.7) with the latent variable.
- The correlations between the “Social Connectedness” latent variable and all of its indicators are exceptionally high (above 0.85).
- The correlations between the “Knowledge Sharing” latent variable and all of its indicators are exceptionally high (above 0.85).
- The correlations between the “Shared Leadership Culture” latent variable and almost all of its indicators are high. Only one indicator has moderate correlation (less than 0.7) with the latent variable.
- The correlations between the “Positive Belief about Change” latent variable and its indicators: “Fear of change implementation” and “Time & Workload” are exceptionally high. However, the correlation between the latent variable and its indicators: “Readiness for Change” and “Inertia” is moderate.

Table 3.14: Indicators’ reliability & validity

Latent Variable	Indicators	Loadings	Indicator Reliability (The Loadings Squared)	Composite Reliability (Rho _A)	AVE
Task Interdependence	TI10	0.777	0.604	0.905	0.617
	TI11	0.741	0.549		
	TI2	0.801	0.642		
	TI3	0.863	0.745		
	TI4	0.863	0.745		

	TI5	0.820	0.672		
	TI6	0.598	0.358		
Social Connectedness	SC12	0.936	0.876	0.927	0.819
	SC13	0.885	0.783		
	SC14	0.889	0.790		
	SC15	0.909	0.826		
Knowledge Sharing	KS24	0.924	0.854	0.879	0.805
	KS25	0.898	0.806		
	KS26	0.869	0.755		
Shared Leadership Culture	SLC29	0.896	0.803	0.918	0.693
	SLC30	0.885	0.783		
	SLC31	0.863	0.745		
	SLC32	0.910	0.828		
	SLC33	0.745	0.555		
	SLC34	0.666	0.444		
Positive Belief about Change	Fear of	0.898	0.806	0.844	0.592
	Readiness fear	0.696	0.484		
	Total Inertia	0.562	0.316		
	Total time-work	0.874	0.764		

3.4.2.2 Indicator Reliability

- All the indicators; except “TI6” in the “Task Interdependence” latent variable and “Totalnertia” in the “Positive Belief about Change” latent variable, have individual reliability values that are larger than 0.4 (the minimum acceptable reliability) and most of the indicators are very close to or exceeding the preferred level of reliability (0.7).

3.4.2.3 Internal Consistency Reliability

- The “Composite Reliability” is used to measure the internal consistency reliability as a replacement to the traditional Cronbach’s Alpha in PLS-SEM.

- The Composite Reliability for all latent variables is much higher than the preferred level of 0.7 indicating that high levels of internal consistency reliability is demonstrated among all latent variables.

3.4.2.4 Convergent Validity

- The Average Variance Extracted (AVE) is used as a measurement for the Convergent Validity.
- Since all AVE values are higher than the acceptable threshold of 0.5, therefore we can conclude that the Convergent Validity is confirmed.

The results of the measurement model analysis have several implications for research and practice (Table 3.14). First, the strong loadings and correlations indicate that the latent variables are well-defined and effectively measured by their indicators. This robust measurement model provides a solid foundation for further structural model analysis, where the relationships between latent variables are examined. Second, the high levels of indicator reliability, internal consistency reliability, and convergent validity suggest that the constructs are measured accurately and consistently. It enhances the credibility of the research findings and supports the generalizability of the results to similar contexts. Finally, while most indicators show strong reliability and validity, the few that do not meet the preferred thresholds highlight areas for potential improvement in the measurement model.

The measurement model analysis in PLS-SEM presents a comprehensive and robust evaluation of the relationships between latent variables and their indicators. The high loadings, strong reliability, and validity measures confirm the model's effectiveness in capturing the underlying constructs. This analysis validates the current research model and contributes to the broader understanding of measurement models in PLS-SEM, offering valuable insights for researchers and practitioners in various fields.

3.4.3 Assessment of Heterotrait-Monotrait Criterion

The heterotrait-monotrait ratio (HTMT) is a criterion for assessing discriminant validity in variance-based structural equation modeling. This criterion, which emerged as a significant advancement in the field of structural equation modeling (SEM), was extensively discussed and refined in several studies (Henseler et al., 2015; Roemer et al., 2021). Discriminant validity is a fundamental concept in the assessment of measurement models in SEM, refers to the extent to which a construct is truly distinct from other constructs within the model. Traditional methods for assessing discriminant validity, such as the Fornell-Larcker criterion and cross-

loading examination, had limitations that the HTMT ratio aimed to address. The HTMT criterion offers a more sensitive and reliable method for evaluating discriminant validity, which is crucial for ensuring the accuracy and credibility of SEM results.

The HTMT is a ratio of the heterotrait-heteromethod correlations' average to the monotrait-heteromethod correlations. Essentially, it compares the mean of correlations between indicators measuring different constructs (heterotrait) with those measuring the same construct (monotrait). In their groundbreaking work, Henseler et al., (2015) provided a comprehensive framework for applying the HTMT criterion, significantly contributing to its adoption and application in research. A key advantage of the HTMT ratio is its ability to provide a more nuanced and accurate discriminant validity assessment, especially in complex models with multiple constructs. Traditional methods often failed to detect a lack of discriminant validity in cases where constructs were closely related but conceptually distinct. The HTMT ratio, by focusing on the relative comparison of heterotrait and monotrait correlations, can more effectively discern these subtle distinctions.

Roemer et al., (2021) further refined the HTMT criterion by introducing HTMT2, an improved version that enhances its applicability and reliability. HTMT2 adjusts the original HTMT ratio to account for measurement error and other model-specific factors, providing a more precise discriminant validity assessment. This refinement was a significant step forward in SEM methodology, offering researchers a more robust tool for validating their measurement models. Rasoolimanesh (2022) emphasized the importance of a comprehensive composite-based approach to discriminant validity assessment in PLS-SEM. His work highlighted the need to integrate various methods, including the HTMT ratio, to evaluate discriminant validity thoroughly. By combining different techniques, researchers can better understand the relationships between constructs in their models, ensuring a more accurate and reliable validity assessment. Henseler et al. (2016) further explored the application of the HTMT criterion in new technology research. They provided updated guidelines for PLS path modeling, including applying the HTMT ratio. Their work underscored the importance of this criterion in cutting-edge research areas, where the distinction between constructs is particularly nuanced and critical to the study's success.

The HTMT ratio is typically compared against a threshold value to determine whether discriminant validity is established. Henseler and his colleagues suggested a threshold of 0.9 for the HTMT ratio, above which discriminant validity is questioned. This threshold provides a clear and practical guideline for researchers, although it is important to consider the specific context of the research when applying it. The introduction of the HTMT ratio and subsequent

developments have significantly impacted SEM methodology. The HTMT ratio has helped enhance the quality and credibility of research findings across various disciplines by providing a more accurate and sensitive measure for assessing discriminant validity. Its application has become a standard part of the SEM toolkit, reflecting the ongoing evolution of methods and practices in quantitative research.

The HTMT ratio significantly advances structural equation modeling. Its development and refinement, as detailed in the works of Henseler and his colleagues, have provided researchers with a more effective tool for assessing discriminant validity. This advancement underscores the importance of continuous methodological improvement in research practices, ensuring that models and analyses accurately reflect the complex realities they aim to represent.

Table 3.15 presented is a critical tool for evaluating discriminant validity in structural equation modeling (SEM), using the Heterotrait-Monotrait (HTMT) ratio. Discriminant validity assesses whether or not distinct constructs in a model are, in fact, empirically different. The HTMT ratio, as a relative measure, compares the mean of correlations between indicators measuring different constructs (heterotrait) with the mean of correlations between indicators measuring the same construct (monotrait). The table has five constructs: Positive Belief about Change, Shared Leadership Culture, Social Connectedness, Task Interdependence, and Knowledge Sharing. Each cell in the table represents the HTMT ratio between pairs of these constructs.

The HTMT ratio values for each pair of constructs are below the commonly recommended threshold of 0.90, indicating good discriminant validity among the constructs. For instance, the HTMT ratio between Positive Belief about Change and Shared Leadership Culture is 0.858, which is below the threshold, suggesting that these two constructs are distinct. Similarly, the ratio between Positive Belief about Change and Social Connectedness is 0.802, again indicating that these constructs are sufficiently different in the context of this model.

Another observation is the relatively lower HTMT ratios for some pairs of constructs, such as Knowledge Sharing and Task Interdependence, which have an HTMT ratio of 0.403. This significantly low ratio suggests a very high level of discriminant validity, indicating that these two constructs are very distinct in the context of this model. However, some constructs exhibit higher HTMT ratios, albeit below the 0.90 threshold. For example, the ratio between Task Interdependence and Positive Belief about Change is 0.932, which is relatively high but still indicates discriminant validity. While these constructs differ, the higher HTMT ratio could suggest a closer relationship or some degree of overlap in what they represent. It is also important to consider these constructs' context and theoretical underpinnings. In some research

scenarios, constructs are expected to have some association level due to their nature or the theoretical framework guiding the research. For instance, Shared Leadership Culture and Social Connectedness having an HTMT ratio of 0.820 might reflect a conceptual closeness in the model, which is understandable given that both constructs could be related to interpersonal dynamics and organizational culture.

The analysis of the HTMT ratios in the table suggests a satisfactory level of discriminant validity among all pairs of constructs. While some constructs are more closely related than others are, as indicated by their higher HTMT ratios, all pairs are distinct enough to satisfy the criteria for discriminant validity in SEM. This finding is crucial for the credibility and validity of the structural equation model, as it confirms that each construct contributes unique and distinct information.

Table 3.15: Discriminant validity

	Positive Belief About Change	Shared Leadership Culture	Social Connectedness	Task Interdependence	Knowledge Sharing
Positive Belief About Change					
Shared Leadership Culture	0.858				
Social Connectedness	0.802	0.820			
Task Interdependence	0.932	0.880	0.696		
Knowledge Sharing	0.713	0.525	0.602	0.403	

- Discriminant Validity tests whether the constructs are unrelated/independent of each other or do they overlap.
- Henseler et al., (2015) show by means of a simulation study that the traditional approaches for discriminant validity assessment do not reliably detect the lack of discriminant validity in common research situations. These authors therefore propose an alternative approach, based on the multitrait-multimethod matrix, to assess discriminant validity: the heterotrait-monotrait ratio of correlations “HTMT”.

- The acceptable level of discriminant validity is (< 0.90) as suggested by Henseler et al. (2015). Accordingly, the discriminant validity for all latent variables except for the “Task Interdependence” is well established.

3.5 Checking structural path significance in Bootstrapping.

3.5.1 P-values of outer loadings

According to the results below, we can conclude that all the outer model loadings are significant at a 5% significance level (i.e., there is a statistically significant correlation between the indicators and their latent variables).

Table 3.16 - P-values of outer loadings

	Task Interdependence	Social Connectedness	Knowledge Sharing	Shared Leadership Culture	Positive Belief of Change
TI10	0.01				
TI11	0.01				
TI2	0.01				
TI3	0.01				
TI4	0.01				
TI5	0.01				
TI6	0.01				
SC12		0.01			
SC13		0.01			
SC14		0.01			
SC15		0.01			
KS24			0.01		
KS25			0.01		
KS26			0.01		
SLC29				0.01	
SLC30				0.01	
SLC31				0.01	
SLC32				0.01	
SLC33				0.01	
SLC34				0.01	
Fearofch					0.01
Readinessfear					0.01
Totalnertia					0.01
Totaltimework					0.01

3.5.2 Structural Equation Model

Moving onto testing the structural model, the following tables present the results of the path coefficients, and the adjusted coefficient of determination (R^2 Adjusted). The structural model and Adjusted R^2 are pivotal in statistical analysis, particularly within business research.

These concepts, integral to understanding and applying PLS-SEM, are extensively explored, and elucidated in various scholarly works. Ramayah et al. (2018) provides a comprehensive guide on PLS-SEM using Smart PLS, offering insightful perspectives on the nuances of structural models. Similarly, Sarstedt and Cheah (2019) offer a detailed review of PLS-SEM, focusing on Smart PLS, a widely used software in this domain. Cheah et al. (2020) further expand on these concepts by providing step-by-step guidelines for conducting multi-group analysis using Smart PLS. This approach is increasingly relevant in diverse business research contexts.

The structural model in PLS-SEM is a core component representing the relationships between latent variables. These latent variables are theoretical constructs often not directly observable but are measured indirectly through various indicators or observed variables. The structural model, therefore, elucidates the hypothesized causal relationships between these constructs, offering a pathway to understand and test the theoretical framework underpinning a research study. This model is particularly crucial in business research, where complex relationships between constructs such as consumer behavior, brand loyalty, and organizational performance are common. One of the key strengths of PLS-SEM, and by extension, the structural model, is its ability to handle complex models with multiple constructs and pathways. This flexibility makes it an attractive tool for researchers dealing with intricate models that may need to be more suitable for more traditional statistical techniques. The structural model in PLS-SEM is often visualized as a path diagram, where paths representing hypothesized relationships, with directionality indicating the proposed causal flow, connect latent variables.

A critical measure within the structural model is the coefficient of determination, commonly called R^2 . The R^2 value is a statistical measure representing the proportion of variance in the dependent variable that is predictable from the independent variables. In other words, it indicates the strength of the relationship between the dependent and independent constructs in the model. A higher R^2 value suggests a stronger relationship, implying that the independent variables explain a significant proportion of the variance in the dependent variable.

The concept of Adjusted R^2 , as discussed in the works above, is particularly important in PLS-SEM. Unlike the standard R^2 , the Adjusted R^2 considers the number of predictors in the model relative to the number of observations. This adjustment is crucial as it provides a more accurate measure of the model's explanatory power, especially in models with many predictors. By accounting for the complexity of the model, the Adjusted R^2 prevents overestimation of the model's explanatory power, a common issue in models with numerous

predictors. In business research, where models often include multiple predictors to capture the multifaceted nature of business phenomena, Adjusted R^2 is particularly pertinent. It ensures that the model's explanatory power is not inflated due to the sheer number of predictors, thus providing a more realistic and reliable assessment of the model fitness.

Table 3.17: Inner model path coefficients sizes and significance

Hypotheses testing	Path Coefficient	P-value
Task Interdependence → Positive belief about change	0.675	0.01
Social Connectedness → Positive belief about change	0.176	0.01
Knowledge Sharing → Positive belief about change	0.234	0.01
Shared Leadership Culture → Positive Belief about Change	-0.030	0.600

- The inner model path coefficients indicate the following:
 - i. The effect of the sub-construct “Task Interdependence” on the construct “Positive Belief about Change” is moderate and statistically significant (P-value = 0.01).
 - ii. The effect of the sub-construct “Social Connectedness” on the construct “Positive Belief about Change” is weak but statistically significant (P-value = 0.01).
 - iii. The effect of the sub-construct “Knowledge Sharing” on the construct “Positive Belief about Change” is weak but statistically significant (P-value = 0.01).
 - iv. The effect of the sub-construct “Shared Leadership Culture” on the construct “Positive Belief about Change” is statistically insignificant (P-value = 0.60).

2.5.2 Adjusted Coefficient of Determination (R^2 Adjusted)

- The adjusted coefficient of determination (R^2 Adjusted) for the endogenous latent variable “Positive Belief about Change” is **0.805**. This means that the three significant latent variables “Task Interdependence”, “Social Connectedness”, and “Knowledge Sharing” explain 80.5% of the variance of “Positive Belief about Change”.

Moreover, interpreting Adjusted R^2 value is a critical step in PLS-SEM analysis. Researchers must carefully consider what constitutes an acceptable Adjusted R^2 value, which can vary depending on the nature of the research and the specific field of study. In some cases, a lower Adjusted R^2 might be acceptable, especially in exploratory research or fields where predicting behavior is inherently challenging. Furthermore, the Adjusted R^2 plays a vital role in model comparison and evaluation. When multiple models are being compared, the Adjusted R^2 can be a criterion for selecting the best model. A model with a higher Adjusted R^2 is generally considered superior, as it explains a greater proportion of variance in the dependent variable while accounting for the number of predictors.

The structural model and Adjusted R^2 in PLS-SEM are of paramount importance in business research, as highlighted by the works of Ramayah et al. (2018), Sarstedt and Cheah (2019), and Cheah et al. (2020). These concepts provide a framework for understanding and testing complex relationships between latent variables and ensure a more accurate and realistic assessment of the model's explanatory power. As PLS-SEM continues to evolve and gain prominence in various fields of research, understanding and applying these concepts will remain crucial for advancing knowledge and developing robust, reliable models.

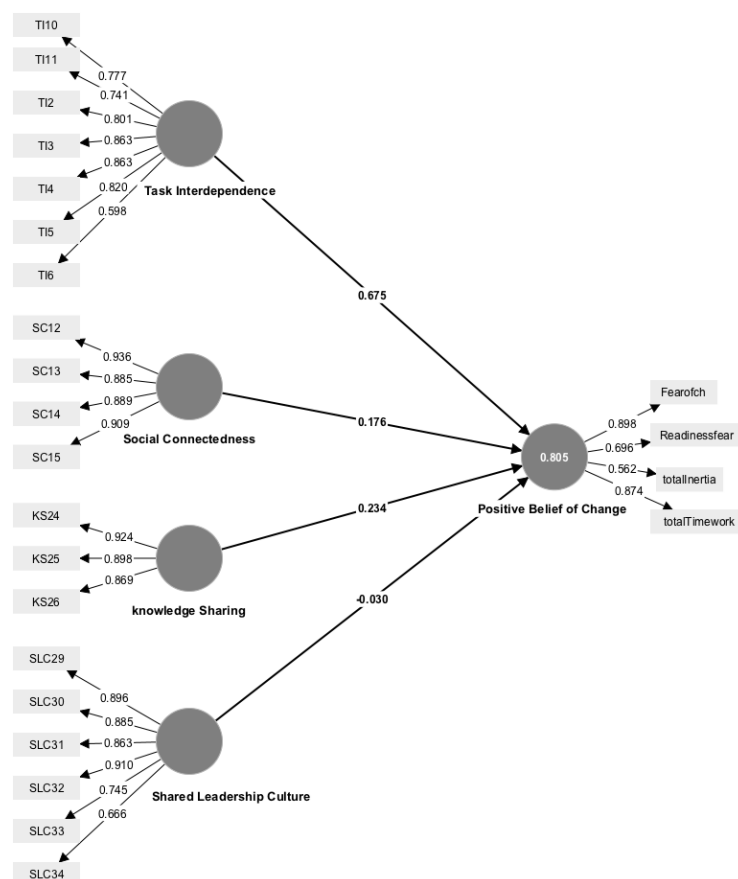


Figure 3.2: Structural Equation Modeling (Direct effects)

3.6 Summary

This chapter discussed the results from exploratory factor analysis (EFA) and structural equation modeling (SEM). The study discussed the survey questionnaire, sample size and data collection procedures and finally, data analysis. By providing the research findings, the study explored the effects of task interdependence, social connectedness, knowledge-sharing, shared leadership culture, and automation on positive beliefs about change. The findings indicate that each factor individually has a positive and significant relationship with positive belief about change. However, when combined with automation, these factors negatively affect positive beliefs about change. These findings suggest that organizations must carefully consider integrating automation into their processes and structures. While automation can bring about efficiency and productivity gains, it may also interact with other factors, such as task interdependence, social connectedness, knowledge-sharing and shared leadership culture, in ways that may negatively affect employees' beliefs about change. To maximize the benefits of automation while minimizing its potential drawbacks, organizations should focus on fostering a supportive and inclusive environment that encourages positive beliefs about change.

This chapter uses Smart PLS 4, a robust Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine the complex relationships between organizational dynamics and positive change beliefs. Task Interdependence, Social Connectedness, Knowledge Sharing, and Shared Leadership Culture are examined to determine how they affect beliefs about organizational change. Based on the robust analytical framework, the findings shed light on complex business interactions, particularly change management.

Structural model analysis provides key insights. Task interdependence moderately and statistically significantly affects positive change beliefs, emphasizing its importance in collaborative work environments. Social Connectedness, though weaker, shows how interpersonal relationships facilitate change. Knowledge Sharing has a weak but significant impact on positive change perceptions. Shared Leadership Culture has no statistically significant effect, suggesting its limited impact in the context studied. The chapter discusses the Adjusted Coefficient of Determination (R^2 Adjusted) of 0.805 for the endogenous latent variable "Positive Belief about Change". This high value indicates that Task Interdependence, Social Connectedness, and Knowledge Sharing explain 80.5% of positive beliefs about change variance. Based on PLS-SEM's advanced methods, this analysis helps organizations understand and improve positive change perceptions.

Table 3.18 Summary of the Hypothesis

#	Hypothesis	Result
H1	There is direct positive effect of Task Interdependence on Positive Belief about Change	Supported
H2	There is direct positive effect of Social Connectedness on Positive Belief about Change	Supported
H3	There is direct positive effect of Knowledge Sharing on Positive Belief about Change	Supported
H4	There is direct positive effect of Shared Leadership Culture on Positive Belief about Change	Not Supported

Next chapter will examine the Moderating effect of Automation and Type of organizational Change on the relation between Shared Leadership and Positive belief About Change.

Chapter 4

Moderating effect of Automation and Type of organizational Change on the relation between Shared Leadership and Positive belief About Change

Quantitative Study (2)

4.1 Introduction

In the previous chapter we examined the relationship between shared leadership and positive belief about change and found that only shared leadership culture did not directly affect the positive belief about change. This chapter starts with discussing the research methodology of the study. The methodology used in this chapter was the same we already used in chapter 3. So, we don't need to repeat the methodology in detail here except for some information. This chapter also examines the moderating effect of automation, the type of organizational change between shared leadership factors (task interdependence, social connectedness, knowledge-sharing, shared leadership culture and positive belief about change). This chapter systematically elaborates the findings of the interaction effects with the interaction diagrams from Smart PLS. The study uses a 5% significance level with 95% confidence interval. At the end, the study summarizes and concludes the findings of the hypotheses testing.

4.2 Research Methodology

In this chapter, the study aims to assess the moderating role of automation and the type of organizational change on the relationship between shared leadership attributes and positive belief about change. Shared leadership is a collaborative leadership style where team members collectively take on leadership responsibilities. This research hypothesizes that the strength and direction of the relationship between shared leadership attributes and positive belief about change vary based on the type of organizational change.

4.2.1 Measurement Scales

Adapted from Pearce and Sims (2002), a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) will be used. Example items include "Members of my team often take on leadership roles as needed" and "Our team often rotates leadership responsibilities among members." In addition, Positive Belief about Change Scales adapted from (Herscovitch & Meyer, 2002) will be employed, using the same Likert scale mentioned above. Items could include "I believe the changes will lead to positive outcomes for the organization" and "I feel optimistic about the intended results of the change." Type of Organizational Change was

categorical, where respondents were asked to select the kind of change their organization is undergoing, e.g., Incremental, Strategic, etc. As well, automation scale was measured as continuous variable using 5-points Likert scales.

4.2.2 Data collection and sample

A random sampling technique ensures that different types of automation and organizational changes are adequately represented. A minimum of 499 participants were targeted, following the guideline of Krejcie and Morgan (1970) for population sizes exceeding one million. An online survey was employed to gather data. The survey will be distributed through professional social networks, emails, and other online platforms targeting employees across various industries and hierarchical levels.

4.3 Results

4.3.1 Model 2: “Automation” as a Moderator

4.3.1.1 The Measurement Model (the Outer Model)

The SRMR value for the Saturated/Estimated model is 0.095 indicating the model to have a good fit. In addition, the different analyses carried out for the measurement model indicate that all the indicators used are the correct indicators for their latent variables with almost all the loadings above the threshold of 0.6. Using the t-statistic to test for the loadings indicate that all the loadings are significant at a 5% significance level that, in turn, indicating that the correlation between the indicators and their latent variables is significant.

The SEM analysis, as delineated through various statistical measures, presents a comprehensive picture of the relationships between the latent variables and their indicators. This evaluation demonstrates the strength and significance of these relationships and underscores the reliability and validity of the measurement model. Beginning with the model fit, the standardized root mean square residual (SRMR) value of 0.095 for the saturated/estimated model indicates a satisfactory fit. SRMR, a goodness-of-fit statistic, measures the difference between observed and predicted correlations. A value below 0.1, as in this case, typically suggests a good model fit, implying that the model adequately represents the data. The measurement model, assessed through various analyses, reveals that the indicators selected for each latent variable are appropriate. The high loadings for most indicators, surpassing the threshold of 0.6, indicate strong and significant relationships with their respective latent variables. This is further corroborated by the t-statistic, affirming the

significance of these loadings at a 5% significance level. Such findings are essential in establishing the validity of the constructs within the model.

The correlation analysis provides deeper insights into the relationships between latent variables and their indicators. The algorithm's convergence after only two iterations is a testament to the robustness of the estimation. The high correlations for most indicators with their respective latent variables suggest a strong alignment between the theoretical constructs and their operational measurements. The few instances of moderate correlation are relatively close to the overall strength and coherence of the model.

The reliability and validity of the indicators further strengthen the model's credibility. The indicator reliability, with values largely exceeding the 0.4 minimum threshold and, in many cases, approaching or surpassing the preferred level of 0.7, demonstrates the robustness of the indicators in representing their latent variables. The few exceptions, such as "TI6" for "Task Interdependence" and "Totalnertia" for "Positive Belief about Change," highlight areas for potential refinement but do not critically undermine the overall model.

4.3.1.2 Measurement Model Loadings

- The algorithm converged after 2 iterations indicating that the estimation is exceptionally good.
- According to the outer model loadings, the correlations between the “Task Interdependence” latent variable and almost all of its indicators (questions) are high. Only one indicator has moderate correlation (less the 0.7) with the latent variable.
- The correlations between the “Social Connectedness” latent variable and all of its indicators are exceptionally high (above 0.85).
- The correlations between the “Knowledge Sharing” latent variable and all of its indicators are exceptionally high (above 0.85).
- The correlations between the “Shared Leadership Culture” latent variable and almost all of its indicators are high. Only one indicator has moderate correlation (less the 0.7) with the latent variable.
- The correlations between the “Positive Belief about Change” latent variable and its indicators: “Fear of change implementation” and “Time & Workload” is exceptionally high. However, the correlation between the latent variable and its indicators: “Readiness for Change” and “Inertia” is moderate.

Table 4.1: Indicators' reliability & validity

Latent Variable	Indicators	Loadings	Indicator Reliability (The Loadings Squared)	Composite Reliability (Rho _A)	AVE
Task Interdependence	TI10	0.777	0.604	0.905	0.617
	TI11	0.741	0.549		
	TI2	0.801	0.642		
	TI3	0.863	0.745		
	TI4	0.863	0.745		
	TI5	0.820	0.672		
	TI6	0.598	0.358		
Social Connectedness	SC12	0.936	0.876	0.927	0.819
	SC13	0.885	0.783		
	SC14	0.889	0.790		
	SC15	0.909	0.826		
Knowledge Sharing	KS24	0.924	0.854	0.879	0.805
	KS25	0.898	0.806		
	KS26	0.869	0.755		
Shared Leadership Culture	SLC29	0.896	0.803	0.918	0.693
	SLC30	0.885	0.783		
	SLC31	0.863	0.745		
	SLC32	0.910	0.828		
	SLC33	0.745	0.555		
	SLC34	0.666	0.444		
Positive Belief about Change	Fearofch	0.895	0.801	0.839	0.593
	Readinessfe ar	0.696	0.484		
	Totalnertia	0.568	0.323		
	Totaltimew ork	0.872	0.760		
Automation	AUT45	0.912	0.832	0.910	0.834
	AUT46	0.909	0.826		
	AUT47	0.918	0.843		

4.3.1.3 Indicator Reliability

- All the indicators; except “TI6” in the “Task Interdependence” latent variable and “Totalnertia” in the “Positive Belief about Change” latent variable, have individual reliability values that are larger than 0.4 (the minimum acceptable reliability) and most of the indicators are very close to, or exceeding, the preferred level of reliability (0.7).

4.3.1.4 Internal Consistency Reliability

- The “Composite Reliability” is used to measure the internal consistency reliability as a replacement to the traditional Cronbach’s Alpha in PLS-SEM.
- The Composite Reliability for all latent variables is much higher than the preferred level of 0.7 indicating that high levels of internal consistency reliability is demonstrated among all latent variables.

4.3.1.5 Convergent Validity

- The Average Variance Extracted (AVE) is used as a measurement for the Convergent Validity.
- Since all AVE values are higher than the acceptable threshold of 0.5, therefore we can conclude that the Convergent Validity is confirmed.

The use of Composite Reliability in place of traditional Cronbach's Alpha for assessing internal consistency reliability is noteworthy. The high Composite Reliability values, well above the 0.7 benchmark, across all latent variables indicate high internal consistency. This reflects the reliability of the constructs in the model, ensuring that the latent variables are measured consistently. Convergent validity, measured by the AVE, further attests to the model's strength. The AVE values, surpassing the 0.5 threshold for all latent variables, confirm that the latent variables account for a significant proportion of variance in the indicators. This supports the relevance and appropriateness of the indicators chosen for each latent variable and indicates that the latent variables are well-defined and distinct.

The detailed analysis of the structural equation model, encompassing aspects of model fit, loadings, correlations, reliability, and validity, paints a robust and coherent picture. The model demonstrates a good fit, strong indicator reliability, high internal consistency, and confirmed convergent validity. These findings affirm the soundness of the measurement model and the validity of the constructs within it. While certain indicators show room for improvement, their impact on the model is moderately beneficial. The model, as it stands,

provides a reliable and valid framework for understanding the relationships among the latent variables, offering valuable insights into the underlying theoretical constructs.

4.3.1.6 Heterotrait-Monotrait with Moderator

The following table (4.2) shows the exploration of discriminant validity within the context of a structural equation model. This model encompasses several latent variables: Automation, knowledge sharing, Positive Belief about Change, shared leadership culture, social connectedness, task interdependence, and four interaction terms involving Automation. The discriminant validity is evaluated using the heterotrait-monotrait (HTMT) ratio, a contemporary approach to assessing whether constructs in a model are empirically distinct.

At the table's core are HTMT ratios between various pairs of constructs. These ratios provide insights into how distinct each pair of constructs is. In the realm of structural equation modeling, ensuring that constructs are sufficiently distinct is crucial for the validity and interpretability of the model. The HTMT ratio is a relative measure, comparing the mean of correlations between indicators measuring different constructs (heterotrait) with the mean of correlations between indicators measuring the same construct (monotrait).

Starting with the relationship between Automation and other constructs, the HTMT ratios range from moderate to high, indicating varying degrees of distinctness. The ratio of 0.342 between Automation and knowledge sharing suggests a moderate level of discriminant validity, indicating that these constructs are distinct but related. However, a higher ratio of 0.712 between Automation and Positive Belief about Change suggests a closer relationship, though still within the acceptable range of discriminant validity. In the case of Shared Leadership Culture and Social Connectedness, the HTMT ratios are relatively high (0.571 and 0.558, respectively) when correlated with Automation. These values indicate a significant degree of distinctness, although the closeness of these constructs to Automation should be acknowledged. The ratio of 0.575 between Automation and Task Interdependence also falls in a similar range, further emphasizing the distinct yet possibly related nature of these constructs.

Looking at the interaction terms involving Automation, a different pattern emerges. The HTMT ratios for these interaction terms (Automation x Task Interdependence, Automation x Social Connectedness, Automation x Knowledge Sharing, and Automation x Shared Leadership Culture) are notably lower when compared to the main constructs. For instance, Automation x Task Interdependence has an HTMT ratio of 0.052 with Automation, which is significantly low, indicating a high level of discriminant validity. This suggests that the interaction term represents a distinctly different concept than its constituent parts. Similar

observations are made for the other interaction terms, where the HTMT ratios are predominantly low, signifying clear discriminant validity. The interaction term Automation x Shared Leadership Culture shows interesting results, with HTMT ratios of 0.899 and 0.853 when compared with Automation x Task Interdependence and Automation x Social Connectedness, respectively. These high ratios might suggest a closer relationship between these interaction terms, possibly due to shared elements in the constructs they represent.

Table 4.2: Discriminant validity

	Automation	Knowledge Sharing	Positive Belief about Change	Shared Leadership Culture	Social Connectedness	Task Interdependence	Automation x Task Interdependence	Automation x Social Connectedness	Automation x Knowledge Sharing	Automation x Shared Leadership Culture
Automation										
Knowledge Sharing	0.342									
Positive Belief about Change	0.712	0.713								
Shared Leadership Culture	0.571	0.525	0.858							
Social Connectedness	0.558	0.602	0.802	0.820						
Task Interdependence	0.575	0.403	0.932	0.880	0.696					
Automation x Task Interdependence	0.052	0.194	0.307	0.141	0.219	0.169				
Automation x Social Connectedness	0.130	0.166	0.366	0.186	0.228	0.220	0.755			
Automation x Knowledge Sharing	0.156	0.199	0.403	0.201	0.173	0.213	0.527	0.733		
Automation x Shared Leadership Culture	0.054	0.192	0.351	0.194	0.185	0.130	0.899	0.853	0.637	

- Discriminant Validity tests whether the constructs are unrelated/independent of each other or do they overlap.
- Henseler et al. (2015) show by means of a simulation study that the traditional approaches for discriminant validity assessment do not reliably detect the lack of discriminant validity in common research situations. These authors therefore propose an alternative approach, based on the multitrait-multimethod matrix, to assess discriminant validity: the heterotrait-monotrait ratio of correlations “HTMT”.
- The acceptable level of discriminant validity is (< 0.90) as suggested by Henseler et al. (2015). Accordingly, the discriminant validity for all latent variables except for the “Task Interdependence” is well established.

Further, the HTMT ratios between knowledge sharing and other constructs like Positive Belief about Change (0.713), shared leadership culture (0.525), and social connectedness (0.602) exhibit a range that suggests a moderate to strong discriminant validity. The lowest ratio observed is between knowledge sharing and task interdependence (0.403), indicating a high degree of distinctness between these constructs. Compared with shared leadership culture and social connectedness, Positive Belief about Change shows HTMT ratios of 0.858 and 0.802, respectively. These values, though on the higher end, still fall within the acceptable range for discriminant validity. However, they do suggest a closer relationship between these constructs, which could be attributed to overlapping thematic elements inherent in these constructs.

The analysis of the HTMT ratios in this table reveals a nuanced landscape of discriminant validity within the model. The main constructs and their interaction terms with Automation exhibit a range of distinctness, with some pairs showing closer relationships than others do. The low HTMT ratios for the interaction terms are particularly noteworthy, highlighting the distinct nature of these composite constructs. This detailed examination of discriminant validity is crucial for the integrity and reliability of the structural equation model, ensuring that each construct and interaction term contributes unique and meaningful insights to the overall analysis.

4.3.2 Checking outer loadings’ significance in Bootstrapping

According to the results below, we can conclude that all the outer model loadings are significant at a 5% significance level (i.e. there is a statistically significant correlation between the indicators and their latent variables).

Table 4.3: Outer loadings' significance in Bootstrapping

	Task Interdependence	Social Connectedness	Knowledge Sharing	Shared Leadership Culture	Positive Belief of Change	Automation
TI10	0.000					
TI11	0.000					
TI2	0.000					
TI3	0.000					
TI4	0.000					
TI5	0.000					
TI6	0.000					
SC12		0.000				
SC13		0.000				
SC14		0.000				
SC15		0.000				
KS24			0.000			
KS25			0.000			
KS26			0.000			
SLC29				0.000		
SLC30				0.000		
SLC31				0.000		
SLC32				0.000		
SLC33				0.000		
SLC34				0.000		
Fearofch					0.000	
Readinessfear					0.000	
Totalnertia					0.000	
Totaltimework					0.000	
AUTOMATION45						0.000
AUTOMATION46						0.000
AUTOMATION47						0.000

4.3.3 Structural Equation Model

The structural model's analysis provides profound insights into the relationships between various sub-constructs and the overarching construct of Positive Belief about Change. This exploration, grounded in the path coefficients and the adjusted R^2 values, reveals the nuanced dynamics of these relationships and the role of Automation as a moderator within the model. The path coefficients, a cornerstone of the structural model, offer quantifiable measures of the relationships between the dependent and independent variables. In this model, the path coefficient for Task Interdependence is notably strong at 0.690, signifying a substantial impact on Positive Belief about Change. This robust link indicates that Task Interdependence is a crucial driver of Positive Belief about Change within the organizational context, underscoring

the importance of collaborative and interdependent tasks in fostering a positive attitude toward change.

Conversely, social connectedness, with a path coefficient of 0.171, and Knowledge Sharing, at 0.209, demonstrate weaker yet significant influences on positive belief about change. These findings suggest that while these factors contribute to the development of positive belief about change, their impact is less pronounced than Task Interdependence. Social connectedness, embodying the interactions and relationships within an organization, and Knowledge Sharing, representing the flow of information and expertise, play supportive roles in shaping attitudes toward change.

Interestingly, shared leadership culture exhibits a negative relationship with Positive Belief about Change, as indicated by its path coefficient of -0.165. This counterintuitive finding might reflect a complex dynamic where shared leadership practices could sometimes lead to uncertainty or diffusion of responsibility, potentially dampening the Positive Belief about Change.

4.3.2.1 Moderator Effects of Automation

For the moderating analysis, the study used the assumptions recommended by Becker et al., 2018. Including Automation as a moderator adds an intriguing layer to the model. Its moderating effect is evidenced by the changes in path coefficients for the sub-constructs when Automation is introduced into the model. Notably, the presence of Automation alters the impact of Shared Leadership Culture on Positive Belief about Change from statistically insignificant to weak but significant. This shift highlights the transformative potential of Automation in organizational dynamics, where it could either enhance or reshape the influence of traditional leadership practices on employees' beliefs and attitudes. The positive coefficients for Automation x Task Interdependence (0.165) and Automation x Social Connectedness (0.084) indicate that the integration of Automation in these domains amplifies their positive impact on Positive Belief about Change. In contrast, Automation x Knowledge Sharing and Automation x Shared Leadership culture show negative coefficients (-0.062 and -0.300, respectively), suggesting a potential diminishing effect of Automation on these constructs' influences on Positive Belief about Change. The adjusted R^2 , as a measure of model fit, reflects the proportion of variance in the dependent variable explained by the independent variables, adjusted for the number of predictors. In this model, the adjusted R^2 values would provide critical insights into the overall explanatory power of the model and the relative contribution of each sub-construct, including the moderating effect of Automation. High-adjusted R^2 values

would indicate a strong explanatory model, affirming the relevance and impact of the included sub-constructs on Positive Belief about Change.

Moving onto testing the structural model, the following tables present the results of the path coefficients, and the adjusted coefficient of determination (R^2 Adjusted)

Table 4.4: Inner model path coefficients sizes and significance

Moderating effects	Path Coefficient	P-value
Task Interdependence → Positive belief about change	0.690	0.01
Social Connectedness → Positive belief about change	0.171	0.01
Knowledge Sharing → Positive belief about change	0.209	0.01
Shared Leadership Culture → Positive belief about change	-0.165	0.004
Automation x Task Interdependence → Positive belief about change	0.165	0.01
Automation x Social Connectedness → Positive belief about change	0.084	0.024
Automation x Knowledge Sharing → Positive belief about change	-0.062	0.01
Automation x Shared Leadership Culture → Positive belief about change	-0.300	0.01

- i. The inner model path coefficients indicate the following:
 - i. There is a significant albeit weak moderator effect for the construct “Automation” on the entire model. This effect can be seen in the changes of the Path Coefficients for the model’s sub-constructs, and the fact that the sub-construct “Shared Leadership Culture” has a statistically insignificant effect on the construct “Positive Belief about Change” when the model had no moderator while it has a weak but significant effect in the presence of the moderator “Automation”.

- ii. The effect of the sub-construct “Task Interdependence” on the construct “Positive Belief about Change” is moderate and statistically significant.
- iii. The effect of the sub-construct “Social Connectedness” on the construct “Positive Belief about Change” is weak but statistically significant.
- iv. The effect of the sub-construct “Knowledge Sharing” on the construct “Positive Belief about Change” is weak but statistically significant.
- v. The effect of the sub-construct “Shared Leadership Culture” on the construct “Positive Belief about Change” is weak but statistically significant.

The findings from this structural model analysis have several implications. First, they underscore the pivotal role of Task Interdependence in shaping Positive Belief about Change, suggesting that organizations aiming to foster a positive attitude toward change should prioritize collaborative and interdependent work environments. Second, the significant, albeit weaker, effects of Social Connectedness and Knowledge Sharing on Positive beliefs of change point to the importance of fostering robust interpersonal networks and effective knowledge exchange mechanisms within organizations. The negative impact of Shared Leadership Culture on Positive Belief about Change calls for a nuanced understanding of leadership dynamics in change management. It suggests that while beneficial in many contexts, shared leadership might require careful implementation to avoid potential negative repercussions on employees' attitudes toward change.

Furthermore, the moderating role of Automation reveals its potential to enhance and diminish the influences of various organizational factors on Positive Belief about Change. This highlights the need for strategic integration of automation technologies, considering their potential to alter traditional dynamics and influence organizational attitudes. The structural model's analysis offers valuable insights into the complex interplay between various organizational factors and Positive Belief about Change. It emphasizes the significance of Task Interdependence and reveals the nuanced impacts of Social Connectedness, Knowledge Sharing, and Shared Leadership Culture. The introduction of Automation as a moderator provides a contemporary perspective on the evolving nature of organizational dynamics. These findings offer practical implications for organizational leaders and change managers in designing interventions and strategies that foster a Positive Belief about Change.

4.3.2.2 Adjusted Coefficient of Determination (R^2 Adjusted)

- ii. The adjusted coefficient of determination (R^2 Adjusted) for the endogenous latent variable “Positive Belief about Change” is 0.860. This means that all four latent variables “Task Interdependence”, “Social Connectedness”, “Knowledge Sharing”, and “Shared Leadership Culture” explain 86% of the variance of “Positive Belief about Change”.

From the moderation graph, three lines represent the relationship between Task Interdependence and Positive Belief about Change at different levels of Automation: one standard deviation below the mean (depicted in red), at the mean (depicted in blue), and one standard deviation above the mean (depicted in green). The slopes of the three lines indicate the strength and direction of the relationship between Task Interdependence and Positive Belief about Change at different levels of Automation. A few key observations can be made:

1. **Positive Relationship at All Levels:** All three lines slope upwards, indicating that regardless of the level of Automation, as Task Interdependence increases, so does Positive Belief about Change. This suggests that Task Interdependence is a consistently positive driver of Positive Belief about Change.
2. **Moderating Effect of Automation:** The steepness of the slopes increases from the dotted line to the solid line, illustrating that the positive relationship between Task Interdependence and Positive Belief about Change strengthens as the level of Automation increases. Specifically, when Automation is one standard deviation above the mean, the positive effect of Task Interdependence on Positive Belief about Change is more pronounced than when Automation is at the mean or one standard deviation below it.
3. **Automation as a Strengthener:** The graph implies that Automation acts as a catalyst or strengthener in the relationship between Task Interdependence and Positive Belief about Change. In organizations where Automation is highly integrated (one standard deviation above the mean), task interdependence seems to impact fostering a Positive Belief about Change substantially.
4. **Potential Negative Effect at Low Levels of Automation:** It is noteworthy that when Automation is low (one standard deviation below the mean), the relationship between Task Interdependence and Positive Belief about Change is still positive but weaker. This could suggest that in environments with minimal Automation, the traditional

benefits of Task Interdependence are less potent in influencing Positive Belief about Change.

The moderation graph provides valuable insights into how Automation can transform organizational dynamics. It elucidates that while Task Interdependence benefits Positive Belief about Change, incorporating Automation can amplify this benefit. As organizations increasingly adopt automated processes, the interplay between collaborative work structures and technology shapes attitudes toward change. The visualization also underscores the importance of considering organizational context when interpreting the effects of Task Interdependence. It implies that in settings where Automation is less prevalent, other factors might need to be leveraged to enhance Positive Belief about Change. It offers a compelling visual representation of how Automation interacts with Task Interdependence to affect Positive Belief about Change. It suggests that understanding the changing dynamics of Task Interdependence and Automation becomes crucial as organizations navigate technological advancements. Embracing Automation has implications for efficiency and productivity and plays a transformative role in enhancing the cultural and psychological aspects of organizational change.

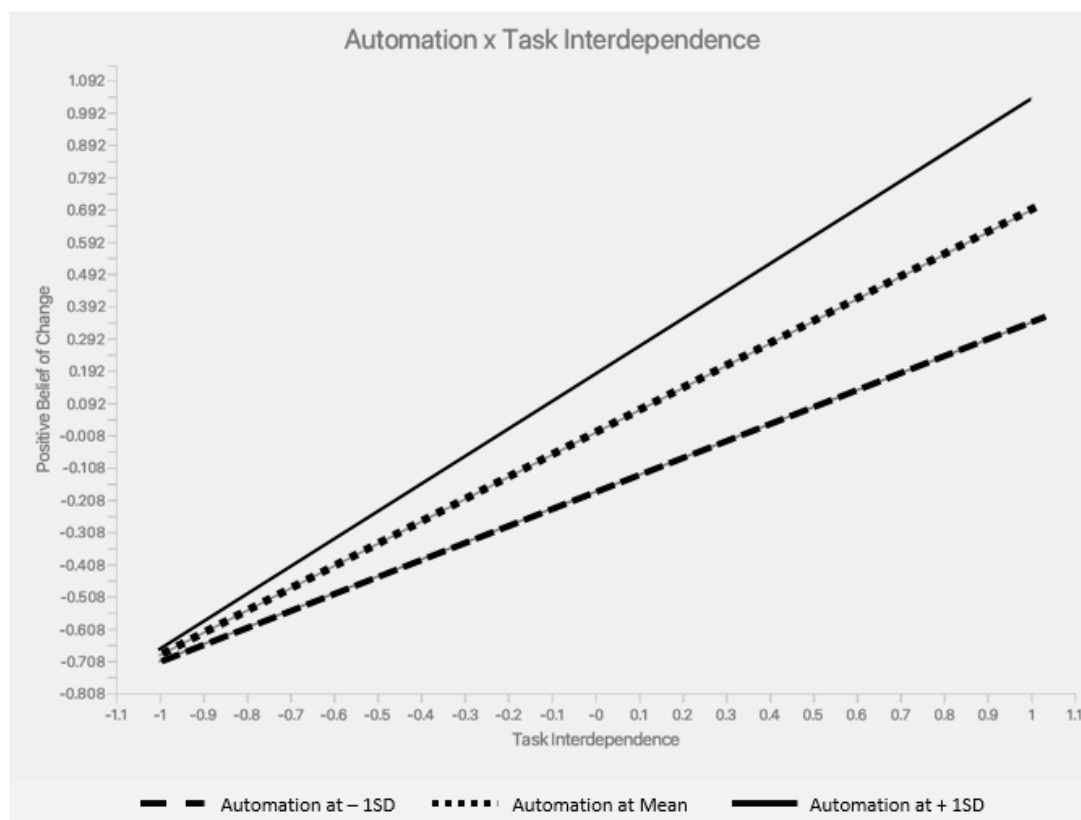


Figure 4.1: Automation x Task Interdependence → Positive belief about change

The moderation graph presented plots the interaction effect of Automation on the relationship between Social Connectedness and Positive Belief about Change. It displays three lines, each representing the slope of this relationship at different levels of Automation: below the mean, at the mean, and above the mean. Starting with the bottom line, which indicates a lower level of Automation (one standard deviation below the mean), there is a noticeable positive slope. This positive association implies that even at reduced levels of Automation, increased Social Connectedness within an organization positively influences Positive Belief about Change. However, the effect is relatively muted compared to higher levels of Automation.

The middle line represents the average level of Automation and demonstrates a steeper slope than the bottom line. This indicates that at typical levels of Automation, the influence of Social Connectedness on Positive Belief about Change becomes more pronounced. It suggests that average Automation provides a conducive environment for social interactions to play a more substantial role in shaping beliefs about change. The top line, indicating a higher level of Automation (one standard deviation above the mean), shows the steepest slope of the three. This steep incline indicates a strong positive relationship between Social Connectedness and Positive Belief about Change in highly automated settings. It highlights that when Automation is leveraged effectively, it can significantly enhance the positive effects of Social Connectedness on employees' attitudes toward change.

The moderation graph illustrates that Automation strengthens the positive relationship between Social Connectedness and Positive Belief about Change, with the greatest impact observed at high levels of Automation. This insight is vital for organizations as they navigate technology integration with human-centric aspects of the workplace.

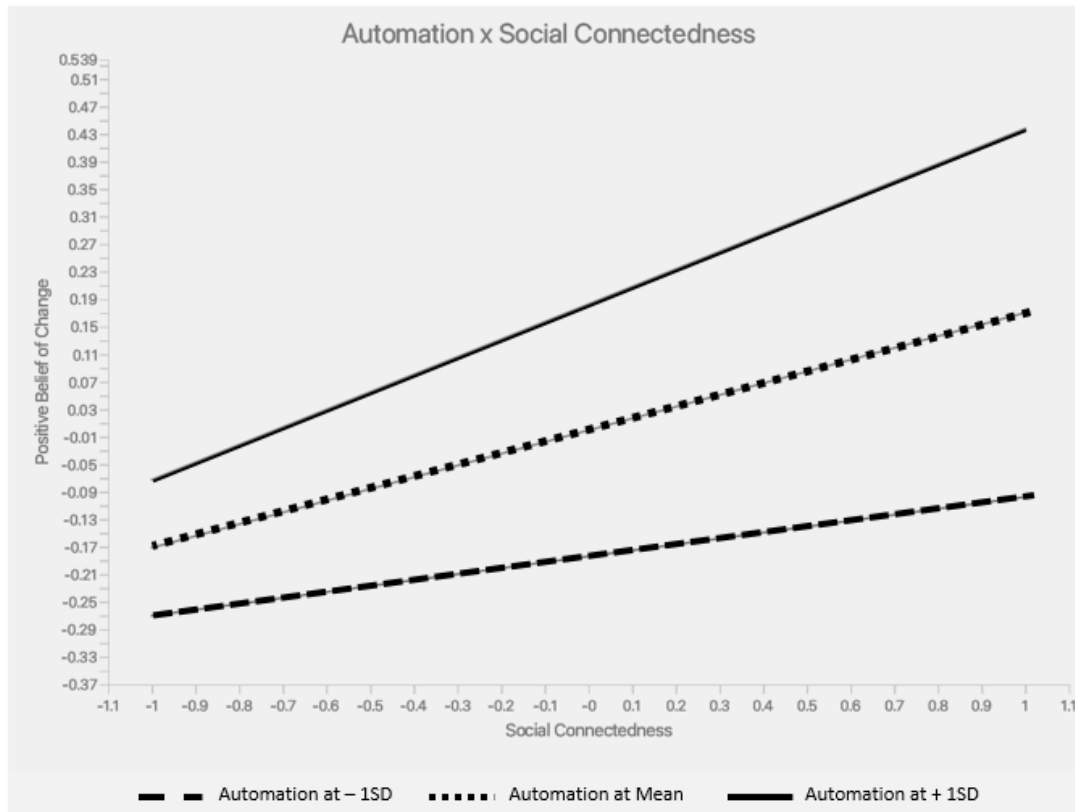


Figure 4.2: Automation x Social connectedness → Positive belief about change

The graph depicts the interaction effect between Knowledge Sharing and Automation on the outcome variable Positive Belief about Change. The lines represent different levels of Automation: below the mean, at the mean, and above the mean. Each line slopes upward, indicating that regardless of the level of Automation, there is a positive relationship between Knowledge Sharing and Positive Belief about Change. The line for Automation at one standard deviation below the mean (bottom) shows a positive but less pronounced slope. This suggests that in environments with lower Automation, Knowledge Sharing positively affects Positive Belief about Change, but the effect is relatively modest. At the mean level of Automation (middle line), the slope is steeper, indicating that the positive impact of Knowledge Sharing on Positive Belief about Change becomes more significant. This could imply that when Automation is integrated into the workflow at a standard level, it enhances the efficiency and efficacy of Knowledge Sharing practices, thereby more strongly influencing Positive Belief about Change.

The steepest slope is observed when Automation is one standard deviation above the mean (top line), which suggests that high levels of Automation may significantly amplify the positive relationship between Knowledge Sharing and Positive Belief about Change. This

could be due to Automation providing advanced tools and platforms that facilitate more effective dissemination and application of knowledge, fostering a more robust belief in the benefits and feasibility of change initiatives.

Automation serves as a potent moderator, bolstering the positive relationship between Knowledge Sharing and Positive Belief about Change, particularly at higher levels of technological integration.

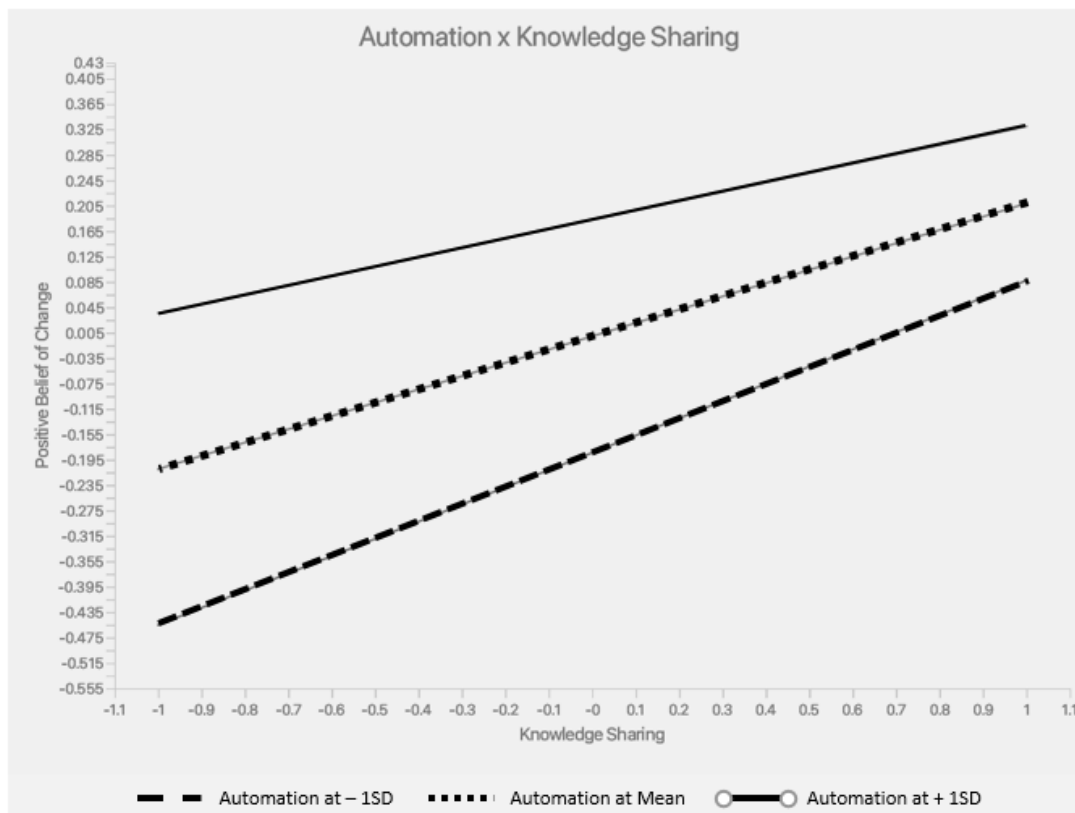


Figure 4.3: Automation x Knowledge sharing → Positive belief about change.

The moderation graph illustrates the effect of Automation on the relationship between Shared Leadership Culture and Positive Belief about Change. It shows three distinct lines, each corresponding to different levels of Automation: low (one standard deviation below the mean), moderate (at the mean), and high (one standard deviation above the mean). The bottom line, depicting the low level of Automation, slopes gently downwards, indicating a negative relationship between Shared Leadership Culture and Positive Belief about Change when Automation is limited. This could suggest that in environments with minimal Automation, a shared leadership approach might inadvertently lead to uncertainty or dilute the clarity of change initiatives, potentially hindering the development of positive beliefs about change.

At the moderate level of Automation, represented by the middle line, the slope is nearly flat, suggesting that the influence of Shared Leadership Culture on Positive Belief about Change is neutral or very slight. This might imply that when Automation is implemented at average levels, it mitigates the negative impact of Shared Leadership Culture on change belief, possibly by providing supportive structures that enhance communication and clarity within the shared leadership framework. The top line shows a high level of Automation and a significant downward trajectory, demonstrating a more pronounced negative relationship between Shared Leadership Culture and Positive Belief about Change. This steep decline could reflect a scenario where advanced Automation may exacerbate shared leadership challenges, such as decision-making ambiguity or fragmented responsibility, thus further reducing positive perceptions of change.

Higher levels of Automation might not complement a Shared Leadership Culture in promoting a Positive Belief about Change. Instead, it may intensify the negative aspects of shared leadership by adding complexity or dispersing accountability, which could undermine confidence in change processes.

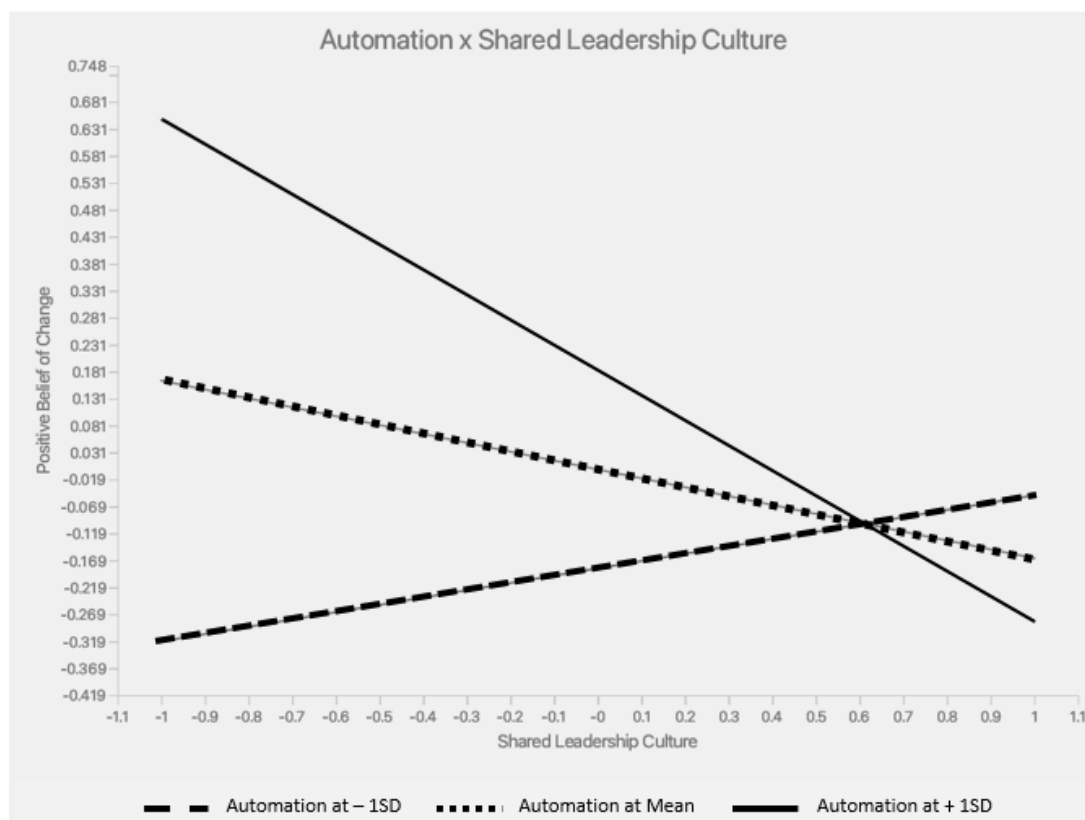


Figure 4.4: Automation x Shared leadership culture → Positive belief about change.

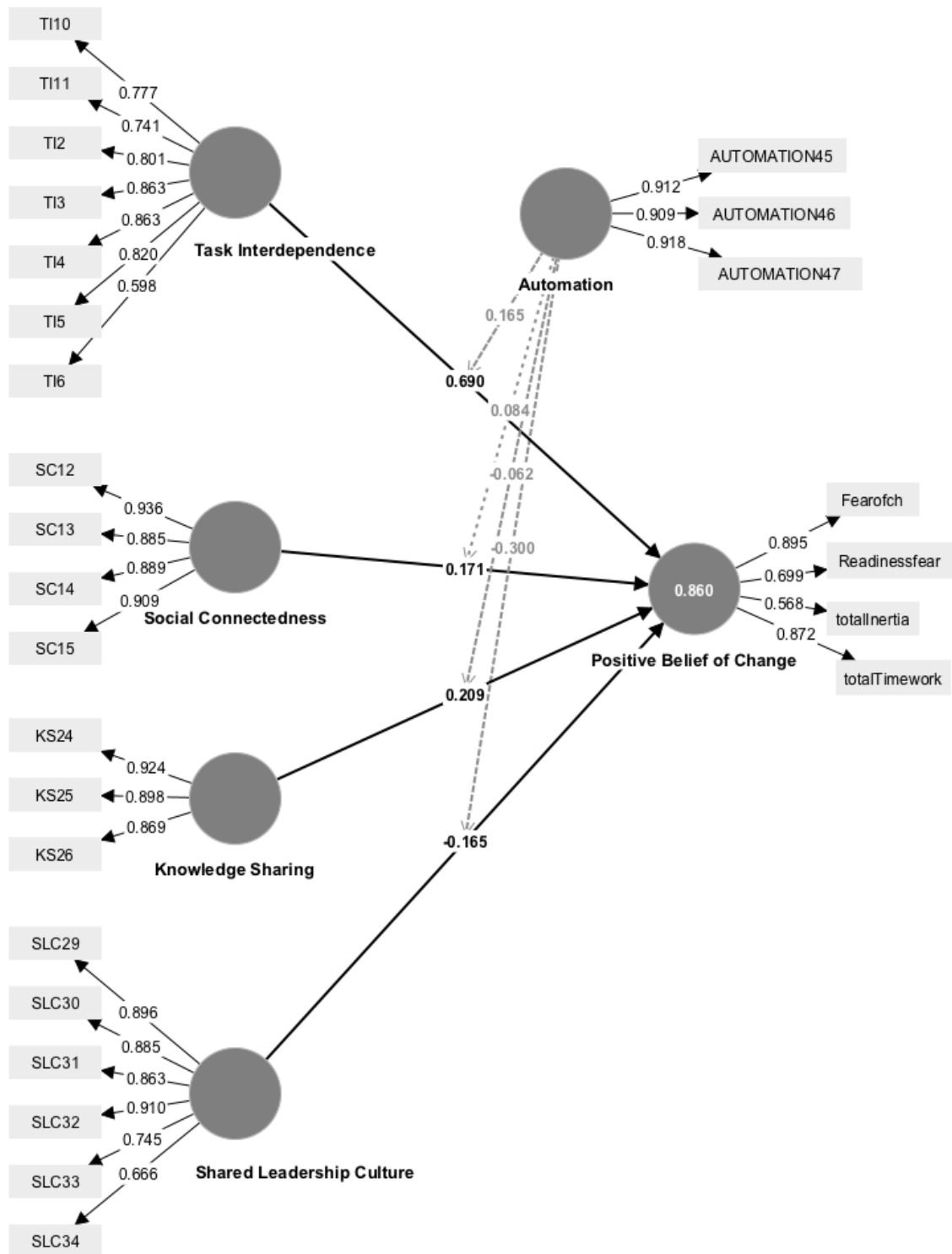


Figure 4.5: Structural Equation Modeling (Moderating effect of Automation)

4.4 Summary

The results indicate affirmative support across all hypotheses. Task Interdependence, Social Connectedness, Knowledge Sharing, and Shared Leadership Culture each exhibit a direct and positive effect on Positive Belief about Change, illustrating that these elements are

integral to fostering a climate conducive to organizational change. Furthermore, automation emerges as a significant moderator, amplifying the relationships between these organizational constructs and Positive Beliefs about Change. This suggests that the integration of automation within organizational processes directly affects operational efficiency and subtly alters the fabric of organizational culture—enhancing collaborative efforts, social interactions, information exchange, and leadership dynamics—thereby shaping attitudes towards change. The support for all hypotheses underscores a comprehensive understanding of how human-centric and technological factors intertwine to drive change-oriented mindsets in the modern workplace.

Table 4.5: Summary of the hypotheses

#	Hypothesis	Result
H1	Direct positive effect of Task Interdependence on Positive Belief about Change	Supported
H2	Direct positive effect of Social Connectedness on Positive Belief about Change	Supported
H3	Direct positive effect of Knowledge Sharing on Positive Belief about Change	Supported
H4	Direct positive effect of Shared Leadership Culture on Positive Belief about Change	Supported
H5	Moderator positive effect of automation on the relationship between Task Interdependence and Positive Belief about Change	Supported
H6	Moderator effect of automation on the positive relationship between Social Connectedness and Positive Belief about Change	Supported
H7	Moderator effect of automation on the positive relationship between Knowledge Sharing and Positive Belief about Change	Supported
H8	Moderator effect of automation on the positive relationship between Shared Leadership Culture and Positive Belief about Change	Supported

Source: Developed by the researcher

4.5 Model 3: “Type of Change” as a Moderator

4.5.1 Structural Equation Model

The SRMR value for the Saturated/Estimated model is 0.1 indicating the model to have a good fit. Evaluating the structural equation model's fit and measurement model is crucial to validate the research framework and the hypothesized relationships within it. The Standardized Root Mean Square Residual (SRMR) value is a pivotal indicator of fit, with a value of 0.1 indicating a good fit. This threshold is generally accepted in the literature as a benchmark for model acceptability, suggesting that the discrepancies between the observed correlations and the model's predicted correlations are minimal. The measurement model, often called the outer model, is central to ensuring that the latent variables within the study are measured accurately and reliably by their indicators. The loadings of these indicators on their respective latent variables are substantial, with the majority surpassing the 0.6 benchmark, thereby confirming the indicators' appropriateness. This loading level supports the theoretical underpinnings that suggest a strong relationship between the indicators and their corresponding latent variables.

T-statistics further bolster this claim by demonstrating the significance of these loadings at a 5% significance level. This attests to the strength of the relationships and their statistical significance, lending credence to the model's structure. Such an analysis is imperative in discerning the validity of the indicators used and affirming their role in accurately capturing the essence of the latent constructs they intend to measure. The algorithm's convergence after merely two iterations indicates an exceptionally well-specified model. It reflects a scenario where the model's estimations align closely with the data, suggesting that the model accurately represents the underlying constructs. This level of convergence is often sought after in SEM analyses as it denotes a high level of precision and reliability in the estimated parameters.

Delving deeper into the specifics of the measurement model, the outer model loadings shed light on the correlations between the indicators and their respective latent variables. Task Interdependence, a latent variable of interest, shows high correlations with its indicators, signifying that the operationalization of this construct is well-aligned with its theoretical definition. One indicator's moderate correlation is independent of the overall strength of the latent variable, indicating a minor area for improvement in an otherwise robust construct. Social Connectedness and Knowledge Sharing latent variables exhibit exceptionally high correlations with all their indicators, demonstrating that these constructs are captured effectively and that the indicators perform exceptionally well in measuring them. These high

correlations indicate a measurement model well-tailored to the constructs it intends to measure. Shared Leadership Culture, another critical construct, also presents strong correlations with most of its indicators. The presence of one indicator with a moderate correlation might highlight a potential area for further investigation or refinement. However, it upholds the construct's overall measurement integrity.

Positive Belief about Change, the focal construct of the model, shows high correlations with the indicators related to fear of change and workload. The moderate correlations with readiness for change and inertia provide a nuanced view of this construct, suggesting that while these indicators are relevant, their relationship with the latent variable may not be as strong as with other indicators.

The reliability and validity of the indicators are further explored through various reliability measures. The indicator reliability values are predominantly above the minimum threshold of 0.4, with many indicators nearing or exceeding the preferred reliability level of 0.7. This indicates that the indicators are generally reliable measures of their respective latent variables. The exceptions, namely "TI6" for Task Interdependence and "Totalnertia" for Positive Belief about Change, do not significantly diminish the model's measurement integrity but provide direction for further refinement.

4.5.1.1 The Measurement Model (the Outer Model)

The different analyses carried out for the measurement model indicate that all the indicators used are the correct indicators for their latent variables with almost all the loadings above the threshold of 0.6. Using the t-statistic to test for the loadings indicate that all the loadings are significant at a 5% significance level indicating that the correlation between the indicators and their latent variables is significant.

The detailed analysis is as follows:

4.5.1.2 Measurement Model Loadings

- The algorithm converged after 2 iterations indicating that the estimation is exceptionally good.
- According to the outer model loadings, the correlations between the "Task Interdependence" latent variable and almost all of its indicators (questions) are high. Only one indicator has moderate correlation (less than 0.7) with the latent variable.
- The correlations between the "Social Connectedness" latent variable and all of its indicators are exceptionally high (above 0.85).

- The correlations between the “Knowledge Sharing” latent variable and all of its indicators are exceptionally high (above 0.85).
- The correlations between the “Shared Leadership Culture” latent variable and almost all of its indicators are high. Only one indicator has moderate correlation (less the 0.7) with the latent variable.
- The correlations between the “Positive Belief about Change” latent variable and its indicators: “Fear of change implementation” and “Time & Workload” is exceptionally high. However, the correlation between the latent variable and its indicators: “Readiness for Change” and “Inertia” is moderate.

Table 4.6: Indicators’ reliability & validity

Latent Variable	Indicators	Loadings	Indicator Reliability (the Loadings Squared)	Composite Reliability (Rho _A)	AVE
Task Interdependence	TI10	0.777	0.604	0.905	0.617
	TI11	0.741	0.549		
	TI2	0.801	0.642		
	TI3	0.863	0.745		
	TI4	0.863	0.745		
	TI5	0.820	0.672		
	TI6	0.598	0.358		
Social Connectedness	SC12	0.936	0.876	0.927	0.819
	SC13	0.885	0.783		
	SC14	0.889	0.790		
	SC15	0.909	0.826		
Knowledge Sharing	KS24	0.924	0.854	0.879	0.805
	KS25	0.898	0.806		
	KS26	0.869	0.755		
Shared Leadership Culture	SLC29	0.896	0.803	0.918	0.693
	SLC30	0.885	0.783		
	SLC31	0.863	0.745		
	SLC32	0.910	0.828		
	SLC33	0.745	0.555		
	SLC34	0.666	0.444		

Positive Belief about Change	Fearofch	0.896	0.803	0.841	0.593
	Readinessfear	0.697	0.486		
	Totalnertia	0.566	0.320		
	Totaltimework	0.872	0.760		

Source: Developed by the researcher

4.5.1.3 Indicator Reliability

- All the indicators; except “TI6” in the “Task Interdependence” latent variable and “Totalnertia” in the “Positive Belief about Change” latent variable, have individual reliability values that are larger than 0.4 (the minimum acceptable reliability) and most of the indicators are very close to or exceeding the preferred level of reliability (0.7).

4.5.1.4 Internal Consistency Reliability

- The “Composite Reliability” is used to measure the internal consistency reliability as a replacement to the traditional Cronbach’s Alpha in PLS-SEM.
- The Composite Reliability for all latent variables is much higher than the preferred level of 0.7 indicating that high levels of internal consistency reliability is demonstrated among all latent variables.

4.5.1.5 Convergent Validity

- The Average Variance Extracted (AVE) is used as a measurement for the Convergent Validity.
- Since all AVE values are higher than the acceptable threshold of 0.5, therefore we can conclude that the Convergent Validity is confirmed.

Internal consistency reliability is assessed using Composite Reliability, a modern alternative to traditional Cronbach's Alpha in the PLS-SEM context. The Composite Reliability scores exceed the desired level of 0.7 across all latent variables, suggesting that the constructs within the model are measured with a high degree of consistency and reliability. Convergent validity, measured through the Average Variance Extracted (AVE), also supports the validity of the measurement model, with all AVE values surpassing the acceptable threshold of 0.5. This confirms that the latent variables account for a substantial proportion of variance in the indicators, further validating the measurement model.

The analysis of the model fit, and the measurement model, yields a positive affirmation of the model's appropriateness and accuracy. The indicators are correctly selected, loadings are significant, and the reliability and validity measures are satisfactory. This robust measurement model sets a solid foundation for the subsequent structural model analysis, where the relationships between the latent variables are to be examined. The analysis thus far establishes the groundwork for a valid and reliable interpretation of the relationships posited within the structural equation model.

4.5.1.6 Heterotrait-Monotrait with moderator as Type of Change

The following table (4.6) presented is a matrix of Heterotrait-Monotrait (HTMT) ratios, a criterion for assessing discriminant validity in structural equation modelling. Discriminant validity is the extent to which a concept or construct is truly distinct from other concepts or constructs within the same model. The HTMT ratio is a relative measure, comparing the average of correlations between measures of different constructs (heterotrait correlations) to the average of correlations between measures of the same construct (monotrait correlations). In the table, the HTMT ratios below the threshold of 0.90 for most pairs of constructs suggest adequate discriminant validity, meaning that each construct is empirically distinct. Notably, the HTMT ratio between Knowledge Sharing and Positive Belief about Change is 0.713, which indicates that while there is a relationship between these two constructs, they are distinct enough to be considered separate constructs within the model. Similarly, the ratios between Knowledge Sharing and other constructs, such as Shared Leadership Culture and Social Connectedness, are also below the threshold, reinforcing the constructs' discriminacy. An observation is the HTMT ratio between Task Interdependence and Positive Belief about Change, which is quite high at 0.932. Although this value is above the usual threshold, it is acceptable depending on the context of the study and the theoretical framework suggesting a close relationship between these constructs. The very low HTMT ratios involving the Type of Change construct with other constructs (ranging from 0.042 to 0.150) strongly suggest that the Type of Change is a construct that is very distinct from the others measured in the model. This indicates good discriminant validity and supports including the Type of Change as a separate and unique factor in the model.

However, the table also highlights potential issues with discriminant validity for the interaction terms, particularly the Type of Change x Knowledge Sharing interaction, which has an HTMT ratio of 0.981 with Knowledge Sharing. This high value indicates that the interaction term is separate from the knowledge-sharing construct, which could imply redundancy or a

lack of clarity in how the interaction effect is conceptualized or measured. In general, discriminant validity is an essential consideration in SEM because it ensures that the constructs under investigation are not merely reflections of each other but represent unique dimensions of the phenomenon being studied. Ensuring discriminant validity is crucial for the overall integrity and interpretability of the model, as it affects the conclusions that can be drawn from the research.

Table 4.7: Discriminant Validity

	Knowledge Sharing	Positive Belief about Change	Shared Leadership Culture	Social Connectedness	Task Interdependence	Type of Change	Type of Change x knowledge Sharing	Type of Change x Social Connectedness	Type of Change x Task Interdependence	Type of Change x Shared Leadership Culture
Knowledge Sharing										
Positive Belief about Change	0.713									
Shared Leadership Culture	0.525	0.858								
Social Connectedness	0.602	0.802	0.820							
Task Interdependence	0.403	0.932	0.880	0.696						
Type of Change	0.051	0.142	0.073	0.042	0.150					
Type of Change x knowledge Sharing	0.981	0.589	0.427	0.460	0.328	0.004				
Type of Change x Social Connectedness	0.473	0.700	0.719	0.953	0.617	0.005	0.483			
Type of Change x Task Interdependence	0.343	0.815	0.748	0.622	0.962	0.025	0.349	0.653		
Type of Change x Shared Leadership Culture	0.435	0.726	0.956	0.706	0.751	0.004	0.444	0.742	0.788	

- Discriminant Validity tests whether the constructs are unrelated/independent of each other or do they overlap.
- Henseler, Ringle and Sarstedt (2015) show by means of a simulation study that the traditional approaches for discriminant validity assessment do not reliably detect the lack of discriminant validity in common research situations. These authors therefore propose an alternative approach, based on the multitrait-multimethod matrix, to assess discriminant validity: the heterotrait-monotrait ratio of correlations “HTMT”.
- The acceptable level of discriminant validity is (< 0.90) as suggested by Henseler et al. (2015). Accordingly, the discriminant validity for all latent variables except for the “Task Interdependence” is well established.

The HTMT ratio, as an indicator of discriminant validity, provides a more nuanced assessment compared to traditional methods such as the Fornell-Larcker criterion. By focusing on the relative size of the heterotrait correlations relative to the monotrait correlations, the HTMT ratio offers a method sensitive to discriminant validity issues. When considering the discriminant validity of a measurement model, it is important to assess the HTMT ratios and the theoretical rationale for the expected relationships between constructs. In some cases, high HTMT ratios is theoretically justified. In such instances, researchers should provide a strong theoretical argument for why these constructs, despite high correlations, should be considered distinct. The HTMT ratios in the table provide substantial evidence of discriminant validity for most of the constructs within the model. The few high ratios observed necessitate carefully reviewing the constructs involved, potentially revising the measurement model or providing a theoretical justification for the observed relationships. Ensuring discriminant validity is critical for the sound interpretation of SEM results and advancing theory in empirical research.

4.5.2 Checking outer loadings’ significance in Bootstrapping:

According to the results below, we can conclude that all the outer model loadings are significant at a 5% significance level (i.e., there is a statistically significant correlation between the indicators and their latent variables).

Table 4.8: Outer loadings' significance in Bootstrapping

	Task Interdependence	Social Connectedness	Knowledge Sharing	Shared Leadership Culture	Positive Belief of Change	Automation
TI10	0.000					
TI11	0.000					
TI2	0.000					
TI3	0.000					
TI4	0.000					
TI5	0.000					
TI6	0.000					
SC12		0.000				
SC13		0.000				
SC14		0.000				
SC15		0.000				
KS24			0.000			
KS25			0.000			
KS26			0.000			
SLC29				0.000		
SLC30				0.000		
SLC31				0.000		
SLC32				0.000		
SLC33				0.000		
SLC34				0.000		
Fearofch					0.000	
Readinessfear					0.000	
Totalnertia					0.000	
Totaltimework					0.000	

Source: Developed by the researcher

4.5.3 Structural Equation Model

The structural model's path coefficients and adjusted R^2 provide a nuanced understanding of the relationships within the model and the moderating effects at play. The path coefficients indicate the strength and direction of the relationships between the dependent sub-constructs and the main construct, Positive Belief about Change. Task Interdependence stands out in the model with a substantial and significant path coefficient. This finding emphasizes the central role of Task Interdependence in influencing Positive Belief about Change. A moderate path coefficient with a p-value of 0.000 indicates a strong and statistically significant impact. This suggests that in environments where tasks are interdependent, individuals are likely to exhibit a stronger belief in the efficacy and necessity of change. This could be due to the collaborative nature of work that may foster a sense of readiness and collective effort towards embracing change. On the other hand, Social Connectedness, despite being a focal point in many organizational studies, shows a negative path coefficient, though

it is not statistically significant. This intriguing result could imply that Social Connectedness, contrary to expectations, may not always be conducive to fostering a Positive Belief about Change. This might be because too strong a focus on maintaining social harmony could deter individuals from advocating for change, which often requires challenging the status quo.

Knowledge Sharing presents a positive and significant path coefficient, underscoring its importance in promoting a Positive Belief about Change. Knowledge Sharing likely equips individuals with the information and understanding necessary to appreciate the benefits and methodologies of change, thus enhancing their belief in and support for change initiatives. Shared Leadership Culture, however, does not show a significant impact on Positive Belief about Change. While Shared Leadership Culture is often lauded for its democratic nature, the lack of a significant path coefficient suggests that this approach may not necessarily translate into positive change beliefs. This could be due to potential ambiguities in responsibility and decision-making that a shared leadership approach might entail, which might dilute the clarity and decisiveness often required to foster a culture that embraces change.

The moderation effects presented in the model reveal that the Type of Change has a varied impact on the relationships between the sub-constructs and Positive Belief about Change. Specifically, it weakens the relationship between Social Connectedness and Positive Belief about Change, rendering it statistically insignificant. This could indicate that the nature of the change being considered plays a pivotal role in how social ties within the organization influence change beliefs. Conversely, the Type of Change strengthens the positive impact of Knowledge Sharing on Positive Belief about Change. This finding suggests that the content and context of the change can make sharing knowledge a more critical determinant of positive change beliefs. When individuals understand the specific nature of the change, the sharing of this specialized knowledge may become more valuable, and thus, the belief in the change is stronger.

Moving onto testing the structural model, the following tables present the results of the path coefficients, and the adjusted coefficient of determination (R^2 Adjusted)

Table 4.9: Inner model path coefficients sizes and significance

Moderating effect of the type of change	Path Coefficient	P-value
Task Interdependence → Positive belief about change	0.609	0.01

Social Connectedness → Positive belief about change	-0.108	0.254
Knowledge Sharing → Positive belief about change	0.439	0.01
Shared Leadership Culture → Positive belief about change	0.145	0.329
Type of Change x Task Interdependence → Positive belief about change	0.081	0.551
Type of Change x Social Connectedness → Positive belief about change	0.298	0.003
Type of Change x Knowledge Sharing → Positive belief about change	-0.210	0.003
Type of Change x Shared Leadership Culture → Positive belief about changes	-0.199	0.217

Source: Developed by the researcher

- The inner model path coefficients indicate the following:
 - i. The “Type of Change” as a Moderator has a significant albeit weak effect on the relationship between the sub-constructs “Social Connectedness” and “Knowledge Sharing” and the construct “Positive Belief about Change”, where this moderator causes the relationship between the “Social Connectedness” and “Positive Belief about Change” to become statistically insignificant, while it strengthens the effect of the sub-construct “Knowledge Sharing” on the construct “Positive Belief about Change”.
 - ii. The effect of the sub-construct “Task Interdependence” on the construct “Positive Belief about Change” is moderate and statistically significant.
 - iii. The effect of the sub-construct “Shared Leadership Culture” on the construct “Positive Belief about Change” is statistically insignificant.

The model also indicates that the interactions between the Type of Change and Task Interdependence and Shared Leadership Culture are not statistically significant. This might suggest that the nature of the change does not alter the impact of these factors on Positive Belief

about Change, which could be due to the inherent characteristics of these stable constructs regardless of the type of change considered. The model paints a complex picture of the factors influencing Positive Belief about Change and the moderating role of the Type of Change. Task Interdependence and Knowledge Sharing emerge as significant drivers of positive change belief, whereas Social Connectedness and Shared Leadership Culture do not demonstrate a significant direct effect. The Type of Change, as a moderator, further complicates these relationships, indicating that the impact of these sub-constructs on change belief is contingent upon the nature of the change itself. This nuanced understanding is vital for organizations seeking to manage change effectively, as it highlights the importance of considering both the structural aspects of work and the specific details of the change being implemented.

4.5.4 The Adjusted Coefficient of Determination (R^2 Adjusted)

The adjusted coefficient of determination, Adjusted R^2 , is an essential measure in structural equation modelling as it provides insight into the model's explanatory power while adjusting for the number of predictors. In the context of the model under discussion, Adjusted R^2 value of 0.807 for the construct of Positive Belief about Change is notably high. This value suggests that a significant portion of the variability in employees' belief in the efficacy and positive outcomes of organizational change are explained by Task Interdependence and Knowledge Sharing variables. It indicates that these two constructs together create a substantial foundation for predicting how individuals within an organization perceive change.

The high Adjusted R^2 value implies that task interdependence and knowledge sharing are statistically and practically significant in explaining Positive Belief about Change. Task Interdependence might contribute to this high explanatory power by fostering a collaborative environment where change is seen as a collective endeavour rather than an isolated process. Meanwhile, Knowledge Sharing could influence Positive Belief about Change by disseminating necessary information that clarifies the purpose and process of change, thus reducing uncertainty and resistance.

Regarding the moderation effect, the binary categorization of the Type of Change variable for Bootstrapping in the Smart PLS application reflects a methodological consideration in dealing with categorical moderators. This recoding simplifies the analysis, allowing for a clearer interpretation of how different types of change—Incremental or Strategic—affect the relationships within the model. This approach underscores the nuanced ways the nature of change can interact with organizational dynamics to influence employees' attitudes toward change initiatives. With Strategic Change coded as '1', any significant

interaction effects involving this moderator would imply that the nature of Strategic Change distinctively influences the model's relationships compared to Incremental Change.

- The adjusted coefficient of determination (R^2 Adjusted) for the endogenous latent variable “Positive Belief about Change” is 0.807. This means that two significant latent variables “Task Interdependence”, and “Knowledge Sharing” explain 80.7% of the variance of “Positive Belief about Change”.

The moderation graph illustrates the interaction between the Type of Change and Task Interdependence on the outcome of Positive Belief about Change. It compares two scenarios: when the Type of Change is at zero, which corresponds to Incremental Change, and when the Type of Change is at one, which corresponds to Strategic Change. The bottom line, representing Incremental Change, shows a positive slope, indicating that even small, incremental organizational changes are positively correlated with an increase in Positive Belief about Change as Task Interdependence increases. This may suggest that when changes are perceived as incremental or less radical, the collaborative nature inherent in Task Interdependence is sufficient to foster a positive attitude towards the change process.

The top line, depicting Strategic Change, has a steeper slope, suggesting a stronger positive relationship between Task Interdependence and Positive Belief about Change. This steeper slope may imply that the role of interdependent tasks becomes even more crucial in the context of broad, strategic changes. It suggests that when an organization undergoes significant transformations, the dependency between different tasks and the cohesive effort of teams can significantly bolster the confidence in and acceptance of these strategic shifts. The graph conveys that the nature of change—incremental or strategic—can modulate how collaborative work dynamics influence employees' beliefs about organizational change. This nuanced understanding is essential for change management strategies, as it highlights the importance of aligning task interdependence structures with the type of change being implemented to shape positive organizational change beliefs effectively.

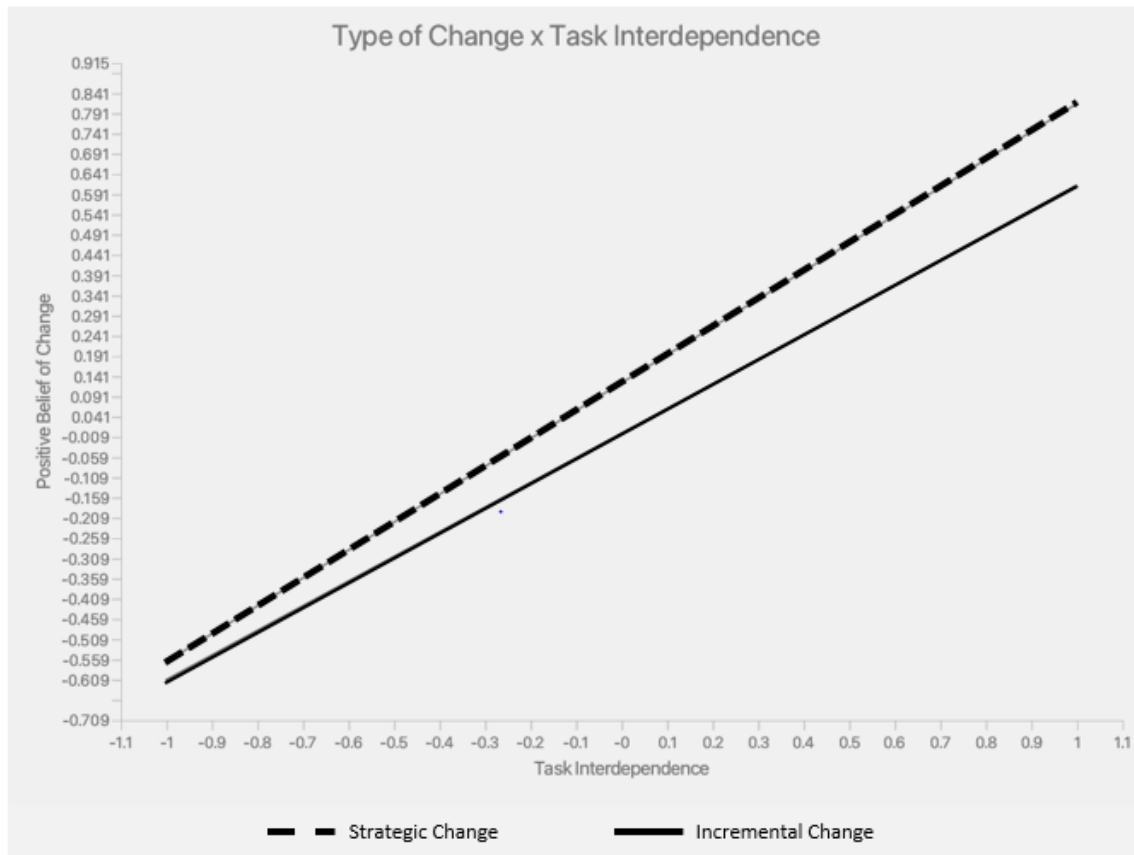


Figure 4.6: Type of Change x Task Interdependence → Positive belief about change

The moderation graph demonstrates the interaction effect between the Type of Change and Social Connectedness on Positive Belief about Change. Here, we observe two distinct lines, each representing the relationship under conditions of Incremental Change and Strategic Change. For Incremental Change, the slope is negative, which suggests that as Social Connectedness increases, the Positive Belief about Change decreases. This could imply that in the face of minor, less complex changes, stronger social bonds within the organization might hinder the acceptance of change, possibly due to contentment with the status quo or comfort in established routines among well-connected team members.

Conversely, under conditions of Strategic Change, the slope is positive and indicates a robust relationship between Social Connectedness and Positive Belief about Change. This suggests that in the context of significant, transformative changes, the fabric of social connections within the organization plays a critical role in shaping positive perceptions toward change. In such scenarios, a strong network of social ties may provide the necessary support, trust, and communication channels that facilitate the understanding and acceptance of substantial changes.

This graph underscores the complexity of managing organizational change and highlights that the implementation type can significantly influence how social dynamics impact change perceptions. Understanding these nuances is vital for leaders and change managers in tailoring their strategies to navigate the human aspects of organizational transformations effectively.

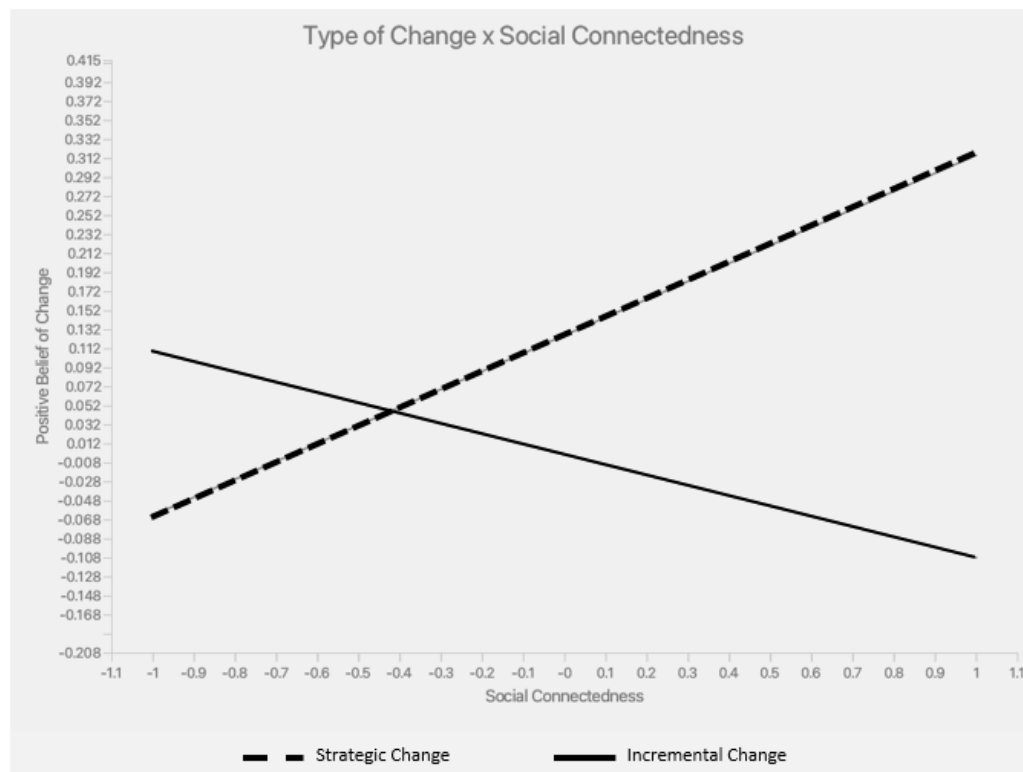


Figure 4.7: Type of Change x Social connectedness → Positive belief about change

The following moderation graph depicts the different types of organizational change interact with Knowledge sharing to influence employees' Positive Belief about Change. The two lines represent the relationship under two scenarios: Incremental Change and Strategic Change. For Incremental Change, indicated by the red line, the slope is downward, suggesting that as Knowledge Sharing increases, the Positive Belief about Change decreases. This unexpected trend might imply that during incremental changes, which typically involve minor adjustments, increased knowledge sharing could lead to an overload of information or a focus on potential issues, potentially dampening the enthusiasm for change.

In contrast, the green line representing Strategic Change shows an upward trend, indicating that higher levels of Knowledge Sharing correlate with an increase in Positive Belief about Change. This relationship implies that when dealing with comprehensive and significant changes, sharing Knowledge becomes crucial in shaping a positive outlook toward

the change process. In the context of Strategic Change, where the stakes and scope of transformation are more considerable, the dissemination of information and insights plays a vital role in building support and confidence among employees. The graph underlines the importance of context in change management. It illustrates that the impact of knowledge sharing on change attitudes is contingent upon the type of change being implemented. This insight is particularly relevant for leaders and change practitioners, emphasizing the need to tailor communication and knowledge management strategies to the specific nature of the change their organization is experiencing.

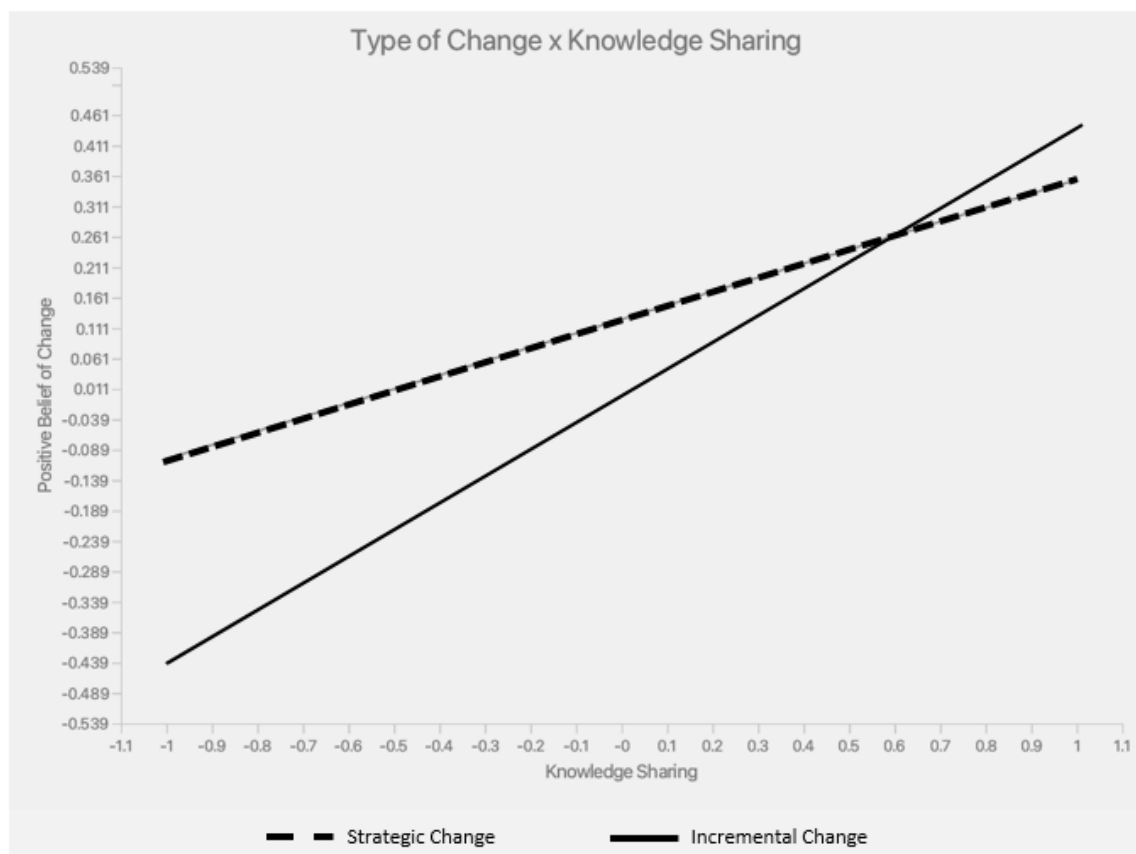


Figure 4.8: Type of Change x Knowledge sharing → Positive belief about change.

The moderation graph represents the interaction effect of an organization's Type of Change and Shared Leadership Culture on Positive Belief about Change. It illustrates two different conditions, with the red line showing the effect under Incremental Change and the green line under Strategic Change.

For Incremental Change, we see a slightly upward trend, suggesting that when changes are minor and more routine, the influence of Shared Leadership Culture is marginally positive or essentially neutral in fostering a Positive Belief about Change. This could indicate that for less extensive changes, the collaborative and democratic nature of a shared leadership approach

does not significantly impact employees' attitudes toward change. In contrast, under Strategic Change, the green line shows a downward trend, which indicates a negative interaction effect. This implies that for more substantial and transformative changes, a shared leadership model may inadvertently lead to decreased positive beliefs about change. This could be because strategic changes often require clear direction and decision-making, which might be less pronounced in a shared leadership environment, potentially leading to confusion or a lack of unified vision about the change.

This interaction effect is critical for understanding how different leadership models can influence change perceptions in varying contexts. It emphasizes the need for adaptability in leadership approaches, particularly in strategic scenarios where the clarity and decisiveness of leadership is paramount for nurturing a Positive Belief about Change.

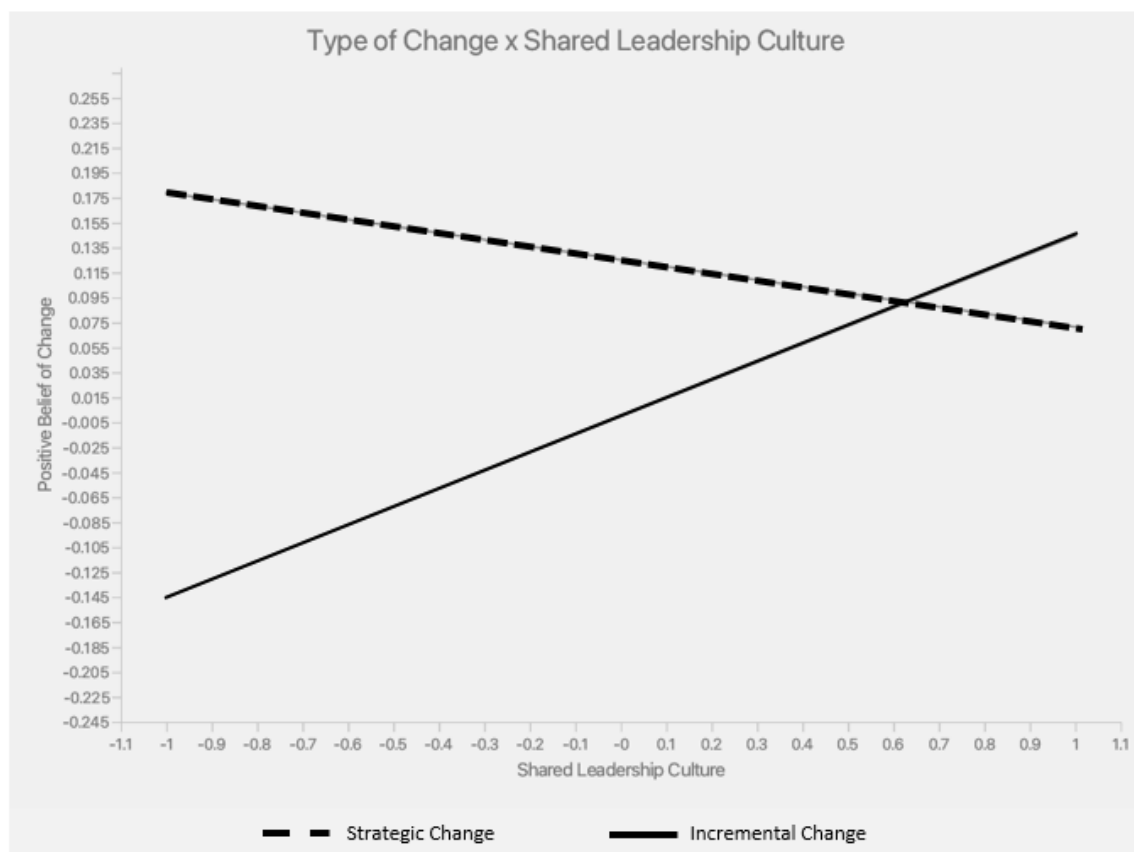


Figure 4.9: Type of Change x Shared leadership culture → Positive belief about change.

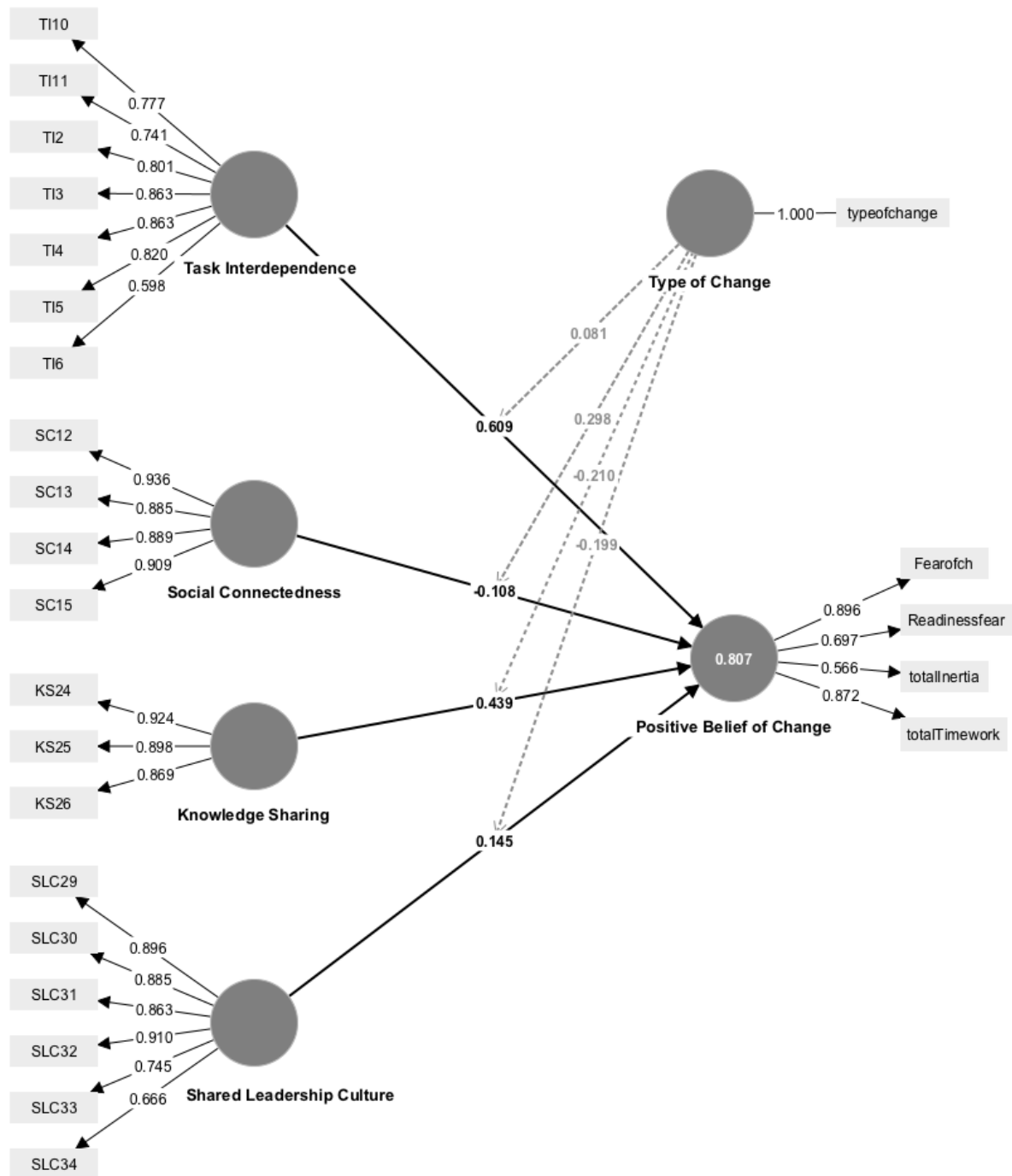


Figure 4.10: Structural Equation Modeling (Moderating effect of the type of change)

4.6 Summary

Evaluating the hypotheses related to the structural model offers a clear perspective on the factors influencing Positive Beliefs about Change within an organization. The supported hypothesis for the direct effect of Task Interdependence on Positive Belief about Change underscores the significance of collaborative work dynamics in shaping employees' attitudes toward change. Interdependent tasks likely create a shared sense of purpose and accountability,

which can positively influence individuals' belief in the efficacy and necessity of change initiatives.

Conversely, the hypotheses regarding the direct effects of Social Connectedness and Shared Leadership Culture on Positive Belief about Change were not supported. This suggests that while these elements are important for fostering a cohesive work environment, they do not necessarily translate into a positive perception of organizational change. It could be that the complexities involved in navigating social dynamics and shared decision-making may not always align with the drivers that enhance employees' belief in change.

The moderator effect of the type of change has also yielded insightful results. The change type significantly impacted the relationships between Social Connectedness and Knowledge Sharing with Positive Belief about Change, but not between Task Interdependence and Shared Leadership Culture. This indicates that the nature of the change—whether incremental or strategic—can either amplify or diminish the influence of certain organizational factors on change beliefs. For instance, Knowledge Sharing becomes more critical during strategic changes, whereas the impact of Task Interdependence remains unaffected by the type of change.

These findings highlight the importance of context in organizational change processes. They suggest that change managers should consider not only the structural and cultural elements of their organizations but also the specific characteristics of the change when designing and implementing change initiatives. Understanding these dynamics can help tailor strategies that effectively address the multifaceted nature of change within organizations.

Table 4.10: Summary of the moderating hypotheses testing (The type of change)

#	Hypothesis	Result
H1	Direct positive effect of Task Interdependence on Positive Belief about Change	Supported
H2	Direct positive effect of Social Connectedness on Positive Belief about Change	Not supported
H3	Direct positive effect of Knowledge Sharing on Positive Belief about Change	Supported
H4	Direct positive effect of Shared Leadership Culture on Positive Belief about Change	Not supported

H9	Moderator effect of type of change on the positive relationship between Task Interdependence and Positive Belief about Change	Not supported
H10	Moderator effect of type of change on the positive relationship between Social Connectedness and Positive Belief about Change	Supported
H11	Moderator effect of type of change on the positive relationship between Knowledge Sharing and Positive Belief about Change	Supported
H12	Moderator effect of type of change on the positive relationship between Shared Leadership Culture and Positive Belief about Change	Not supported

Source: Developed by the researcher

Next chapter is a qualitative study aiming to further explain the obtained quantitative results by listening to the target respondents.

Chapter 5

Qualitative Findings

5.1 Introduction

Chapters 3 and 4 explored the quantitative relationship between shared leadership and organizational change management yet the researcher found that it is imperative to listen to target respondent in order to add their detailed narrative insights to the obtained quantitative results. This chapter is based on the qualitative research methodology and findings. First, the study put the research methodologies according to qualitative research by conducting semi-structured interviews. After that, the study discusses the results from the qualitative semi-structured interviews. Hence, in the rapidly changing environment of the modern workplace, understanding the factors and intricacies of organizational change is paramount. Given the multifaceted nature of change processes and the diversity of employee backgrounds, roles, and experiences, a qualitative approach offers insights into the lived experiences and perspectives of those at the heart of the change process. This study, anchored in the renowned Braun and Clarke (2006) approach, delves into the world of professionals ranging from early-career to senior-level positions to unearth patterns, themes, and narratives surrounding the phenomenon of change management.

The focus of this qualitative study is twofold. First, it aims to understand the themes emerging from the semi-structured interviews, offering a comprehensive overview of the complex change management landscape. Second, by focusing on the diverse demographic backgrounds of the participants, it intends to provide a holistic perspective, capturing the richness and nuance that only such a diverse cohort offers.

5.1.1 Different factors of shared leadership and the success or failure of organizational change implementations?

The traditional model of leadership, which operates from the top down, is different from shared leadership. Team leadership responsibilities are decentralized, with each team member taking on some of those responsibilities. Zhu et al. (2018) extensively reviewed shared leadership and highlighted its growing significance in studying organizational behavior. This sentiment was echoed by Imam (2021), suggesting that the success of a construction project is linked to shared leadership, autonomy, and knowledge sharing. In addition, Salas-Vallina et al. (2021) emphasized shared leadership's role in enhancing both resiliency and performance, particularly in times of uncertainty. Carson et al. (2007) investigated the factors contributing

to shared leadership in teams and the implications of this dynamic on performance. They pointed out the significance of meeting certain conditions for shared leadership to succeed.

In addition, Imam (2021) brought attention to the intertwined relationship between shared leadership and the exchange of information to ensure a project's success. Lee et al. (2020), who emphasized the significant role that knowledge sharing plays in ISD projects, provided support for this idea. A cross-level analysis was conducted by Vandavasi et al. (2020) to link knowledge sharing, shared leadership, and innovative behavior. The results of this analysis suggested that teams that practiced shared leadership were more likely to be creative. Coun et al. (2019) investigated the role of employee self-determination in mediating the relationship between transformational leadership and shared leadership. Their findings suggested that transformational leadership can foster shared leadership when employees have a sense of autonomy. Ali et al. (2023) investigated the connection between shared leadership and the creative output of teams. They developed a framework for moderated mediation based on how social information is processed.

On the other hand, Holcombe et al. (2023) presented models and frameworks for shared leadership in higher education. They emphasized the significance of this type of leadership in navigating change in today's uncertain environment. These kinds of frameworks are necessary because shared leadership may affect the level of success achieved by organizational change implementations. Elgohary and Abdelazyz (2020) investigated the resistance to change that occurs during the performance of electronic government systems. Even though shared leadership is not explicitly mentioned in the study, it is possible that it could help reduce such resistance by dividing responsibility and decision-making power (Sharif et al., 2023d). Whether a change is successful or not often depends on several different factors. The difficulty of overcoming one's resistance to change is a topic that comes up again and again in the research (Elgohary & Abdelazyz, 2020; Roth & Spieth, 2019). Resistance may get in the way of successfully implementing new initiatives. Additionally, distinct leadership styles, such as narcissistic leadership (Mousa et al., 2021), can influence the success of organizational change implementations in various ways. The extent to which shared leadership has the potential to mitigate negative impacts and encourage positive ones may be the focus of additional research.

5.1.2 Individual and organizational factors and shared leadership dynamics (e.g., task interdependence, social connectedness, knowledge sharing, shared leadership culture) in the change management process

Individual and organizational factors are pivotal in the shared leadership dynamics during the change management process. Shared leadership is a team property where multiple team members lead the team collectively (Carson et al., 2007). This dynamic leadership approach fosters a sense of joint responsibility, ensuring that not just one person is responsible for leading the group. Shared leadership is increasingly seen as an effective way to address organizations' complexities and rapid changes (Holcombe et al., 2023).

1. Task Interdependence

Teams, where members depend on one another to complete tasks are often more successful when they adopt shared leadership practices (Lee et al., 2020). Task interdependence encourages members to frequently interact, collaborate, and exchange information, creating an environment conducive to shared leadership and successful change management (Zhu et al., 2018).

2. Social Connectedness

A team's social bonds or connectedness can significantly influence the success of shared leadership. Strong interpersonal relationships can make it easier for team members to share responsibilities and leadership roles (Vandavasi et al., 2020).

3. Knowledge Sharing

Knowledge sharing is crucial for organizational change. Teams that share knowledge effectively are better positioned to adopt shared leadership (Imam, 2021). A culture that encourages knowledge sharing can facilitate the smooth flow of information, ensuring that all members are informed and aligned with the change initiatives (Ahmad & Karim, 2019). Knowledge transfer and sharing form a basis for competitive advantage in firms (Argote & Ingram, 2000).

4. Shared Leadership Culture

Organizations that encourage a culture of shared leadership can adapt better to changes. This culture nurtures a sense of mutual trust and collective responsibility among team members (Han et al., 2021). Shared leadership can enhance resilience and performance in turbulent times, especially when combined with a passionate work environment (Salas-Vallina et al., 2021).

5. Change Management Process

The change management process involves adapting to new systems, behaviors, and methods of operation. For change initiatives to succeed, organizations often need a leadership model that can rapidly adapt and respond to new challenges (Cameron & Green, 2019). Shared leadership can address uncertainties during organizational changes by pooling diverse perspectives and expertise (Bordia et al., 2004).

6. Individual and Organizational Factors

Both individual and organizational factors influence shared leadership dynamics in the change management process. For instance, employees' attitudes toward organizational change can impact the success of shared leadership (Choi, 2011). When combined with shared leadership, organizational learning can significantly influence organizations' adaptability and resilience during change (Mousa et al., 2020). Therefore, shared leadership dynamics, enhanced by individual and organizational factors like task interdependence, social connectedness, and a culture of knowledge sharing, can significantly influence the success of change management processes. A supportive environment that nurtures these dynamics is crucial for change initiatives' seamless transition and success.

Table 5.1 outlines the essential elements of shared leadership in change management procedures, emphasizing the value of mutually dependent tasks, social ties, information exchange, a shared leadership culture, the actual change management process, and the interaction of organizational and individual components. It implies that teams have a higher chance of implementing shared leadership if they build strong relationships, depend on one another to finish tasks, and share knowledge efficiently. This strategy fosters shared responsibility and mutual trust during organizational changes, which is crucial for adjusting to new behaviors and systems. Moreover, the degree of organizational learning and employees' attitudes toward change are critical factors that influence shared leadership's flexibility and resilience, suggesting that a thorough, multidimensional strategy is essential for successful change management.

Table 5.1: Key Dynamics of Shared Leadership in Change Management Processes

Umbrella Construct	Construct	Sources	Examples
Task Interdependence	Teams Dependence	Han et al. (2021);	Teams where members depend on one another to complete tasks are often more

		Hendrickson, Rosen & Aune (2011); Imam (2021)	successful when they adopt shared leadership practices.
Social Connectedness	Interpersonal Relationships	Grieve et al. (2013); Hendrickson, Rosen & Aune (2011); Imam (2021)	Strong interpersonal relationships can make it easier for team members to share responsibilities and leadership roles.
Knowledge Sharing	Organizational Change	Ali et al., (2021); Coun, Peters and Blomme (2019); Hendrickson et al. (2011)	Knowledge sharing is crucial for organizational change. Teams that share knowledge effectively are better positioned to adopt shared leadership.
Shared Leadership Culture	Mutual Trust and Responsibility	Chen et al. (2021); Cao et al. (2021); Vandavasi et al. (2020)	A culture of shared leadership nurtures a sense of mutual trust and collective responsibility among team members.
Change Management Process	Adapting to New Systems	Abrantes et al. (2024); Alsayat & Alenezi (2018); Simone et al. (2018)	The change management process involves adapting to new systems, behaviors, and methods of operation. Shared leadership can address uncertainties during organizational changes.
Individual and Organizational Factors	Attitudes and Organizational Learning	Bordia et al. (2004); Hendrickson et al. (2011); Mousa et al. (2020)	Employees' attitudes toward organizational change can impact the success of shared leadership. Organizational learning can significantly influence adaptability and resilience during change.

Source: Developed by the researcher

5.1 Research Methodology

5.1.1 Qualitative research method

To investigate the myriad of ways in which shared leadership influences the success or failure of organizational change implementations, a qualitative research methodology was chosen for this investigation. According to Creswell (2013), qualitative methods are particularly well-suited to capture the factors, intricacies, and subjective interpretations inherent in human experiences and practices. In particular, this study used semi-structured interviews as the primary instrument for data collection. According to Brinkmann and Kvale (2015), this methodology provides the flexibility to delve deeply into individual perceptions while maintaining a consistent comparative analysis structure. Participants in the study were chosen using the method of purposive sampling to recruit people with prior experience with shared leadership in the context of organizational change.

To direct the semi-structured interviews, several research questions were developed. The purpose of these questions was to determine the extent to which various aspects of shared leadership have an impact on the success or failure of change initiatives, as well as the individual and organizational dynamics, such as social connectedness and knowledge sharing, that shape this leadership style during the process of change management (Carson et al., 2007). Previous research on shared leadership highlights its potential to foster collaboration, spread responsibility, and tap into diverse knowledge bases. However, there is a possibility of either role ambiguity or responsibility diffusion (Ensley et al., 2006). After this context was presented, interviewees were prompted to share their first-hand experiences, insights, and reflections on the interplay between shared leadership and change management. Their narratives will shed light on the nuances and contingencies that quantitative metrics may miss because they focus on the bigger picture.

5.1.1.1 Semi-structured interviews

The study targeted data saturation point which was achieved after conducting 26 semi-structured interviews from the professional and executives of small and medium enterprises (SMEs). Despite the current global context and the need for flexibility in data collection methods, 26 semi-structured interviews were conducted both online and face-to-face. This approach minimizes geographical constraints and offers a convenient medium for participants, ensuring that they can engage in the interview process from the comfort of their chosen environment (Janghorban et al, 2014). Each participant was selected based on her/his unique professional background and experience with shared leadership within his or her respective

organizations. Some of the interviews were conducted using video conferencing, allowing for a more interactive and personal conversation. The platform provided options for recording, enabling the researcher to revisit the conversations for in-depth analysis. Each session lasted between 45 to 60 minutes. The participants were briefed about the purpose of the research, and their consent for recording was taken before the commencement of each interview (Seitz, 2016).

5.1.1.2 Transparency and ethical considerations

In online semi-structured interviews, transparency and ethical considerations remain at the forefront to ensure the research maintains integrity, respects participants' rights, and produces trustworthy results.

1. **Informed Consent:** Before the commencement of each interview, participants were briefed about the purpose, process, and implications of the research. They must understand the nature of their involvement, the potential risks, and rights, including the right to withdraw at any stage without repercussions. Consent was obtained explicitly for recording the interview sessions (British Psychological Society, 2013).
2. **Anonymity and Confidentiality:** Given the personal and professional information shared, steps were taken to ensure that participants' identities and responses remained confidential. Unique identifiers were removed or replaced with pseudonyms during data analysis and reporting. Furthermore, the recorded interviews and transcripts were securely stored, with only the research team having access (Orb et al., 2001).
3. **Transparency in Data Management:** All recorded sessions were stored on secure servers with password protection. Participants were informed about the storage, access, and eventual disposal of their interview records. Any use of the data beyond the scope of the current research would require additional consent.
4. **Potential Bias and Objectivity:** Researchers remained aware of potential biases and ensured that questions were posed neutrally, allowing interviewees to express their views without leading them in a specific direction. Reflexivity, or the researcher's self-awareness of their role and potential influence on the research, was practiced throughout the process (Berger, 2015).
5. **Feedback and Results Sharing:** Participants were offered the option to receive a summary of the research findings. This ensures transparency and validates the experiences and insights shared by the participants.

6. **Technological Considerations:** Since some of the interviews were conducted online, participants were briefed about the technology and potential risks associated with online data transmission. Secure and reputed video conferencing tools were chosen to minimize risks. Acknowledging that participants were volunteering their time, interviews were scheduled at their convenience, ensuring minimal disruption to their daily responsibilities. Furthermore, the researcher was sensitive to discomfort or fatigue, allowing for breaks or rescheduling.

Therefore, the ethical approach to this research prioritized all participants' respect, dignity, and autonomy, ensuring that their experiences and insights were collected and interpreted with the utmost integrity and responsibility.

5.2 Data analysis for Qualitative data

The information obtained from the semi-structured interviews that took place online was subjected to thematic analysis, which was carried out with the help of a six-step methodology developed by Braun and Clarke (2006). Initially, familiarization with the data was accomplished by repeatedly listening to, and reading from, the interview transcripts and recordings. Because of this immersion, the researcher acquired a profound familiarity with the material. Following this, initial codes were generated across the entire dataset in an open-coding fashion using a systematic approach. These codes were compiled and organized into potential themes and sub-themes by using the NVivo software. This was done to ensure the themes accurately reflected the coded extracts and the entire dataset. In the fourth step, a thematic map of the analysis was determined by comparing these themes to the coded quotes and the whole dataset. Following that, distinct names and definitions were assigned to every recurring theme. In the final step, the findings were written up, and a connection was made between the thematic conclusions, the research questions, and the pertinent literature. The utilization of NVivo made it possible to have a well-organized and productive coding process, which in turn ensured a well-structured and all-encompassing investigation of the data.

5.3 Results

5.3.1 Thematic analysis and coding

The study used thematic analysis and coding based on the Braun and Clarke approach (Clarke & Braun, 2018), a widely used method for identifying, analyzing, and reporting patterns or themes within qualitative data. The process involves six steps (Clarke & Braun, 2018), which were followed in the study to explore the semi-structured interviews:

1. **Familiarization with the data:** The researcher transcribed the interviews verbatim, ensuring that all participant responses were accurately recorded. They then read and re-read the transcripts to immerse themselves in the data and gain a deeper understanding of the participants' experiences and perspectives.
2. **Generating initial codes:** The researcher systematically assigned descriptive labels or codes to sections of the transcripts that reflected the content and meaning of the participants' responses. These codes served as the building blocks for identifying themes and sub-themes. The coding process was inductive, allowing themes to emerge from the data rather than being imposed by pre-existing theories or assumptions.
3. **Searching for themes:** After coding the entire dataset, the researcher reviewed the codes and began to group them into broader themes based on their similarities and relationships. This process involved sorting the codes into potential themes and sub-themes, creating a thematic map to visualize their connections.
4. **Reviewing themes:** In this step, the researcher examined the candidate themes and sub-themes to ensure they were coherent, distinct, and adequately represented the data. This involved checking the themes against the coded data and the original transcripts to ensure they accurately reflected participants' experiences and perspectives. Themes were refined, merged, or discarded as necessary to create a clear and meaningful thematic structure.
5. **Defining and naming themes:** The researcher then refined the themes further, ensuring each theme had a clear and concise name and description. This involved identifying the essence of each theme, understanding its relationship with the sub-themes, and determining how it contributed to the overall understanding of the research question.
6. **Producing the report:** The researcher presented the findings by discussing each main theme and related sub-themes with their respective codes. This involved providing a detailed description of each theme, illustrating its significance with relevant quotes from the interview transcripts, and relating the themes to the broader research question and existing literature.

Following the Braun and Clarke (2006) approach, the study ensured a rigorous and transparent analysis of the semi-structured interview data. This resulted in a comprehensive understanding of the themes and sub-themes that emerged from the participants' experiences and perspectives.

5.3.2 Demographic information

The interviewees represent diverse professionals from different educational backgrounds, ages, and work experiences. The demographic data provided for each interviewee provides a rich dataset to analyze age, education, and work experience, tenure in the current organization, roles, and team involvement. There are mid-career to senior-level professionals in their late 20s to late 40s. Some have engineering or law degrees, but most have business degrees in Business Administration, Marketing, Economics, and Strategic Management. The participants' high level of formal education, with many holding master's degrees or higher, suggests a workforce that values continuing education and specialization. Interviewees have 6–20 years of work experience, demonstrating professional maturity and expertise. Notably, Vice Presidents and Directors tend to have more work experience, demonstrating the link between experience and organizational leadership. Some employees have been with their company for over a decade. This long tenure may indicate organizational alignment, loyalty, job satisfaction, and professional growth opportunities.

The interviewees held management and leadership roles in procurement, innovation, change management, strategy, and digital transformation. Modern organizations value these functions, especially change management and innovation, signaling a business trend toward adaptability and continuous improvement. The frequent mention of team leadership roles like shared leadership, facilitation, and collaboration indicates a shift toward more inclusive and flexible management styles that value empowerment and collective problem-solving. Interviewees' team involvement and experience demonstrate the importance of teamwork in organizational goals. These organizations emphasize shared leadership, collaborative project management, and strategic initiatives, suggesting they move from hierarchical structures to more fluid team configurations. This approach leverages diverse skills and perspectives, boosts innovation, and makes change and challenge-response more agile. Thus, demographic data show a highly educated, experienced, and engaged workforce prioritizing collaboration, innovation, and strategic management in organizational challenges.

Table 5.2. Demographic information

Interviewee	Age	Education	Total Work Experience	Current Organization Tenure	Role in the Organization	Team Involvement & Experience
Interviewee A	30	Mechanical engineer, minor in business administration	7 years	7 years (in the eighth year)	Head of Master Data Management for products/items	Part of a team, leadership role
Interviewee B	29	Bachelor's in accounting, Master's in marketing	6 years	5 years	Procurement Section Head	Part of a team, execution, supervision, analysis/enhancement projects
Interviewee C	46	Engineering degree, Master's in Business Administration	20 years	6 years	Vice President for Business Excellence	Part of a team, working with subordinates & superiors, influenced by family business aspect
Interviewee D	42	Business Administration	21 years	8 years	Head of Procurement for the whole group (GB Corp)	Part of a team, leading, mentoring, and managing the procurement team
Interviewee E	46	Faculty of Law, English Department, Cairo University, Egypt	About 15 years	Around 6 years	Health, Safety, and Environmental Consultant	Sometimes part of a team, leader when involved
Interviewee F	36	Bachelor of Statistics and Economics, Faculty of Economics and Political Science	Around 15 years	6 years	Manager in the department	Part of a team, shares plans/tasks with the team to accomplish goals
Interviewee G	48	Master's degree in business administration	Not specified	12 years or more	Directing change efforts, focusing on organizational restructuring and digital transformation	Part of a team, with a leadership role in shared leadership dynamics affecting change management
Interviewee H	Not specified	Not specified	Not specified	Almost 9 years	Director of Innovation and Change	Involved in utilizing shared leadership techniques for incorporating technology and cultivating a change-welcoming culture
Interviewee I	35	Undergraduate in Business Administration, Master's in Organizational Leadership	Not specified	8 years	Director of the Change Management Department	Team facilitator focusing on teamwork and shared leadership, assigns tasks based on team members' abilities and experiences

Interviewee J	34	Bachelor's in Computer Science, Master's in Business Administration with an IT management specialization	Not specified	9 years	Director of the digital transformation initiative	Emphasizes collaborative leadership, using team's diverse abilities and knowledge for project advancement
Interviewee K	35	Master's in Organizational Psychology	Not specified	5 years	Head of Change Management	Involved in the company's transition, emphasizes shared leadership to tap into team's varied abilities and views
Interviewee L	39	Ph.D. in Industrial Engineering specializing in process optimization	Over 15 years	5 years	Leading the innovation and development team	Focused on fostering a collaborative environment for innovation and organizational change through shared leadership
Interviewee M	Not specified	Bachelor's in Business Administration, Master's in Innovation Management	Not specified	Nearly 8 years	Director of Innovation and Development	Leads innovation and design strategies, emphasizing shared leadership within the department for enhanced buy-in and innovation
Interviewee N	Not specified	Not specified	Not specified	Nearly 8 years	Head of the Innovation Department	Practices shared leadership, emphasizing empowerment and decision-making across the team for effective organizational change
Interviewee O	Not specified	Computer Science, Master's in Innovation Management	15 years	8 years (3 years in current role)	Innovation and Development Director	Leads in promoting innovation and developing change management techniques, implements shared leadership to enhance agility and collaborative culture during organizational changes
Interviewee P	Not specified	Business Administration, Master's in Strategic Management	18 years	Over 10 years (4 years in current role)	Director of Strategy and Change Management	Oversees strategic planning and organizational change initiatives, utilizing shared leadership to leverage collective expertise for adaptive strategies
Interviewee Q	Not specified	Not specified	Not specified	10 years (4 years in current role)	Head of Strategic Initiatives	Leads projects for aligning business processes and culture, emphasizes collaborative leadership for effective stakeholder engagement
Interviewee R	Not specified	Organizational Psychology	Over 15 years	8 years (3 years in current role)	Director of Innovation and Change Management	Leads initiatives for continuous improvement and adaptability, emphasizes the role of shared leadership in organizational change
Interviewee S	Not specified	Business Management, Organizational Psychology	Over 20 years	12 years (4 years in current role)	Director of Innovation and Strategy	Utilizes shared leadership to encourage innovation and strategic redirection, fostering a culture of collective leadership for inclusive and dynamic organizational change

Interviewee T	Not specified	Not specified	Not specified	Not specified	Senior Project Manager	Focuses on shared leadership in projects, especially during organizational change, emphasizing the importance of collaboration, trust, and effective communication for success
Interviewee U	Not specified	Not specified	Not specified	5 years	Chief Operations Officer	Implements shared leadership in operational processes, emphasizing the importance of team members taking on leadership roles for agile response in organizational changes
Interviewee V	36	Bachelor's in Business Administration, Master's in Organizational Leadership	Not specified	8 years (4 years as Director of Operations)	Director of Operations	Emphasizes the role of shared leadership in fostering an environment of empowerment and collective problem-solving during change
Interviewee W	34	Bachelor's in Business Administration, Master's in Strategic Management	10 years	8 years (3 years in current role)	Director of Strategic Initiatives	Leads project teams, collaborates with departments, and adapts strategies based on feedback; integral team member
Interviewee X	Not specified	Bachelor's degree in Communication Arts, Master's in Business Administration	11 years	6 years	Head of Marketing	Implements shared leadership in decision-making and project management, enhancing team ownership, motivation, and innovation
Interviewee Y	Not specified	Bachelor's in Engineering, Master's in Business Innovation	12 years	7 years	Head of Innovation and Development Department	Leads with a focus on fostering an innovative culture through shared leadership, enhancing adaptability and resilience to change
Interviewee Z	Not specified	Bachelor's in Economics, Master's in Strategic Management	Over 15 years	10 years	Chief Strategy Officer	Guides strategic initiatives, fostering innovation and shared leadership for dynamic market response and change management

Source: Developed by the researcher

5.3.3 Development of Themes and sub-themes

The study identified the main themes and sub-themes from the semi-structured interviews. The data presented in Table 5.3 outlines a comprehensive analysis of themes and sub-themes derived from a study on organizational dynamics, focusing on aspects like change management, employee skills and expertise, and the environment of the organization, among others. The sub-themes under change management, such as 'Change of Organizational Culture' and 'Organizational Change,' with 18 and 16 files, respectively, and a significant number of references (31 and 30), highlight the critical emphasis on the need for and the process of managing change within organizations. Similarly, the 'Training and Education' sub-theme under 'Employees Skills and Expertise,' with 21 files and 37 references, underscores the importance of continuous learning and development in enhancing employee capabilities to

adapt to organizational needs and changes. The environment of the organization is another focal area, with the 'Working Environment' receiving considerable attention (17 files, 34 references), suggesting that the physical and psychological conditions under which employees work significantly influence organizational performance and change receptivity. The 'Impact on Organizational Change' theme, particularly the sub-themes 'Enhancing creativity and flexibility in change process' and 'Direct influence on accountability and ownership', with 11 files each and 16 and 13 references, respectively, indicate the nuanced impacts that organizational change can have on various facets of the organization, including creativity, accountability, and ownership.

Implementation strategies, organizational culture and social dynamics, and organizational role themes reveal deep insights into the mechanisms and cultural factors that facilitate or hinder organizational change and transformation. For example, 'Internal Communication Channels for Teams', with 19 files and a high number of references (73), and 'Decision Making' under Implementation Strategies, with 19 files and 54 references, indicate the critical roles of effective communication and decision-making processes in successful organizational change initiatives. These findings underscore the complexity of organizational dynamics and the multifaceted approach needed for effective change management. In addition, the emphasis on 'Digital Collaboration Platforms' within 'Tools and Technologies', with 20 files and 55 references, along with the significant focus on 'Shared Leadership' themes such as 'Knowledge Sharing' and 'Social connectedness', with 18 files each, reflects the evolving nature of organizational structures and processes. It highlights the importance of technological integration and collaborative leadership styles in driving organizational change and transformation. The analysis across various themes and sub-themes not only provides a detailed insight into the factors that influence organizational change but also underscores the interconnectivity between technology, culture, and leadership in shaping the future of organizations.

Interviews reveal a wealth of information about organizational change, from change management strategies and challenges to employee skills, organizational environment, and leadership and team management. When analyzed with quantitative data from hypothesis testing, these insights reveal compelling patterns and relationships that demonstrate the complexity and multifaceted nature of organizational change management. Consider task interdependence and positive change beliefs for a deeper understanding. In interdependent task environments, people are more likely to view change positively, according to data. Interdependence fosters a collaborative culture that shares knowledge and resources and builds

resilience and adaptability to change. Such environments foster unity and shared purpose, making change less daunting and more of an opportunity for growth.

Similarly, social connectedness is crucial. Strong employee social bonds and community help organizations manage change. Internal communication and social interaction are key to a supportive organizational culture, according to qualitative data. Feeling connected and valued increases employees' openness to change and confidence in its benefits. This is especially true in shared leadership, where the distribution of leadership roles and responsibilities across the organization promotes inclusive and participatory change. Automation and technology create a complex picture. Digital tools and platforms are seen as a positive step towards future-proofing organizations, but the data suggests that ensuring the human aspect of organizational change is noticed may be difficult. Technology must be balanced with employee engagement, training, and development. The resistance to change, expressed through fears, inertia, and workload, highlights the need for well-planned strategies to address these issues. Employee transition programs and clear communication of the vision and benefits of change can reduce resistance and create a more conducive environment for change.

Table 5.3. Themes and sub-themes

Themes	Sub-themes	Files	References
Change Management		0	0
	Change of Organizational Culture	18	31
	Implement the Change	7	15
	Organizational Change	16	30
	Review the Progress and Results	6	17
	Vision Crafting and Plan of Change	11	22
Employees Skills and Expertise		0	0
	Knowledge and Experience	15	24
	Training and Education	21	37
Environment of Organization		0	0
	Automation Based	4	7
	Avoid Job Leaving	6	9
	Industrial based	5	7
	Working Environment	17	34
Impact on Organizational Change		0	0
	Direct influence on accountability and ownership	11	13
	Enhancing creativity and flexibility in change process	11	16
	Success and Failure Factors	7	12
Implementation Strategies		0	0
	Decision Making	19	54
	Implementation Strategies	12	21
	Investing in leadership development	9	10

Organizational Culture and Social Dynamics		0	0
	Importance of Organizational Culture	11	23
	Internal Communication Channels for Teams	19	73
	Social Interaction and Information Exchange	14	23
Organizational Role		0	0
	Active Participation of CEOs	5	10
	Central Procurement Department	3	7
	Consensus with other departments	4	7
	Social Connectedness	9	15
Organizational Transformation		0	0
	Cost Saving and Execution time	8	11
	Digital Transformation	11	20
	Intensity of Change	16	32
Programs and Schemes for Organizations		0	0
	Financial Arms	7	13
	Leasing and Mortgage	2	2
	Loans for SMEs	3	4
Resistance to Change		0	0
	Fear	6	11
	Inertia	4	9
	Rubbished Data	4	7
	Time and Workload	6	13
Shared Leadership		0	0
	Knowledge Sharing	18	39
	Social connectedness	18	29
	Task Interdependence	11	21
	Transparency and Problem Solving	17	33
Team Management		0	0
	Divisions of Managers	4	7
	Heterogeneity	4	7
	Job Description	4	7
	Leading and Mentoring	7	17
Size		3	6
Tools and Technologies		0	0
	Digital Collaboration Platforms	20	55
	Future Technological Integration	16	23
	Integration of AI and data analytics	8	14

Source: Developed by the researcher

5.4 Contextual Factors of Shared Leadership in Change Management

Table 5.4 shows how organizational change is complex and how many factors affect it. Change management, employee skills and expertise, and organizational environment highlight the complex relationship between organizational culture, employee capabilities, and the working environment in facilitating change. Change management success is greatly enhanced by an adaptable, inclusive, and aligned organizational culture. Additionally, employee skills and expertise, significantly when enhanced through ongoing training and education, are essential to managing change. Impact on organizational change and Implementation Strategies emphasize accountability, creativity, and strategic decision-making in change. Effective change management fosters employee accountability and ownership, boosting creativity and flexibility. Change initiatives require strategic decision-making and inclusive planning. These elements, along with leadership development, ensure that change is implemented and sustained.

Organizational culture, social dynamics, and role emphasize internal communication, social interaction, and leadership in change management. A strong, adaptive organizational culture, supported by effective communication and social interaction, eases change. The need for top-down commitment to change initiatives is highlighted by the fact that CEOs actively direct and energize change efforts. Organizational transformation and programs and Schemes for organizations show how digital technologies can transform organizations and how financial support mechanisms enable change. Digital transformation drives change, forcing organizations to adopt new technologies and processes. Financial programs like SME loans and leasing schemes allow organizations to invest in change initiatives, demonstrating the importance of financial flexibility and support.

Therefore, the synthesis of findings across all themes shows that successful organizational change requires cultural, strategic, operational, and financial considerations. Effective change initiatives combine change management, employee development, technology, and leadership. This comprehensive approach prepares organizations to implement change, sustain it, adapt to future challenges, and capitalize on growth and development opportunities. This analysis provides a roadmap for organizations navigating change in today's dynamic business environment.

Table 5.4. Addressing research questions

Themes	Sub-themes	Research Question (s) Addressed	Key Findings
Change Management	Change of Organizational Culture	How does changing organizational culture impact change management?	Organizational culture significantly influences the success and approach to change management.
	Implement the Change	What are effective methodologies for implementing organizational changes?	Tailored and strategic implementation methodologies are crucial for successful change.
	Organizational Change	What drives organizational change and how is it managed effectively?	Key drivers of change include internal and external pressures; effective management involves strategic planning and communication.
	Review the Progress and Results	How do organizations assess the impact and effectiveness of change?	Regular review and assessment are essential for understanding the impact of change and guiding future actions.
	Vision Crafting and Plan of Change	How important is vision crafting in the change management process?	A clear and compelling vision is crucial for guiding change and motivating stakeholders.
Employees Skills and Expertise	Knowledge and Experience	How do employee skills and expertise contribute to organizational change?	Skills and experience are foundational to adapting to change and overcoming challenges.
	Training and Education	What role does ongoing training play in supporting organizational change?	Training is critical for preparing employees for change, enhancing adaptability and competence.
Environment of Organization	Automation Based	How does automation influence the organizational environment?	Automation significantly affects efficiency and requires adaptation in roles and processes.
	Avoid Job Leaving	How can organizations reduce turnover during times of change?	Addressing job satisfaction and engagement is key to retaining talent during change.
	Industrial based	How do industry-specific factors affect organizational change?	Industry-specific challenges and opportunities influence change strategies and implementation.
	Working Environment	How does the working environment impact employee adaptability to change?	A supportive working environment enhances adaptability and resilience to change.
Impact on Organizational Change	Direct influence on accountability and ownership	How does change impact employee accountability and ownership?	Effective change management increases accountability and ownership among employees.
	Enhancing creativity and flexibility in change process	How does organizational change foster creativity and flexibility?	Change processes can enhance creativity and flexibility if managed in an inclusive manner.

	Success and Failure Factors	What are the key factors that determine the success or failure of organizational change?	Success factors include clear communication, leadership, and employee engagement; failure often results from resistance and poor planning.
Implementation Strategies	Decision Making	What role does decision-making play in change management success?	Decisive and inclusive decision-making is essential for the success of change initiatives.
	Implementation Strategies	How can implementation strategies be optimized for effective change?	Strategic, adaptable implementation plans are crucial for effective change.
	Investing in leadership development	How important is leadership development in executing change strategies?	Leadership development is key to ensuring leaders are equipped to guide and support change.
Organizational Culture and Social Dynamics	Importance of Organizational Culture	How does organizational culture affect change dynamics?	A strong, adaptive culture is crucial for positive change dynamics and employee engagement.
	Internal Communication Channels for Teams	How do internal communication channels affect change management?	Effective communication channels are vital for transparency, feedback, and engagement in change.
	Social Interaction and Information Exchange	What role does social interaction play in organizational change?	Social interaction facilitates information exchange and collaboration, enhancing change acceptance.
Organizational Role	Active Participation of CEOs	What is the impact of CEO involvement on change management?	Active CEO involvement significantly influences the direction and momentum of change efforts.
	Central Procurement Department	How do departmental roles and consensus impact change?	Departmental roles and consensus are critical for coordinated and effective change implementation.
	Consensus with other departments	How does cross-departmental consensus affect organizational change?	Cross-departmental consensus is essential for unified and effective change processes.
	Social Connectedness	How does social connectedness within the organization impact change?	Social connectedness supports a collaborative culture, enhancing change adaptability.
Organizational Transformation	Cost Saving and Execution time	How do cost-saving measures and execution time affect organizational transformation?	Efficient execution and cost-effectiveness are crucial for the sustainability of transformation efforts.
	Digital Transformation	How does digital transformation influence organizational change?	Digital transformation drives significant change, requiring adaptability and tech-savviness.
	Intensity of Change	What factors influence the intensity of organizational change needed?	The external environment and internal capabilities dictate the intensity and scope of change.

Programs and Schemes for Organizations	Financial Arms	How do financial programs support organizational change initiatives?	Access to financial resources supports change initiatives by enabling investment in key areas.
	Leasing and Mortgage	What is the role of leasing and mortgage schemes in organizational development?	Leasing and mortgage schemes provide financial flexibility, aiding in organizational growth.
	Loans for SMEs	How do loan programs for SMEs support their adaptability and growth?	Loans are crucial for SMEs, providing the necessary capital for change and innovation efforts.
Resistance to Change	Fear	What psychological factors contribute to resistance to organizational change?	Fear of the unknown and loss of status quo are major contributors to resistance.
	Inertia	How does organizational inertia affect change initiatives?	Inertia hinders change by maintaining status quo behaviors and attitudes.
	Rubbished Data	How does misinformation affect perceptions of organizational change?	Misinformation can significantly increase resistance and skepticism towards change.
	Time and Workload	How do time constraints and workload impact employee resistance to change?	High workload and tight schedules can exacerbate resistance by increasing stress and uncertainty.
Shared Leadership	Knowledge Sharing	How does shared leadership impact knowledge sharing and innovation?	Shared leadership fosters an environment conducive to knowledge sharing and collaborative innovation.
	Social connectedness	How does social connectedness within leadership impact organizational culture?	Social connectedness among leaders promotes a strong, unified organizational culture.
	Task Interdependence	How does task interdependence under shared leadership affect organizational outcomes?	Task interdependence encourages teamwork and collaboration, leading to improved outcomes.
	Transparency and Problem Solving	How do transparency and problem-solving approaches under shared leadership influence organizational effectiveness?	Transparency and collaborative problem-solving enhance organizational effectiveness and adaptability.
Team Management	Divisions of Managers	How do managerial divisions impact team dynamics and performance?	Clear divisions and roles within management enhance team clarity, dynamics, and performance.
	Heterogeneity	What is the impact of team heterogeneity on organizational change?	Team heterogeneity brings diverse perspectives, enhancing problem-solving and innovation.

	Job Description	How do clear job descriptions affect employee clarity and engagement during change?	Clear job descriptions improve role clarity, engagement, and performance during change.
	Leading and Mentoring	What role does leadership and mentoring play in managing team dynamics during change?	Effective leadership and mentoring are crucial for navigating team dynamics and fostering adaptability during change.
Size		How does the size of the organization impact the approach to change management?	Organizational size influences change management strategies, with larger organizations facing more complexity.
Tools and Technologies	Digital Collaboration Platforms	How do digital collaboration platforms facilitate organizational change?	Digital platforms are essential for enabling communication, collaboration, and flexibility in change processes.
	Future Technological Integration	What role will future technologies play in organizational adaptation and growth?	Integrating future technologies is key to staying competitive and adaptable in rapidly changing environments.
	Integration of AI and data analytics	How does the integration of AI and analytics impact organizational decision-making and change?	AI and data analytics revolutionize decision-making processes, enabling more informed and efficient change management.

Source: Developed by the researcher

5.5 Cluster Bar Charts

A cluster bar chart visually represents the coding structure used in a qualitative research project. It is a graphical tool that helps researchers to display and understand the relationships between themes and sub-themes within their data. The chart is organized hierarchically, with broader themes at the top and more specific sub-themes branching out below them. This structure enables researchers to identify patterns, connections, and discrepancies within their data (Bazeley & Jackson, 2013). Clustered charts help researchers systematically classify their data according to emerging themes and sub-themes. This organization allows for more efficient data analysis and helps prevent data overload (Tiwari & Kaurav, 2022). By visually mapping out the relationships between themes and sub-themes, clustered charts make it easier for researchers to identify patterns and connections within their data (Bazeley & Jackson, 2013). In addition, clustered charts provide a visual audit trail of the coding process, increasing the transparency and credibility of the research (Sinkovics & Alfoldi, 2012). Finally, the study identified 14 themes with related sub-themes and made clustered charts for each main theme and related sub-themes. Therefore, now we are going to explore the role of the main themes (contextual factors) of shared leadership in change management process.

5.5.1 Theme 1: Change Management

First, the study identified the main theme of change management with related sub-themes. Themes and sub-themes from change management literature analysis depict the complex process of organizational change. Change management has five sub-themes: Change of organizational culture (18 files, 31 references), Implement the change (7 files, 15 references), organizational change (16 files, 30 references), and review the progress and results (6 files, 17 references), and vision crafting and plan of change. Notably, the sub-themes change of organizational culture, implementing the change, organizational change, reviewing progress and results, and vision crafting, and plan of change have many files and references, indicating a strong body of knowledge and research. This distribution emphasizes the importance of a holistic approach to change management, including cultural adaptation, ongoing evaluation, and strategic vision. Previous studies have shown that a complete and integrated approach to managing change in organizations improves effectiveness and sustainability.

According to the quantitative hypotheses, testing findings highlight the complexity of change management and the importance of task interdependence, social connectedness, and knowledge sharing in fostering positive change beliefs. These factors have significant positive path coefficients, indicating their importance in organizational change. In contrast, shared leadership culture had a negative path coefficient in the initial analysis, suggesting potential issues with positive change beliefs. However, moderating effects analysis shows nuanced interactions, particularly with automation, showing how modern technological interventions affect change management. This supports literature that suggests context, including technological advances, can significantly impact change management efforts. In addition, moderating effects help explain how external factors like automation can affect organizational change strategies. Automation's positive effects on task interdependence and social connectedness contrast with its negative effects when combined with knowledge sharing and shared leadership culture, revealing how technology and organizational change dynamics interact.

These findings support Armenakis and Bedeian (1999) and Arntz et al. (2016), who emphasize the complexity of organizational change processes and the effects of automation on organizational roles and structures. This analysis emphasizes the need for an adaptable, multifaceted approach to change management that is informed by empirical evidence and theoretical insights. It also emphasizes the importance of considering both internal organizational dynamics and external environmental factors. Several interviewees talked about the organizational change in SMEs:

"They are used to the old mindset. Why change? So they resist any different changes that would happen." (Interviewee 1, 2, 6)

"Resistance from the different business units...most people, they do not want to change how they used to work for different years or many years." (Interviewee 5, 6)

The evidence show that organizations resist change because they prefer familiar practices and mindsets. Multiple interviewees across business units attributed this resistance to the discomfort of changing long-standing workflows and routines. Several interviewees talked about the vision crafting and plan of change and review of the progress in SMEs

"We designed and implemented a specific channel so that any requester can use it to request any service from our department." (Interviewee 3, 4)

"Much automation took place to replace the manual or human interference that would lead to human errors." (Interviewee 2)

"Till now we are working on different enhancements to make it as user-friendly as possible for the people to use it." (Interviewee 6)

Therefore, the study's findings indicate that organizational change, vision crafting, and plan of change was the highest-rated sub-theme in semi-structured interviews. This suggests that having a clear and compelling vision and a well-defined strategy is a critical factor in driving successful change implementation within the context of shared leadership. By prioritizing the development of a change plan that aligns with the organization's goals and objectives, organizations can foster social connectedness, knowledge-sharing, and positive beliefs about change, ultimately enhancing their ability to navigate and thrive in times of change and uncertainty.

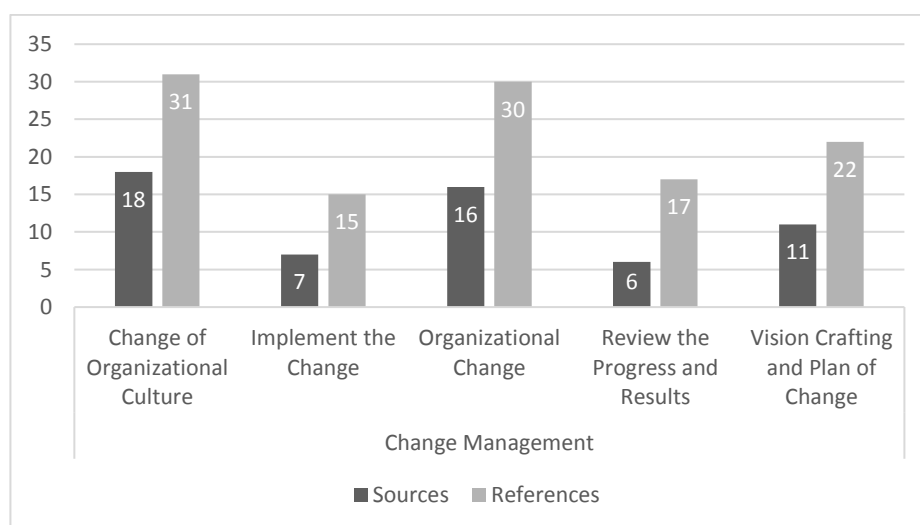


Figure 5.1: Change Management

5.5.2 Theme 2: Employee Skills and Expertise

Second, the study identified the main theme "Employees' Skills and Expertise" with sub-themes. The analysis of "Employees Skills and Expertise," particularly its sub-themes "knowledge and experience" (15 files, 24 references) and "training and education" (21 files, 37 references), emphasizes the importance of continuous skill development and harnessing new and existing knowledge in organizational change processes. The finding agrees with Aiken et al. (2011) and Ahmad and Karim (2019) that education and knowledge sharing are crucial to organizational success and adaptability, as "Training and Education" has the most files and references. The "Knowledge and Experience" sub-theme emphasizes the value of leveraging expertise and experiential learning in the workplace, supporting the quantitative analysis's positive correlation between knowledge sharing and positive beliefs about change. This suggests that organizations must invest in formal training and create environments that encourage internal knowledge sharing and application to improve change initiatives.

Finally, comparing these sub-themes to the quantitative findings, including automation's moderating effects, shows how employee capabilities affect the organizational change ecosystem. The complex relationship between shared leadership culture and automation on change initiatives (AlKayid et al., 2023; Arntz et al., 2016) shows the difficulty of aligning individual skills with organizational strategies in the face of rapid technological and market changes. Armenakis and Bedeian (1999) and Argote, McEvily, and Reagans (2003) support a holistic approach that emphasizes skill and knowledge development and fosters an organizational culture conducive to adaptability and shared leadership, emphasizing the complexity of organizational change. To support the findings, 5 interviewees talked about knowledge and experience of employees to implement positive belief about change:

"As long as I do not think there are any negative ways of my sharing of such information, information can be at times confidential or can lead to bad outcomes." (Interviewee 1, 6)

"It is easier to have recommendations from a higher or the same level than from a lower level. So I share with all with everyone without a constraint from their gender or their age, their experience." (Interviewee 1, 4, 5)

The findings show different views on organizational information sharing. The first emphasizes caution when sharing sensitive information due to the risks. Unlike the first quote, the second emphasizes information sharing without hierarchical, gender, age, or experience barriers. These perspectives show how complex internal communication dynamics are, balancing

openness with data security. On the other hand, three interviewees talked about the role of education in implementing positive change:

"How far do you think employees try to observe and learn new concepts to change their thinking and behavior? It is subjective, but I believe it is affected by the workload they have." (Interviewee 5)

"We had sessions. We had briefing sessions. What are we responsible for? For instance, we have a major change in the company, and the company has chosen some ambassadors from each department, which I am one of, luckily."

(Interviewee 1, 4)

The findings emphasize two critical aspects of organizational change: the individual's ability to learn new concepts and the structured approach to facilitating change. The first quote implies that an employee's ability to adapt and learn is significantly influenced by their workload, implying that excessive pressure may impede their willingness to change. The second quote describes an organization's proactive strategy for managing change, which includes using departmental ambassadors to spearhead and guide the transition. This approach implies an understanding of the value of leadership and structured support in successfully implementing organizational changes.



Figure 5.2: Employees skills and expertise

5.5.3 Theme 3: Environment of organization

In the 3rd stage, the study identified 3rd main theme 'Environment of the organization' with sub-themes. The thematic analysis of the "Environment of Organization" and its sub-themes, "automation based" (4 files, 7 references), "avoid job leaving" (6 files, 9 references),

"industrial-based" (5 files, 7 references), and "working environment" (17 files, 34 references), provides essential insights into the factors that influence organizational dynamics and employee engagement. The focus on "working environment" with the most files and references indicates a broad scholarly interest in how the physical and psychological conditions of the workplace affect employee productivity, morale, and retention, which is consistent with the findings of Chawla et al. (2023) and Cohen (1988), who emphasize the importance of a supportive work environment in fostering organizational commitment and effectiveness.

The "automation-based" and "industrial-based" sub-themes emphasize the changing nature of work environments in response to technological advancements and industry demands. With automation reshaping roles and tasks, the findings are consistent with the findings of Chui, Manyika, and Miremadi (2016, 2018) discussions on the potential of machines to augment or replace human tasks, emphasizing the need for organizations to adapt their environments to maximize technological benefits while minimizing disruptions. This adaptation is critical for maintaining a competitive edge and keeping the workforce relevant in an increasingly digital economy. Regarding the "avoid job leaving" sub-theme, the emphasis on retention strategies highlights the critical challenge that organizations face in reducing turnover. This concern is directly related to the quality of the working environment, as evidenced by the significant path coefficients for social connectedness and knowledge sharing in promoting positive beliefs about change (Carson et al., 2007; Connelly & Kelloway, 2003). These factors suggest that creating a collaborative, engaging, and supportive workplace can reduce the likelihood of job turnover, emphasizing the importance of organizational culture in retention.

"A positive working environment is crucial for our team's success. We cultivate a culture of open communication, collaboration, and mutual respect that allows everyone to contribute their best." (Interviewee 2, 3)

"By fostering a positive working environment, we have seen increased employee satisfaction, higher productivity, and a stronger sense of camaraderie among our team members." (Interviewee 2, 5)

As well, two interviewees talked about avoiding job leave circumstances to implement change such as interviewees 2 and 3 emphasize the importance of a positive workplace for team success. They emphasize open communication, collaboration, and mutual respect to create an environment where every team member can contribute their best. Interviewees 2 and 5 also note that a positive workplace boosts employee satisfaction, productivity, and teamwork. These comments support the literature that shows supportive work environments improve

organizational performance and employee morale, proving that investing in workplace culture pays off. Interviewees 1 and 4 discuss avoiding job leave to implement change. They prioritize employee well-being, work-life balance, career paths, and organizational investments in employee growth and development to reduce turnover. Research shows that organizational support, career development, and competitive compensation packages help retain talent and maintain organizational stability during change (Carson et al., 2007; Cohen, 1988).

"Our organization invests in employee growth and development, ensuring that each individual feels valued and has a clear career path, which ultimately helps to avoid job leaving." (Interviewee 1)

"To minimize turnover and avoid job leaving, we prioritize employee well-being, work-life balance, and competitive compensation packages to ensure our team members feel appreciated and fulfilled in their roles." (Interviewee 4)

To summarize, the integration of these sub-themes reflects a complex interplay between the organizational environment and employee behavior, in which factors such as automation, industrial demands, and work environment quality play critical roles in shaping employee experiences, attitudes toward change, and decisions to stay or leave. The quantitative findings emphasize the significance of task interdependence, social connectedness, and knowledge sharing as critical predictors of positive organizational change outcomes (Carson et al., 2007; Coun et al., 2019). These findings suggest that addressing the multifaceted components of the workplace is critical for developing a resilient, adaptable, and committed workforce in the face of ongoing organizational and industrial transformations.

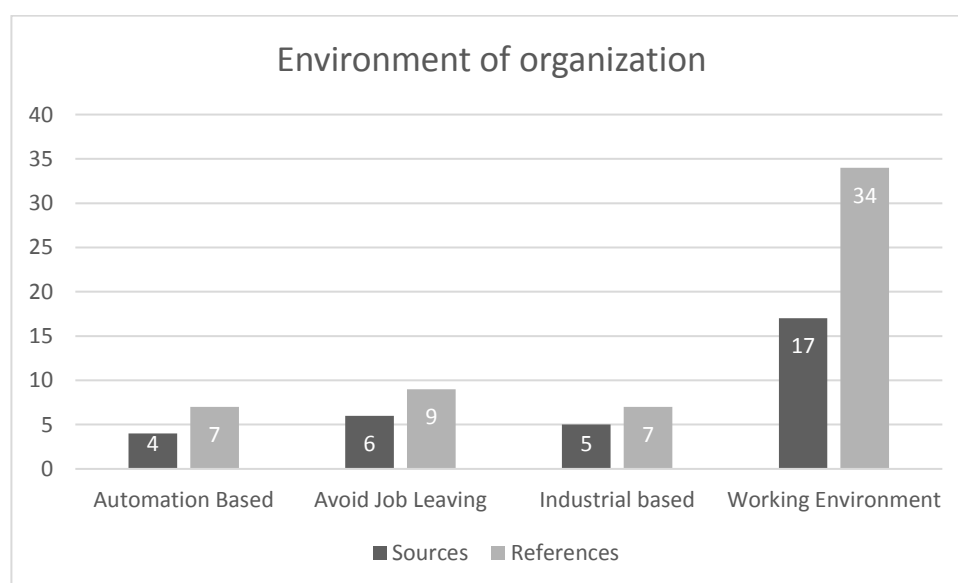


Figure 5.3: Environment of organization

5.5.4 Theme 4: Impact on organizational change

In the 4th stage, the study identified the main theme 'Impact on organizational change' with sub-themes. The analysis of organizational change and its sub-themes, "direct influence on accountability and ownership" (11 files, 13 references), "Enhancing creativity and flexibility in the change process" (11 files, 16 references), and "success and failure factors" (7 files, 12 references), illuminates key change management factors. These sub-themes have many files and references in organizational change literature, indicating that scholars agree they are crucial to change. "Direct influence on accountability and ownership" drives organizational change. Research suggests that clear accountability and employee ownership can help implement change (Carson et al., 2007). Cameron and Green (2019) and Chowdhury and Shil (2022) agree that individual accountability and organizational ownership are crucial to change initiative success.

"Enhancing creativity and flexibility in the change process" acknowledges that organizations need to adapt to change. This subtheme references the importance of innovative thinking and adaptability in complex change scenarios (Chui et al., 2018). Organizations better adapt to market changes and technological disruptions by encouraging experimentation and new ideas (Carson et al., 2007). The sub-theme "Success and Failure Factors" covers many change management factors. Communication, leadership, employee engagement, and organizational culture are examples. Task interdependence and knowledge sharing significantly affect employees' beliefs about change, highlighting their importance in change management (Carson et al., 2007; Coun et al., 2019). The moderating effect of change type shows that change management is nuanced and requires different approaches depending on the context and nature of the change initiative (Chui et al., 2016).

"In our organization, we emphasize the importance of accountability and ownership in driving successful change. By empowering employees to take ownership of their roles and holding them accountable for outcomes, we foster a culture of responsibility that fuels the success of our change initiatives." (Interviewee 5)

"Creativity and flexibility are at the heart of our approach to change. We recognize that embracing innovation and adapting to new challenges is essential for navigating the complexities of organizational transformation. By fostering a culture that values creativity and encourages flexibility, we empower our team to thrive amidst change." (Interviewee 2)

These quotes emphasize the fundamentals of organizational change. Change management is complicated, but accountability, ownership, creativity, and flexibility are key. Organizations can empower their teams to adapt, innovate, and succeed in changing business environments by following these principles.

Therefore, organizational change is complex, and accountability, creativity, flexibility, and success and failure factors shape change management outcomes. Recognition and address of these factors improve organizations' change readiness and ability to adapt to changing business environments. The quantitative results reveal the factors that strongly influence employees' change beliefs, guiding the designing and implementation of successful change initiatives in diverse organizational contexts.



Figure 5.4: Impact on organizational change

5.5.5 Theme 5: Implementation strategies

Implementation strategies include decision-making, implementation strategies, and leadership development in organizations. Change depends on decision-making, which sets the direction and tone. Stakeholder involvement in decision-making has been shown to increase ownership and commitment to change initiatives (Cameron & Green, 2019). Effective decision-making also leads to successful implementation (Chowdhury & Shil, 2022). The large number of decision-making interviews and nodes emphasizes its importance in organizational change. Implementation strategies are complex, using methods tailored to the changing context. These methods include top-down orders and participatory processes that involve all employees in change. Leadership development is essential to successful implementation. Leadership development programs help leaders lead teams through change, improve

communication, and encourage innovation (Carson et al., 2007). The large number of implementation strategy files shows the complexity and variety of change management methods.

Leadership development is emphasized in implementation strategies to recognize leadership's crucial role in change. Leadership development programs train leaders to inspire, motivate, and empower their teams to adapt to change and uncertainty (Carson et al., 2007). Studies show leadership effectiveness improves change outcomes (Chowdhury & Shil, 2022).

The findings conclude that strong decision-making, diverse implementation strategies, and leadership development are essential for organizational change. Participatory decision-making, effective implementation strategies, and leadership development can help organizations adapt, innovate, and thrive in today's dynamic business environment (Cameron & Green, 2019; Carson et al., 2007; Chowdhury & Shil, 2022). Further research can reveal best practices and improve change management strategies.

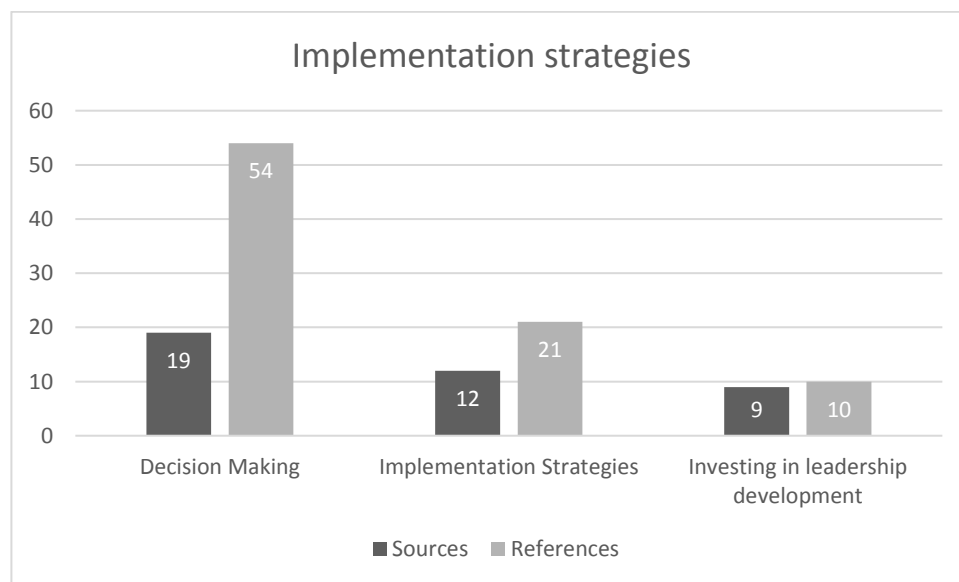


Figure 5.5: Implementation strategies

5.5.6 Theme 6: Organizational Culture and Social Dynamics

The study identified the main theme "organizational culture and social dynamics", emphasizing the critical role of organizational culture, internal communication channels, and social interaction in shaping employees' attitudes toward change. Quantitative analysis reveals that task interdependence, social connectedness, and knowledge sharing strongly predict positive attitudes toward organizational change. This supports the theoretical underpinnings presented in the literature, which state that collaborative environments and

effective communication are critical for fostering an adaptive and positive outlook toward change among employees (Cane et al., 2012; Carson et al., 2007).

In contrast, the initial negative relationship between shared leadership culture and positive belief about change, which becomes significantly negative under certain conditions, demonstrates the complexity of leadership dynamics in change management. This nuanced finding implies that, while shared leadership can provide numerous benefits, its effectiveness in supporting change initiatives may depend on the organizational context and how such a culture interacts with other factors during change processes (Carson et al., 2007). Furthermore, automation and the nature of the change as moderators highlight complex interdependencies. Automation's positive effect on task interdependence, as well as its nuanced impact on social connectedness and knowledge sharing, point to the changing nature of work and the need for organizations to recalibrate their social and knowledge exchange mechanisms in the age of digital transformation (Chui et al., 2016).

Therefore, the impact of different types of change on the dynamics of social connectedness, shared leadership culture, and change beliefs emphasizes the importance of contextual and adaptive change management strategies. The findings suggest that understanding the specific nature of change and its interaction with organizational culture and social dynamics is critical for cultivating a positive change environment (Cameron et al., 2019; Chowdhury et al., 2022). According to the findings, some interviewees claimed that:

"We emphasize task interdependence by fostering a collaborative culture where employees understand their roles and how they fit into the larger picture. When everyone is aware of how their work impacts others, it can lead to better communication and more efficient processes." (Interviewee 2, 5)

And, five interviewees talked about the role of knowledge sharing in bringing positive beliefs about change:

"I believe that social connectedness is essential for fostering a positive work environment, as it helps employees feel supported, engaged, and motivated." (Interviewees 1, 3, 4)

"We prioritize social connectedness by hosting regular team-building events, encouraging open communication, and providing spaces for employees to connect and interact. This contributes to a stronger sense of community and belonging within the organization." (Interviewees 2, 3)

The interviewees stressed the importance of task interdependence and knowledge sharing in creating a positive organizational culture, especially when embracing change. Emphasizing task interdependence creates a collaborative environment where employees understand their roles and how they contribute to organizational goals. This clarity improves communication and streamlines processes because people realize how their work affects others and the organization. Social connection is also stressed as a key to a supportive and engaging workplace. Regular team-building events, open communication channels, and dedicated spaces for interaction can strengthen employee community and belonging. This approach motivates and engages employees and promotes knowledge and positive change beliefs, creating a more resilient and adaptable organizational culture.

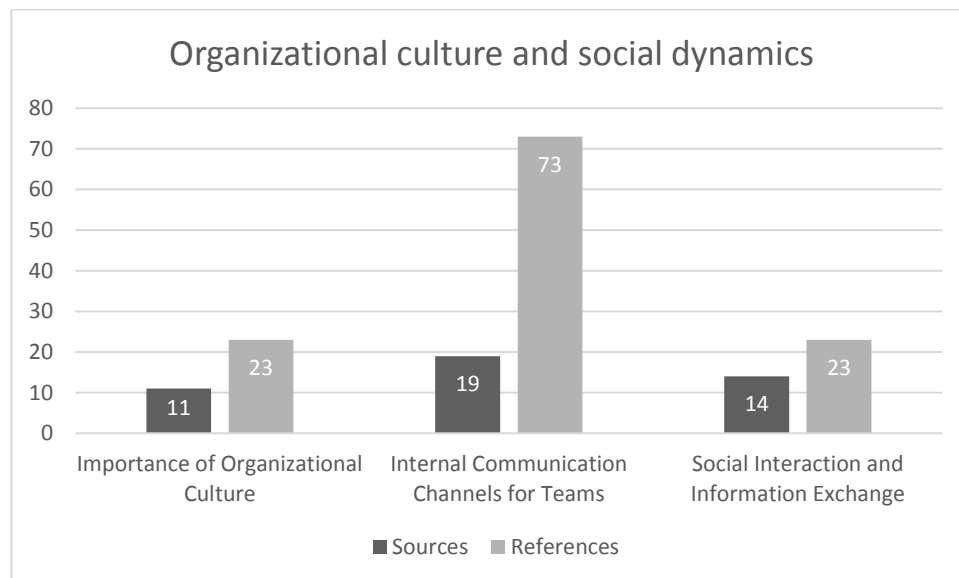


Figure 5.6: Organizational culture and social dynamics

5.5.7 Theme 7: Organizational Role

The study also identified 7th theme 'Organizational Role' with related sub-themes provide a look at the internal dynamics of changing organizations. 5 file and 10 references support that CEO involvement is crucial in change management. This shows the CEO's role in signalling commitment, providing strategic direction, and fostering positive change beliefs. The central procurement department and consensus with other departments, with 3 sources and 7 references each, emphasize departmental collaboration and alignment in change initiatives. Prior research suggests that departmental integration can improve change coordination and effectiveness.

The sub-theme of social connectedness, with 9 sources and 15 references, is notable because contemporary studies have found it to promote a positive organizational culture and change adaptability. A strong relationship indicates a positive relationship between social connectedness and positive change beliefs. These values emphasize the importance of organizational socialization and how it can facilitate change management. Task interdependence, social connectedness, and knowledge sharing are positively associated with positive beliefs about change, indicating strong statistical significance. This suggests that employees who feel connected, informed, and part of a cohesive group are more likely to support change. Sharing leadership culture had a negative relationship with positive beliefs about change, suggesting that more is needed to instill a positive belief about change if it is effectively implemented and aligned with the organization's goals.

Automation and change moderate these relationships, highlighting their complexity. Automation's interaction with task interdependence and social connectedness has positive path coefficients (0.165 and 0.084, respectively), suggesting that collaborative environments with automation can boost positive change beliefs. Automation presents challenges in shared knowledge and leadership environments, as shown by the negative coefficients associated with automation, knowledge sharing, and shared leadership culture. By following the findings, some interviewees argued that:

"The CEO's commitment to change was palpable throughout the organization. It created a wave of confidence that trickled down to every level. Our leader wasn't just directing from the top; they were right there with us, navigating the challenges of change in real-time." (Interviewee 9,15,17)

"Cross-departmental consensus wasn't just a goal, it was our mantra. By working together across different functions, we found innovative solutions that one department couldn't have devised. This collaboration was the cornerstone of our change management success." (Interview 1,7,8,26)

"Our workplace has transformed into a community rather than just a place of work. The social connections I've made here have made me feel more involved and more receptive to the changes we've undergone. It's these relationships that have helped us embrace and drive change rather than resist it." (Interviewee 4,6,11,13)

"I've seen firsthand how automation can reshape our roles, but the strong sense of task interdependence has kept our team cohesive. We have

leveraged technology to enhance our work, not replace it, and that has been key to maintaining a positive outlook on the changes we have experienced."
(Interviewee 17,19,24)

The interviewees' insights show how leadership and organizational culture affect change management success. The CEO's visible commitment and departmental collaboration show that effective change is a collective journey. The CEO's leadership in change fostered unity, purpose, and confidence throughout the organization. This method demystifies change and turns fears into shared experiences. Leaders who work alongside their teams resonate with employees and increase their commitment and receptivity to change. Building a workplace community and emphasizing cross-departmental consensus has helped organizations navigate change. These narratives show that employees naturally support and evolve the organization when they feel connected and valued. The shift from a traditional workplace to a community shows a shift toward a more resilient and adaptable organizational culture that welcomes change. While automation and technological integration threaten team cohesiveness, task interdependence has helped employees see technology as allies. This positive outlook is essential for morale and productivity during major changes. These elements create a strong framework for change driven by leadership involvement, community support, and collaborative problem-solving, and strategic technology enhancement.

In conclusion, the quantitative data support previous research that leadership involvement, departmental collaboration, and social connectedness promote positive organizational change attitudes. According to the analysis, the complex interaction between organizational roles and the culture of collaboration and connectivity drives change management. These findings suggest that organizations must invest in leadership, foster a collaborative culture, and strategically integrate technology to support human-centered change.

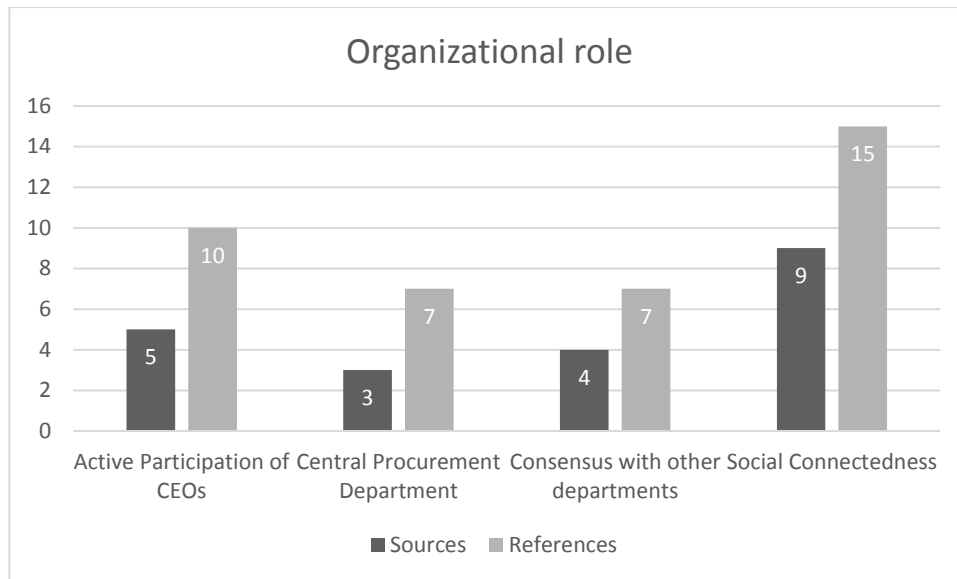


Figure 5.7: Organizational role

5.5.8 Theme 8: Organizational Transformation

The study identified 8th main theme ‘Organizational Transformation’ with sub-themes. The findings show the strong preference for using digital technologies to transform organizations. This transformation emphasizes efficiency and cost-effectiveness, aligning with contemporary literature that emphasizes streamlining operations and maximizing resource utilization. Quantitative hypothesis testing shows that task interdependence, social connectedness, and knowledge sharing positively correlate with positive belief about change. These findings support previous research that suggests cooperative work dynamics, strong organizational social networks, and knowledge sharing promote change. However, shared leadership culture was negatively correlated with positive change beliefs, suggesting that proper execution is necessary for shared leadership to lead to positive change beliefs.

Automation positively affects task interdependence and social connectedness in positive beliefs about change. Automated processes can improve change attitudes when combined with interdependent tasks and social structures. Automation negatively affects knowledge sharing and shared leadership culture, suggesting disruptions or challenges. Task interdependence and knowledge sharing remain strong predictors of positive belief about change, revealing the moderating effect of change type. The interaction between type of change and social connectedness suggests that change type can affect employees' change beliefs. The literature supports this nuanced view that organizational social structures must adapt during transitions.

These findings show that organizations are actively navigating digital transformation and automation. Data suggest that while technological advances are vital, human aspects of organizational change, such as collaboration, social ties, and knowledge exchange, significantly impact the workforce's outlook on change. This balance between technological innovation and human-centric factors guides modern organization transformation.

"The intensity of change in our organization is driven by the need to adapt and stay ahead in our industry. We must be proactive in implementing new processes and technologies, which requires a high level of commitment from our team." (Interviewee 2,6,10,15,17)

"Facing the intensity of change can be challenging, but it is essential for our organization's growth and long-term success. We have to embrace change and be agile to remain competitive in our market." (Interviewee 6,25)

"Cost saving is a significant factor in our decision-making process, as it allows us to allocate resources more effectively and ensure the company's financial health. However, we also recognize the importance of spending time on strategic initiatives and employee development." (Interviewee 2,3,8)

"Balancing cost saving and time spending is crucial for our organization. While we strive to optimize our operations and reduce costs, we invest in employee training and innovative projects to drive the company's growth and success." (Interviewee 5,11,16)

The interviewees emphasized adapting to organizational change to stay competitive and grow. Recognizing the industry's rapid change shows that stagnation is not an option for survival in today's fast-paced market. This intensity includes adopting new technologies and team commitment to new processes. Interviewees acknowledge the need for proactive implementation, demonstrating a flexible and adaptable mindset. This strategy is essential for companies that want to lead their industries. Interviewees also emphasize financial health and resource allocation strategy. Operational optimization requires cost-cutting, but strategic initiatives and human capital are also valued. Interviewees suggest that financial prudence, employee development, and innovation are complementary, not mutually exclusive. This recognizes that long-term organizational success depends on cost-cutting, innovation, and workforce development. These findings suggest a holistic approach to change management that balances financial sustainability and growth investment to navigate transformation.

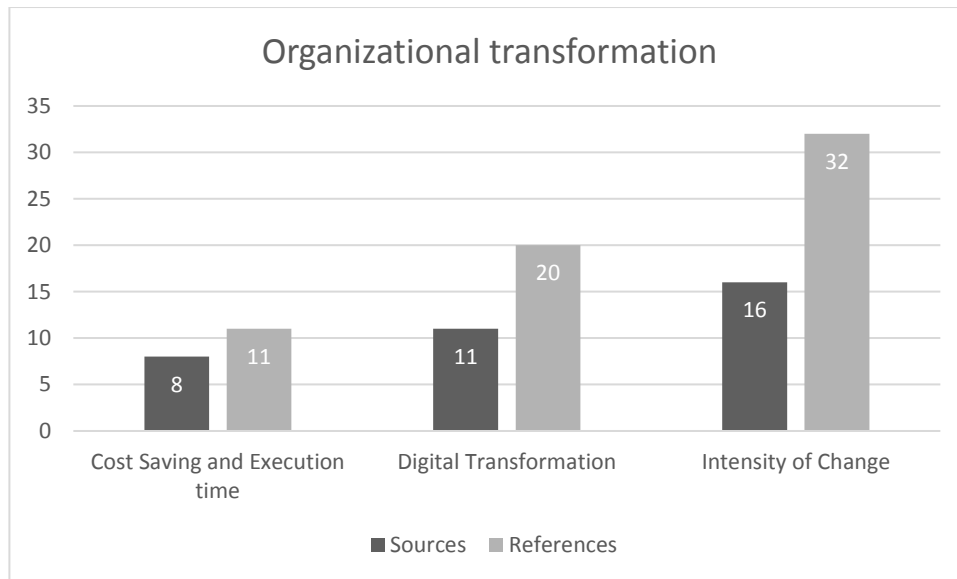


Figure 5.8: Organizational transformation

5.5.9 Theme 9: Programs and Schemes for Organizations

The sub-themes within the main theme '*Programs and Schemes for Organizations*' category, specifically 'Financial Arms' (7 files, 13 references), 'Leasing and Mortgage' (2 files, 2 references), and 'Loans for SMEs' (3 files, 4 references), reflect the critical role of financial strategies in supporting organizational change and transformation.

Financial Arms implies that the organization relies on financial instruments to transition, enabling innovation and adaptability. Han et al. (2021) and Hayes (2022) emphasize the importance of financial resources in underwriting transformational risks and supporting sustained organizational development. Leasing and mortgage, though rarely mentioned, are crucial to financial strategy, especially for long-term investments and asset acquisitions. These tools allow organizations, especially those with limited capital, to scale and evolve without immediate financial burden. Herold et al. (2008) and Higgs & Rowland (2005) agree that strategic financial planning helps organizations change and implement new initiatives. Loans for SMEs highlight SMEs' unique change management challenges and needs. SMEs need loans to invest in innovation and adapt to market demands as they grow. Hoch (2013, 2014) and Huang & Rust (2018) agree that capital is a key enabler of innovation and change.

The findings show that financial strategies drive change as well as liquidity. The findings show that financial support structures increase positive beliefs about change. Given the current economy, organizations must balance innovation with financial sustainability, making this finding crucial. Thus, modern businesses need programs and financial instruments that support organizational change and financial health.

"As a company, we understand that financial challenges can affect anyone. Our financial aid program is designed to help employees overcome obstacles and focus on their well-being and professional growth."
(Interviewee 1,4,18,21)

As well, two interviewees talked about loans and mortgages to implement positive beliefs about change in SMEs:

"When it comes to loans and mortgages, our company offers employees access to resources and financial guidance to help them make informed decisions about their finances and long-term financial goals." (Interviewee 2,7)

"We believe that providing our employees with information and support related to loans and mortgages can contribute to their overall financial well-being, leading to a more satisfied and committed workforce."
(Interviewee 5,6,9,19)

The interviewees' quotes show that companies understand how financial well-being affects employee satisfaction and organizational commitment. According to Interviewee 1,4,18,21, instituting a financial aid program acknowledges and supports employees' personal financial challenges. Instead of just helping, this approach lets employees focus on their work and growth without worrying about money. Such initiatives create a supportive workplace culture that values and invests in staff well-being, boosting loyalty and productivity. Interviewees 2,7 and 5,6,9,19's discussions about loans and mortgages show a proactive strategy to instill positive change beliefs in the organization, especially SMEs. The company becomes an ally to its employees' financial stability by providing resources and guidance, which is especially important during organizational change when uncertainties can increase anxiety. Financial empowerment can boost employee satisfaction because financially secure workers are more likely to accept organizational changes. Such a company's commitment to employees' financial health can foster trust and shared goals, aligning personal and organizational goals for mutual benefit.

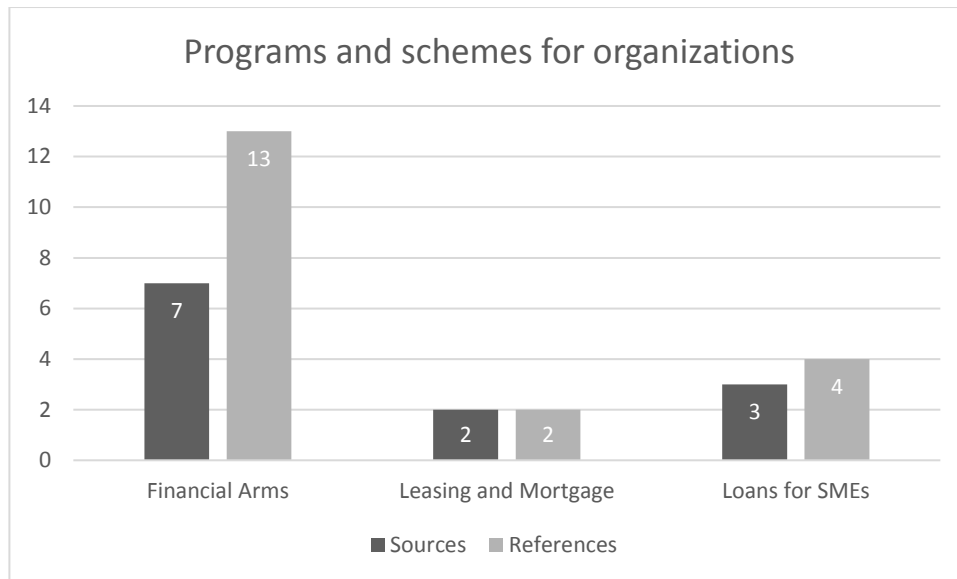


Figure 5.9: Programs and schemes for organizations

5.5.10 Theme 10: Resistance to Change

The '*Resistance to Change*' theme is critically important in understanding the challenges organizations face during transformational processes. The sub-themes identified—Fear (6 files, 11 references), Inertia (4 files, 9 references), Rubbished Data (4 files, 7 references), and Time and Workload (6 files, 13 references)—provide a multifaceted view of the barriers to organizational change. Fear is a significant psychological barrier to change, often rooted in uncertainty or loss. Herold et al. (2008) found that leadership affects employees' commitment to change, so clear communication and supportive leadership can reduce fear and facilitate transition. According to previous studies, organizational inertia tends to stick to routines and recognize familiar processes (Higgs & Rowland, 2005). Misinformation, or 'Rubbished Data,' increase resistance by misrepresenting the change process. Based on Holcombe et al. (2023) research on communication in shared leadership models, improving information quality and clarity can reduce this resistance.

Time and Workload show that employees need help to balance their current duties with new demands. Hoch (2013, 2014) emphasizes workload management to prevent employee burnout and maintain morale during change. If employees feel overwhelmed or unsupported, they may resist change, so change management strategies must consider the impact on their daily activities and provide the resources to manage them.

"The main challenge I see is that organizations try to utilize their employees as much as possible. So they have lots of work, and they are only thinking it is to get done with the tasks they have." (Interviewee 1,6,20,25)

"As long as this is the case and this is the workload they have, they will not think of other things. They will not try to think how to do it better, how to do it differently, how we can implement changes." (Interviewee 1,23,26)

"Burnout is defined as the psychological syndrome that involves a prolonged response to chronic interpersonal stressors on the job." (Interviewee 2,5,11)

Finally, five interviewees talked about inertia:

"Inertia is an opposing force that creates hindrance in organizational processes at the individual and organizational level." (Interview 2,6,16)

"At early stages where planning takes place, it is usually smooth and okay... However, inertia may come later when executing as their subordinates who are the executors have little resistance to change what they used to do." (Interview 4,6)

"Resistance takes place at the latest stages when actually executing. That's what I believe." (Interview 2,5,22)

The interviewees illuminated critical psychological and operational change management challenges for organizations. The narrative highlights a major issue where heavy workloads trap employees in a cycle of task completion with little time to consider process improvements or change initiatives. This environment hinders innovation and causes employee burnout, exhaustion, and cynicism caused by workplace stress. Such conditions harm individuals' and organizations' growth and adaptation. Workload and burnout emphasize the need for organizations to reassess operational demands and prioritize employee well-being to foster a culture of change and innovation.

The discussion of inertia and fear illuminates organizational change barriers. In the execution phase, where resistance to changing familiar processes is strongest, inertia—a force that hinders change at both individual and organizational levels—is often present. Employees fear change will affect their job security and roles in the company, which drives this resistance. Fear can lead to resistance, which hinders change initiatives. These findings suggest that successful change management must acknowledge and manage employee fears, reduce resistance through clear communication and involvement, and reduce workload pressures for innovation. By facing these challenges, organizations can create a more agile, responsive, and psychologically healthy workplace, improving their ability to adapt to change.

And, three interviewee talked about fear:

"In what way do you think organizational change triggers feelings of fear among staff?" (Interviewee 4,7)

"If I can see the change and I agree with it and try to support it, I do not think I am in danger of being let go. However, if I am resistant to and against the change, these people can be laid off to ensure that the change and its objective will be reached." (Interviewees 1,2,7)

In conclusion, the 'Resistance to Change' theme findings reflect the complexity of the literature on change management. Strategic leadership must manage emotional and practical organizational change, they say. To encourage change, leaders must address fear, break down inertia, ensure accurate information dissemination, and manage Workload. These strategies are essential for moving from resistance to acceptance and implementing and maintaining organizational change initiatives.

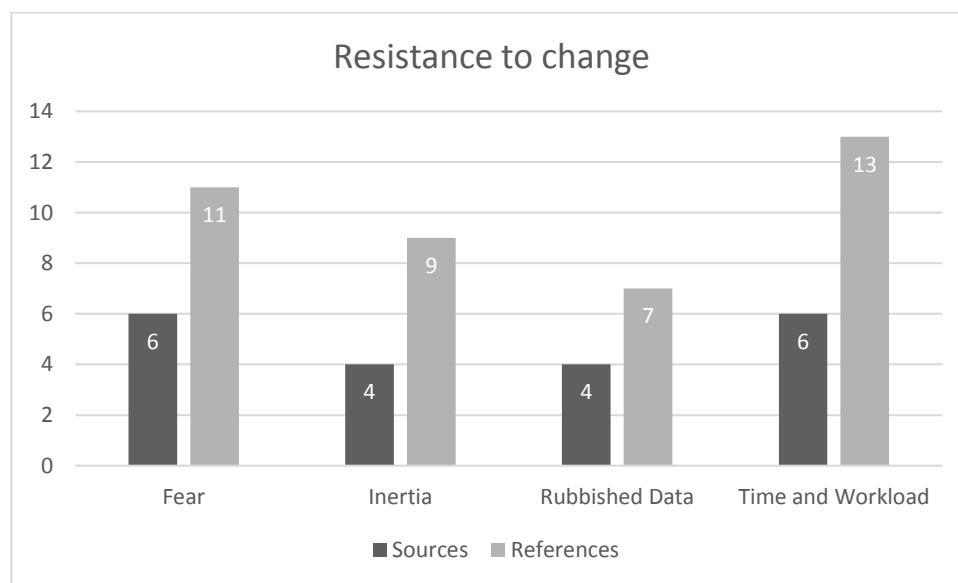


Figure 5.10: Resistance to change.

5.5.11 Theme 11: Shared Leadership Factors

The "Shared Leadership" theme, which includes sub-themes such as knowledge sharing (18 files, 39 references), Social Connectedness (18 files, 29 references), task interdependence (11 files, 21 references), and transparency and problem solving (17 files, 33 references), captures the essence of modern organizational dynamics, highlighting the importance of collaborative, interconnected work environments in fostering innovation and facilitating change. The emphasis on knowledge sharing, as evidenced by the number of files and references, is consistent with Ahmad and Karim's (2019) findings, highlighting the importance

of information dissemination in improving organizational learning and performance. This is supported by Ali et al., (2023) research, which identifies shared leadership as a catalyst for team creativity, implying that leadership that encourages knowledge-sharing significantly contributes to teams' innovative capabilities.

Social connectedness and task interdependence are essential because they highlight the value of relational ties and collaborative workflows in achieving organizational goals. These sub-themes are consistent with the research of Armenakis and Bedeian (1999), who argue that effective change management necessitates a collaborative effort based on strong interpersonal relationships and a shared sense of purpose. Similarly, the emphasis on transparency and problem-solving reflects an organizational culture that values open communication and collaborative approaches to overcoming challenges, consistent with Arntz, Gregory, and Zierahn's (2016) discussion of the importance of adaptability and collaborative problem-solving in the face of automation and technological advancements. Furthermore, the data show that shared leadership increases the capacity for innovation and allows for a more agile and responsive organizational structure capable of navigating the complexities of modern business environments. Aarons et al. (2015) found that shared leadership practices positively impact employee engagement and commitment. The emphasis on shared leadership is consistent with the broader trend of democratizing decision-making processes and leveraging collective intelligence within organizations.

"I think knowledge-sharing is a critical element of success for any organization, especially in times of change. When employees share their knowledge and skills, it can lead to more effective problem-solving and decision-making." (Interviewee 3,22,25)

"In our company, we encourage knowledge-sharing through regular team meetings, cross-functional collaborations, and training sessions. This helps us stay connected and build a strong foundation of shared knowledge." (Interviewee 4,15,14)

The interviewees' insights highlight the critical role of knowledge sharing within organizations, especially in navigating the complexities of change. The emphasis on employee knowledge and skill sharing as a critical success factor demonstrates a thorough understanding of how collaborative learning environments significantly improve organizational problem-solving and decision-making capability. This viewpoint is consistent with current research, which emphasizes the benefits of knowledge sharing in fostering innovation, increasing

efficiency, and developing a resilient organizational culture that can adapt to change. According to the interviewees' observations, knowledge-sharing serves not only as a means of information dissemination, but also as a strategic asset that empowers employees, enriches the organizational knowledge base, and drives collective success.

Furthermore, the company's knowledge-sharing strategies, such as regular team meetings, cross-functional collaborations, and training sessions, demonstrate a proactive approach to cultivating an open and learning culture. These initiatives not only allow for the exchange of knowledge and experiences, but they also strengthen social connections among employees, fostering a sense of unity and shared purpose. Such an environment promotes innovation and creativity by allowing for the exploration and integration of diverse ideas and perspectives into organizational practices. The emphasis on structured yet adaptable platforms for knowledge exchange demonstrates an organization's commitment to leveraging human capital as a key driver of growth and resilience. Finally, these quotes highlight the critical role of knowledge-sharing in preparing organizations to face the challenges of today's business landscape, emphasizing the importance of strategic initiatives that promote collaborative learning and information exchange.

Finally, the findings from the "Shared Leadership" theme highlight the trend towards more collaborative, transparent, and interconnected work environments. The emphasis on knowledge sharing, social connectedness, task interdependence, transparency, and problem-solving highlights their importance in improving organizational resilience, adaptability, and innovation. These findings are consistent with existing research, reinforcing that shared leadership and collaborative cultures are critical in navigating the complexities of modern organizational landscapes. Organizations can better harness their workforce's diverse talents and perspectives by cultivating an environment that values the collective over the individual, thereby driving change and innovation in an increasingly competitive and dynamic world.

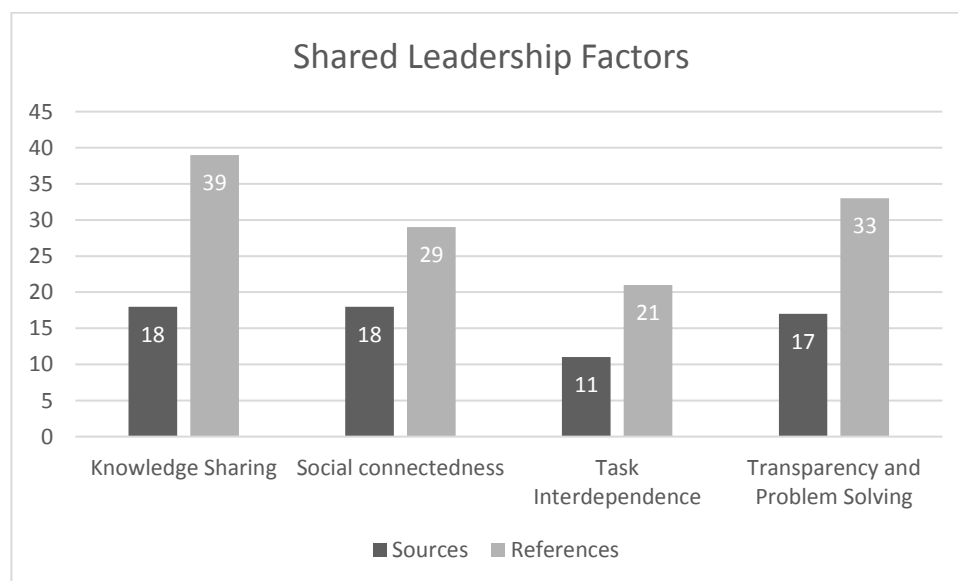


Figure 5.11: Shared leadership factors

5.5.12 Theme 12: Team Management

The "Team Management" theme, which includes the sub-themes of manager divisions (4 files, 7 references), Heterogeneity (4 files, 7 references), Job Description (4 files, 7 references), and Leading and Mentoring (7 files, 17 references), encapsulates the multifaceted approach to developing effective teams within organizations. The emphasis on clear job descriptions and the division of managerial roles suggests that the organization values clarity and structure, allowing team members to understand their responsibilities and how they fit into the larger organizational framework. This structural clarity, as supported by research such as Aiken et al. (2011) and Armenakis and Bedeian (1999), is critical for facilitating effective team dynamics and ensuring that all members are aligned with the organization's goals and change initiatives.

Heterogeneity within teams, as highlighted in the findings, emphasizes the importance of diversity in fostering innovative solutions and broadening team perspectives. The literature, including works by Argote et al., (2003), supports the idea that diverse teams are better able to approach problems creatively and adapt to change more efficiently. This diversity, combined with effective leadership and mentoring, as evidenced by a higher volume of files and references, fosters an environment in which team members feel supported and valued, increasing their engagement and commitment to the organization's goals. According to Aarons et al. (2015), leadership styles that prioritize mentorship and team development are critical in creating a culture of continuous learning and adaptability.

The emphasis on leading and mentoring within the sub-themes highlights the critical role of leaders in guiding their teams through challenges and changes. Effective leadership includes not only the ability to direct and make strategic decisions, but also the ability to mentor and develop employees. This dual focus ensures that teams not only perform their current tasks but also prepare for future challenges, which is consistent with the findings of Ali et al., (2023), who emphasize the importance of shared leadership in improving team creativity and performance.

Finally, the Team Management theme and its sub-themes demonstrate a thorough understanding of the factors that contribute to effective team dynamics within organizations. Structural clarity, diversity, and strong leadership and mentoring are identified as critical components of effective team management. These elements are critical for fostering an organizational culture that values continuous improvement, supports its members through change, and leverages the team's collective strengths to achieve its objectives. This approach

not only improves teams' immediate effectiveness, but it also positions the organization to face future challenges with resilience and adaptability.

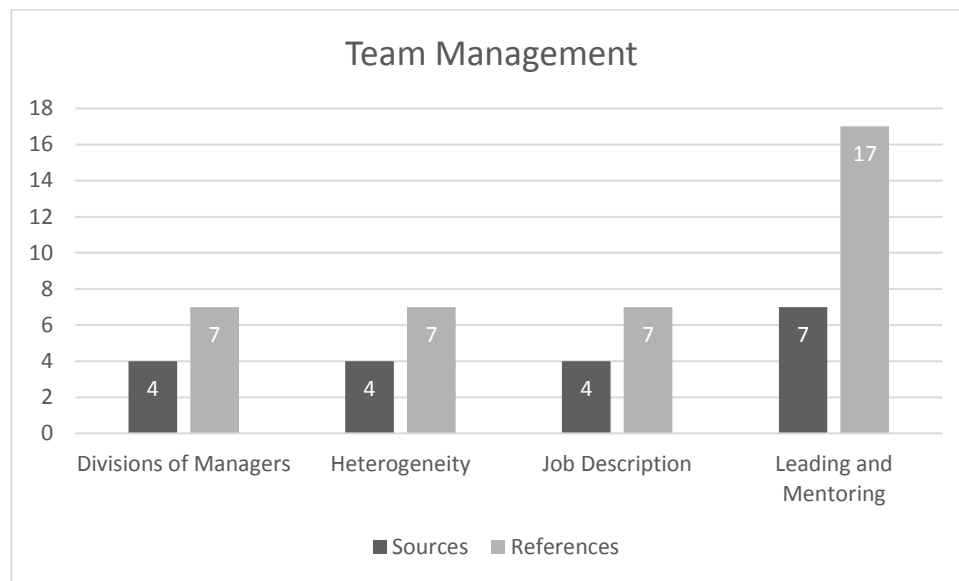


Figure 5.12: Team Management

5.5.13 Theme 13: Size

With its documentation in 3 files and referenced in 6 instances within organizational change, "Size" illuminates how an organization's scale affects its adaptability, decision-making, and change management strategies. According to Arntz et al., (2016), smaller organizations may be more agile due to less bureaucratic inertia. Agility allows for faster decision-making and implementation but may also reduce vetting processes in larger organizations. As Armenakis and Bedeian (1999) found, larger organizations have a more resource base, which helps them implement large-scale changes, but their complex hierarchical structures slow decision-making.

Organizational size affects knowledge sharing, social connectedness, and task interdependence, which are essential for change management. Ahmad & Karim (2019) noted that team members' proximity can foster knowledge sharing and social connectedness in smaller organizations, affecting the organization's ability to embrace and implement change. Argote et al., (2003) state that larger organizations can use structured processes and technologies to share knowledge and maintain social networks across their employee base despite maintaining intimacy. Organizational size affects task interdependence and problem-solving transparency. Due to overlapping roles and responsibilities, smaller teams are more interdependent, which can improve transparency and problem-solving. While larger organizations benefit from specialized roles that increase efficiency, Brynjolfsson and McAfee

(2014) suggest intentionally creating interdependence and transparency through cross-functional teams and open communication channels. This effort to replicate smaller organizations' natural interdependence is essential to maintaining a cohesive change management strategy that supports organizational goals.

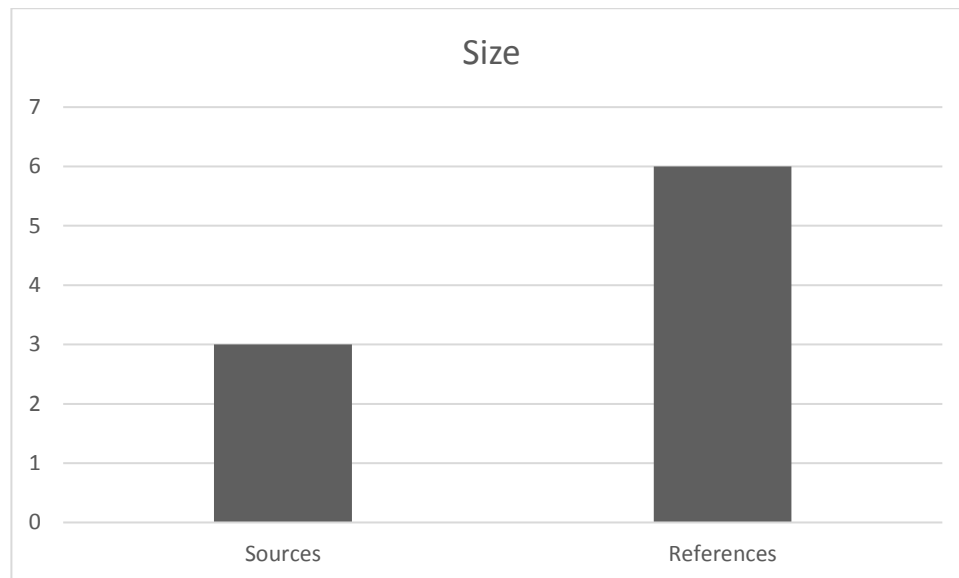


Figure 5.13: Size

5.5.14 Theme 14: Tools and Technologies

The "Tools and Technologies" theme, particularly its sub-themes of digital collaboration platforms (20 files, 55 references), future Technological Integration (16 files, 23 references), and integration of AI and Data Analytics (8 files, 14 references), emphasizes the transformative impact of technological advancements on organizational processes and efficiencies. The large number of files and references associated with digital collaboration Platforms demonstrates the growing reliance on digital tools to promote collaboration and streamline communication across geographic and functional boundaries. This trend reflects the larger shift toward a more interconnected and technologically enabled workplace, as documented in studies by Brynjolfsson and McAfee (2014), which show that leveraging technology is critical for improving operational efficiency and facilitating innovation within organizations.

Future technological integration and AI and Data Analytics integration indicate that organizations recognize the importance of staying current with technological trends to maintain a competitive advantage. The references to these sub-themes imply a proactive approach to implementing and integrating cutting-edge technologies, such as AI and data analytics, into organizational practices. This is consistent with the findings of Arntz, Gregory, and Zierahn

(2016), who discuss the impact of automation and artificial intelligence on the workforce and the potential for these technologies to redefine job roles and organizational structures. The emphasis on these areas demonstrates a recognition that technological foresight and adaptability are critical to long-term organizational resilience and success.

Furthermore, integrating these technologies is viewed as a tool for operational improvements and a strategic asset capable of driving decision-making, innovation, and a better understanding of customer and market dynamics. The use of AI and data analytics, in particular, suggests an organizational shift toward data-driven decision-making processes, emphasizing the importance of using data to gain strategic insights, as echoed in the works of Ali, Wang, and Boekhorst (2023). This strategic approach to technology integration emphasizes the importance of leadership in creating an organizational culture that values continuous learning, adaptability, and technological innovation.

Finally, the "Tools and Technologies" theme findings highlight the importance of technology in shaping contemporary organizational landscapes. The emphasis on digital collaboration platforms, with forward-thinking approaches to technological integration and the adoption of AI and data analytics, reflects a broader organizational imperative to use technology for operational efficiency and as a foundation for strategic innovation and competitiveness. This technological orientation necessitates a culture of continuous learning and adaptability backed up by leadership dedicated to navigating the complexities of digital transformation. The findings from the files and references in this theme emphasize the intersection of technology, strategy, and organizational culture as critical determinants of future organizational success and sustainability.

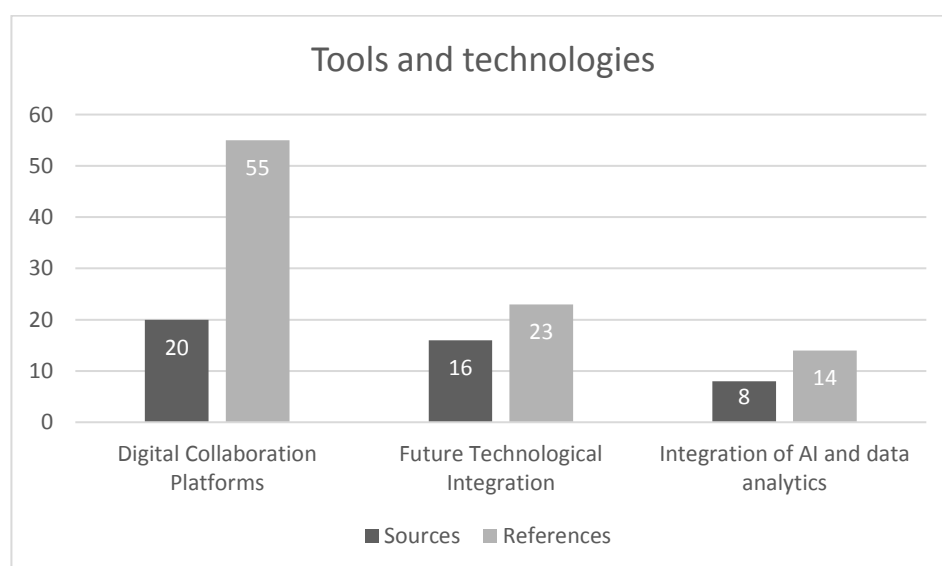


Figure 5.14: Tools and technologies

5.6 Word Clouds

Word clouds represent the frequency of words found within a dataset, such as interview transcripts, survey responses, or any other text-based data (Cui et al., 2010). Word clouds can be created in NVivo. A word's prominence in a word cloud is directly proportional to the number of times it appears in the dataset; more prominent words appear more frequently (Heimerl et al., 2014). Word clouds are a valuable tool for recognizing common themes, trends, or topics because they display the words that are frequently brought up. The provided image is a word cloud generated from qualitative data, most likely analyzed using NVivo or other qualitative data analysis software. Word clouds like this visually represent text data, with the size of each word indicating its frequency or significance within the dataset. In this word cloud, terms such as "change," "leadership," "management," "work," "organizational," "culture," "knowledge," "sharing," and "communication" stand out as larger than others, indicating that these themes are significant in the dataset.

The prominence of "change" and "management" implies an emphasis on change management within an organization. Change management typically entails guiding and preparing individuals, teams, and organizations to embrace change to achieve organizational success and outcomes. The prominence of "leadership" alongside these terms indicates that leaders are viewed as critical in managing change. This could imply that leaders must cultivate a culture that embraces change and helps the organization navigate transitions. The terms "organizational" and "culture" suggest that the data may have emphasized the importance of the overall cultural environment within the organization that supports or hinders change.

The size of the word "knowledge" in close association with "sharing" and "communication" suggests that the dataset may have included discussions about the importance of information sharing and effective communication in the workplace. Knowledge sharing is essential to organizational learning and innovation, indicating that the organization wishes to promote transparency and collective learning. The presence of words such as "collaboration," "teamwork," and "trust" lends credence to this interpretation, as these are essential components of successful knowledge-sharing and collaborative work environments. "Shared" also implies a collaborative approach to tasks or responsibilities, emphasizing the value of teamwork. Therefore, using words like "success" and "results" suggests an outcome-oriented approach, in which the effectiveness of change management and leadership is likely measured by meeting specific goals or performance indicators. The term "experience" could refer to either the customer experience or the employee experience, which are essential for organizational

success. The term "trust" implies that developing and maintaining trust is regarded as critical for effective leadership and successful change management. Overall, the word cloud represents a data set centered on the dynamics of organizational change, with a strong emphasis on the roles of leadership, communication, and collaboration in achieving successful outcomes.



Figure 5.15: Word cloud

5.7 Cluster diagram

In NVivo, a cluster diagram is a graphical representation that shows the relationships between themes or codes based on their co-occurrence or similarity in qualitative interviews (O'Neill et al., 2018). Figure 5.16 resembles a cluster diagram showing qualitative data analysis themes' relationships and relative importance. The diagram, likely from NVivo, shows term clusters based on co-occurrence in the analyzed text data. The circles' sizes indicate each term's frequency or significance, and their proximity suggests a thematic relationship. The diagram's largest cluster includes "shared," "leadership," "success," "innovation," "dynamics," and "collaboration," suggesting these are key data concepts. This suggests shared leadership is crucial to the company's success and innovation. The clustering of these terms suggests that respondents view leadership as a collaborative, shared responsibility that drives organizational dynamics and innovation. The combination of "shared" with "leadership" and "collaboration" suggests an organizational culture that values teamwork over individual heroism.

Other notable clusters include "change," "process," "teams," "culture," "communication," "organizational," "projects," and "decision." This suggests that the

organization is changing and needs good team communication and project management to improve culture. Due to their clustering, decisions are central to the change management strategy. The close relationship between "communication" and "culture" suggests that open and effective communication shapes and maintains organizational culture.

Smaller clusters and keywords like "digital," "insights," "learning," "trust," "environment," and "challenges" suggest subsidiary but essential organizational themes. The term "digital" may refer to new technology or digital transformation. The word "trust" in its cluster indicates its importance in creating a safe and reliable environment for innovation and learning. "Challenges" being central suggests that the organization is focused on growth and success but also aware of its challenges, whether they are internal, market, or environmental. Leadership, collaboration, culture, and change processes drive success, as shown in this organization's internal perception cluster diagram.

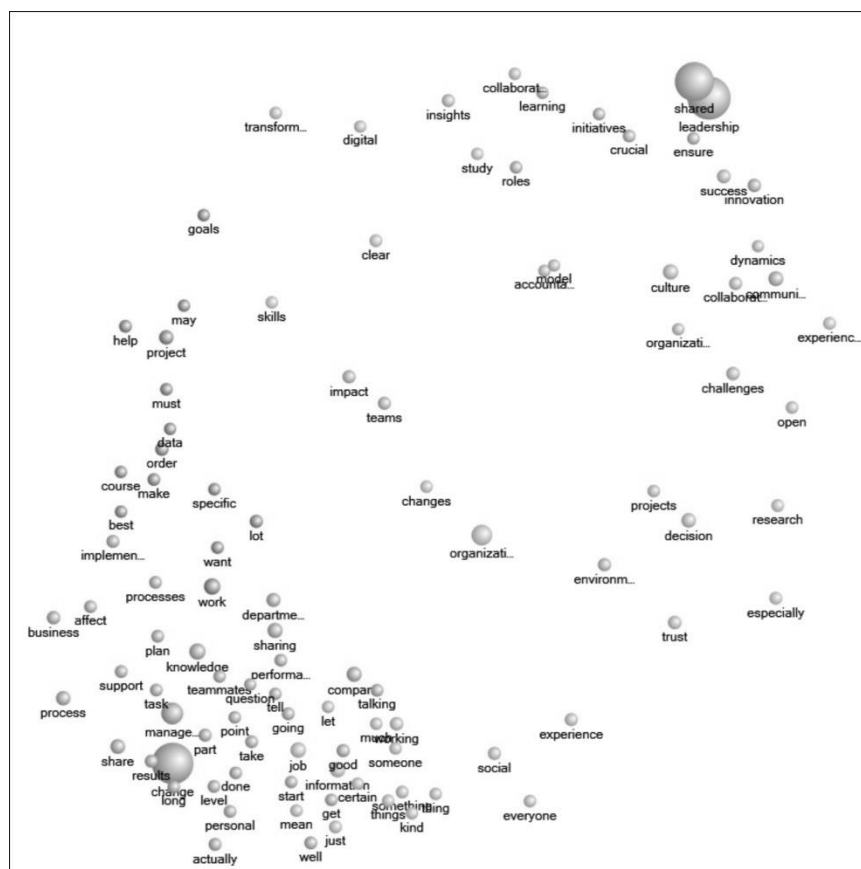


Figure 5.16: Cluster diagram

5.8 Findings and practical implications

Based on the study findings and the identified contextual factors behind shared leadership in change management, the following finding should improve the change management process in small and medium-sized enterprises (SMEs). Managers should develop and promote a culture of shared leadership. They should encourage knowledge sharing, social connectedness, and task interdependence among team members to foster collaboration, innovation, and adaptability. Enhanced communication and transparency remain pivotal during change processes. Effective, shared leadership necessitates organizations establish robust communication channels and foster an open dialogue environment to mitigate resistance (Zhu et al., 2018; Imam, 2021). Such practices not only address concerns but also guarantee that the rationale behind the changes is understood by all employees (Elgohary & Abdelazyz, 2020). Training and support ensure employees have the skills and knowledge to navigate change adeptly. Shared leadership and knowledge sharing significantly promote innovative behavior and ensure successful transitions (Vandavasi et al., 2020; Lee et al., 2020). Consequently, organizations, especially SMEs, should prioritize practices that bolster teamwork and collaboration. Key strategies encompass mentoring, lucid job descriptions, and well-defined managerial divisions (Han et al., 2021; Holcombe et al., 2023).

Resistance to change often stems from many factors, including fear, inertia, and workload constraints (Röth & Spieth, 2019; Mousa et al., 2020). By acknowledging and addressing these root causes, organizations can better emotionally and resource-wise support their employees. Utilizing shared leadership practices minimizes resistance and can pivot employee perspectives from negative to positive beliefs about impending changes (Coun et al., 2019; Salas-Vallina et al., 2021). Financial barriers, especially for SMEs, should be alleviated by tapping into various support programs such as financial aid, leasing options, and SME-specific loans (AlKayid et al., 2023; Mousa et al., 2021). Regularly evaluating the progress of change initiatives is also essential. Feedback loops and performance indicators can inform adjustments to ensure optimal results (Roundy, 2020; Ahmad & Karim, 2019). Therefore, embracing shared leadership and its accompanying practices remains vital for organizations, particularly SMEs, to navigate and implement change successfully. This approach ensures that individual and collective needs are met, facilitating a smoother transition and fostering a resilient, adaptive, and forward-thinking organizational culture.

Therefore, by implementing these recommendations, SMEs can enhance their change management processes, increase the likelihood of successful change initiatives, and promote a

culture of adaptability and resilience. Thus, Figure 5.20 depicts a comprehensive organizational change management Process framework, emphasizing several interconnected elements. The framework's key components include programs and schemes, strategy implementation, tools and technologies, and team management, all of which are influenced by firm size as a controlling factor. The process emphasizes the role of AI and data analytics integration, digital collaboration, and technology integration in driving change. Decision-making, investment in leadership development, and effective implementation strategies are critical to success. The framework also discusses the role of shared leadership, which is defined by task interdependence, social connectedness, knowledge sharing, and transparency in problem-solving. Organizational transformation factors such as intensity of change, digital transformation, cost savings, and execution time are critical, as is managing resistance to change, which includes fear, inertia, and workload challenges. The involvement of organizational roles, particularly CEO participation and central procurement departments, emphasizes the importance of consensus and social connection in effecting change. The model demonstrates effective organizational change management's dynamic and multifaceted nature.

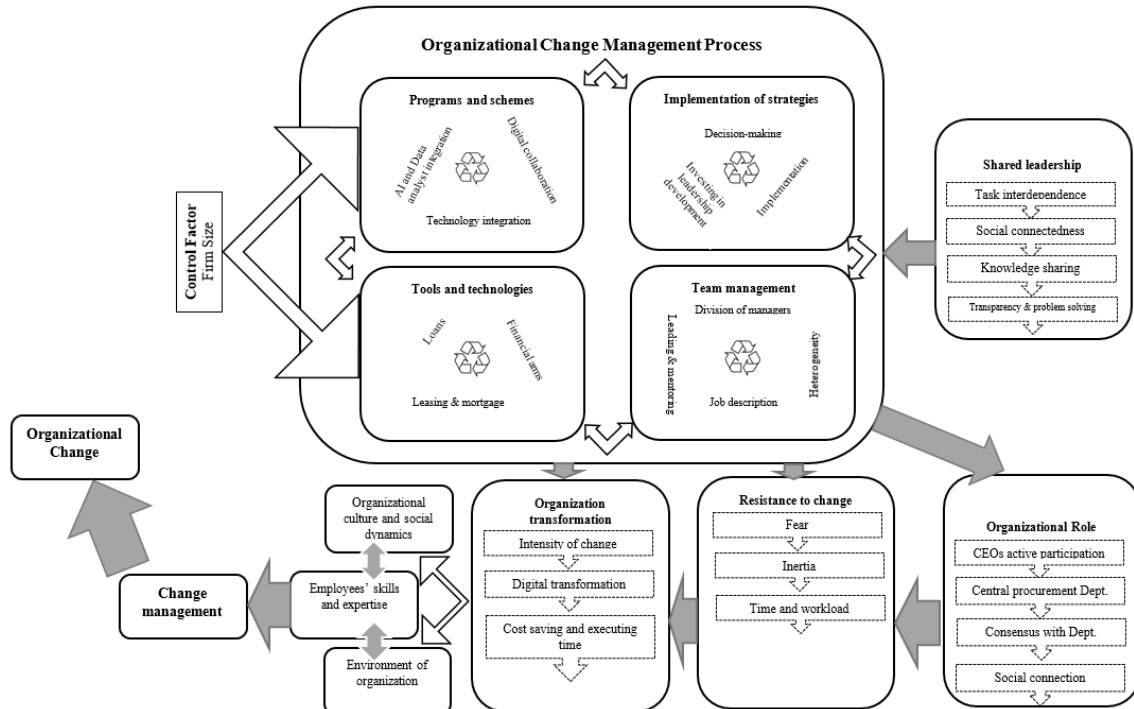


Figure 5.17 Change Management Process

5.9 Summary

First, the study designs the qualitative research methodologies, sampling and data collection procedures, and data analysis as suggested by Braun and Clarke (2006). Second, the research found several recurring concepts and sub-concepts associated with organizational change. These concepts highlighted the significance of various factors in facilitating and impeding change. The subthemes that were rated the highest by respondents were those about fear, inertia, time and workload (creating positive beliefs about change), knowledge sharing, social connectedness, task interdependence, and leading and mentoring. These findings highlight the critical roles that emotional considerations, the tendency to maintain the status quo, time constraints, and the exchange of knowledge, social bonding, employee empowerment, and strong leadership play in the successful implementation of change initiatives. Even though some of the other sub-themes, such as leasing and mortgage, rubbished data, divisions of managers, heterogeneity, job description, and size, were not rated as high, they are still essential to consider in the context of change processes. The study highlights the multifaceted nature of organizational change, with different factors playing varying roles in supporting or impeding change initiatives. These roles are highlighted by the fact that different factors play varying roles. Therefore, for organizations to successfully implement change, it is essential to address and balance the various factors involved, cultivating an environment that is supportive and collaborative and encourages adaptation, innovation, and growth. Finally, the study answered three research questions:

- What individual and organizational factors affect the shared leadership dynamics (social connectedness and knowledge-sharing) in the change management process?

Several individual and organizational factors affect the change management process's shared leadership dynamics (social connectedness and knowledge-sharing). Individual factors include communication skills, openness to sharing ideas and information, emotional intelligence, adaptability to change, and willingness to collaborate. Organizational factors include the overall culture, management support, task interdependence, and the availability of resources and infrastructure that facilitate knowledge sharing and social bonding. Contextual factors such as shared leadership dynamics and team management attributes are particularly relevant to understanding these factors.

- To what extent can different aspects of shared leadership contribute to the success or failure of organizational change implementations?

Different aspects of shared leadership can significantly contribute to the success or failure of organizational change implementations. For instance, knowledge sharing can enhance problem-solving, innovation, and adaptation to change, while social connectedness fosters trust, collaboration, and resilience among team members. Task interdependence can empower employees and encourage ownership and commitment to change initiatives. Conversely, a lack of shared leadership can lead to poor communication, resistance to change, and a lower likelihood of successful implementation. Contextual factors such as resistance to change and shared leadership dynamics help illustrate shared leadership's potential impact on change processes.

- To what extent shared leadership affect change management?

Shared leadership can profoundly affect change management by creating an environment that supports effective communication, collaboration, and adaptation. When shared leadership dynamics are strong, organizations can better navigate the complexities and challenges of change, and employees are more likely to be engaged and committed to the change initiatives. The study's contextual factors, such as shared leadership dynamics and team management attributes, highlight the importance of shared leadership in facilitating successful, positive beliefs about change and overcoming barriers to change.

The following chapter will combine and discuss the findings of the quantitative and qualitative studies attempting to develop practical and theoretical implications and set viable recommendations.

Chapter 6

Discussion and Conclusion

6.1 Introduction

This chapter empirically explains the research topic by integrating quantitative and qualitative findings. Combining these two research approaches, the study aims to capture a more nuanced and in-depth understanding of the phenomenon of shared leadership in order to enhance positive beliefs about change. In quantitative findings, 499 survey responses were analyzed in SPSS and Smart PLS 4. In qualitative phase, 26 semi-structured interviews have been conducted. Quantitative findings refer to the numerical data collected and analyzed during the study. This data is typically gathered through structured surveys in quantitative phase. The quantitative findings provide statistical information, such as percentages, averages, correlations, and statistical significance, which help identify patterns, trends, and relational non-numerical data collected through 26 interviews, observations, or document analysis. This data provides detailed descriptions, narratives, and insights into quantitative and qualitative methods.

On the other hand, qualitative findings help explore complex social phenomena, understand individuals' experiences, motivations, and perspectives, and capture the richness and diversity of human behavior. Integrating quantitative and qualitative findings enables the researchers to triangulate the results, compare different data sources, and gain a more holistic understanding of the phenomenon. By merging the strengths of both approaches, the study aims to enhance the validity and reliability of the findings and provide a more robust interpretation of the research results. In the end, the study offers the managerial implications, explain the limitations and future directions of the study. In this way, the study answers the research questions.

- To what extent different factors of shared leadership can contribute to the success or failure of organizational change implementations?
- What individual and organizational factors affect the shared leadership dynamics (social connectedness and knowledge sharing) in the change management process?
- To what extent can different aspects of shared leadership contribute to the success or failure of organizational change implementations?
- To what extent shared leadership affect change management?

6.2 Validation of the Shared Leadership in Organizational change

First, this study utilized 3-rounds of survey questionnaires in the explanatory factor analysis (EFA) methodology to probe 14 key factors affecting organizational dynamics and change management: Task interdependence, social connectedness, inertia, knowledge sharing, shared leadership culture, time and workload, automation, fear of change implementation, and fear about readiness to change. The 1st round explored task interdependence, social connectedness, and inertia through 11, 4, and 5 items, respectively. The second round focused on knowledge sharing and shared leadership culture, each evaluated via 8 unique items. Finally, the third round considered the remaining four factors: time & workload, evaluated through 10 items; automation, through 3 items; fear of change implementation, via 11 items; and fear about readiness to change, assessed with 4 items. This stepwise, EFA approach provides a robust analysis of these factors interplay and relative importance, offering valuable insights into the multifaceted challenges and intricacies of managing change in contemporary organizations.

In the first run, the study took task interdependence, social connectedness, and inertia items. The highest loadings for task interdependence are seen in items emphasizing coordination with others, reliance on accurate information, and the necessity for frequent consultation with others (items 4, 3, and 5, respectively). These findings suggest that task interdependence is highly contingent on the flow of information and collaborative dynamics within the organization. For social connectedness, the items displaying the strongest loadings reflect the role of managerial encouragement in fostering collaboration and open communication (items 12 and 13), as well as the extent of help received from colleagues at work (item 15). These results underscore the centrality of managerial practices and peer support in promoting social connectedness. Lastly, inertia is strongly associated with the timely completion of tasks and the achievement of work goals (items 63 and 64), indicating that organizational inertia may primarily stem from the focus on task completion and goal achievement, potentially at the expense of innovation and adaptability.

In the second run, the study took knowledge sharing and shared leadership culture. For knowledge sharing, the items with the highest loadings relate to proactive inquiries about colleagues' abilities (item 24), requests for colleagues to share their skills (item 25), and a general interest in being informed about colleagues' knowledge (item 26). These findings indicate that knowledge sharing is significantly driven by individual initiative, curiosity, and the willingness to learn from others. In terms of shared leadership culture, the items demonstrating the strongest loadings involve team members' proactive suggestions for team

improvement (item 29), initiation of actions to enhance team effectiveness (items 30, 34), and seeking information from others about influences that could impact their work (items 32, 33). These results underscore the importance of proactive behavior, mutual learning, and information sharing in cultivating a shared leadership culture within the team. Thus, both domains emphasize the value of initiative, collaboration, and continuous learning in a thriving organizational culture.

In the third run, the study took time & workload, automation, fear of change implementation, and fear about readiness to change provide several noteworthy insights. For time & workload, items related to possessing the necessary equipment and expertise to implement change (items 40, 41) and having a clear understanding of individual roles in the change process (item 39) show the highest loadings. This suggests that successful management of time and workload in change processes requires clarity of roles, adequate resources, and relevant expertise. In terms of automation, high loadings are associated with items reflecting the utilization of automated business transactions by admin staff (item 45) and the perceived impact of automation on staff interaction and alignment with organizational goals (items 46, 47). These findings indicate that perceptions of automation's effects on job roles and interpersonal interactions significantly shape its acceptance. Regarding fear of change implementation, items reflecting the belief in the value and strategic importance of the change (items 48, 49, 51) and concerns about the cost and risk of resisting the change (items 55, 56, 57, 58) exhibit high loadings. This suggests that fear of change implementation is strongly tied to employees' perceptions of the change's value and the perceived consequences of resistance. Lastly, in the fear about readiness to change factor, items related to feeling it would be wrong, irresponsible, or guilt inducing to resist the change (items 60, 61, 62) have the highest loadings, highlighting the role of personal values and responsibility in readiness to change.

In the second phase, the study used Smart PLS 4 software to run structural equation modeling (SEM) to assess the validity, reliability, and path coefficients. First, the study tested the direct impact of task interdependence, social connectedness, knowledge sharing and shared leadership culture on positive belief about change. Carson, et al. (2007) reported the findings which are supported by the significant path coefficient for Task Interdependence ($\beta = 0.675$, $p < 0.0$). In line with the results of this study, their research emphasized the critical role that team interdependence plays in shared leadership and proposed that interdependent teams frequently perform better. The results of Ahmad and Karim (2019) are corroborated by the coefficient for social connectedness ($\beta = 0.176$, $p < 0.0$), which highlights the influence of interpersonal relationships on leadership roles and knowledge sharing.

Knowledge sharing is significant ($\beta = 0.234, p < 0.0$), which is consistent with the importance of this factor found in other studies by researchers like Argote and Ingram (2000) and Ahmad and Karim (2019). This is consistent with past research highlighting the importance of knowledge sharing in organizational development and transformation.

The literature, including Aarons et al. (2015) and Ali et al. (2023), emphasizes shared leadership culture positively. However, the Shared Leadership Culture shows a negative coefficient ($\beta = -0.03, p = 0.60$). This is an interesting finding. This suggests that other factors may directly affect the study's outcomes more than shared leadership culture, or it may point to a more nuanced relationship than previously recognized.

Finally, this indicates that more research is necessary to investigate these dynamics fully and comprehend the various effects of these variables in various organizational contexts.

6.3 Integration of Quantitative and Qualitative findings

This study integrates quantitative and qualitative findings according to research objectives and questions. This integration offers a discussion of the quantitative and qualitative findings and the practical implications for the managers. The study tested the research hypotheses and supported the findings with qualitative findings.

6.3.1 Task interdependence*automation – positive belief about change

In chapter 4, the study tested the research hypotheses by examining the moderating effect of automation and type of organizational change between a set of shared leadership factors and positive belief about change. The path coefficient ($\beta = 0.165, p < 0.0$) indicates that automation moderates Task Interdependence and positive belief about change. Therefore, H1 is supported. This finding offers valuable insights into the relationship between team dynamics and technological advancements in the context of organizational change. The positive coefficient indicates that the relationship between Task Interdependence and optimistic views about change is positively moderated by automation. The work of Chui et al. (2016, 2018) and Arntz et al., (2016), who examined the transformative role of automation in the workplace, supports this conclusion. According to their research, automation may improve the productivity and efficacy of tasks dependent on one another, encouraging team members to have a more positive outlook on organizational change. This viewpoint is consistent with the recent discovery that automation can amplify task interdependence's beneficial effects on attitudes toward change.

Task interdependence has a strong positive effect, indicating that when employees perceive their work as interdependent with others, they are likely to hold more positive beliefs

about organizational changes. This finding aligns with the work of Marks et al., (2001), who suggested that task interdependence fosters a sense of collective responsibility, facilitating acceptance of change. Automation also has a significant and positive moderating effect, suggesting that implementing automated systems foster positive beliefs about change. This might be due to the perception that automation can enhance efficiency and reduce workload. Frank et al. (2019) who asserted that automation led to job enhancements rather than job displacement support this viewpoint. This suggests that the positive influence of task interdependence on belief about change decreases when automation is high. This could be attributed to the notion that high automation may reduce the need for interdependence, possibly causing uncertainty or fear about job security (Oreg et al, 2011; Ford et al, 2008). These findings enrich our understanding of the complex interplay between task design, technological innovation, and change acceptance in organizations.

Moreover, the significant negative moderating effect suggests that organizations should carefully manage the change process when introducing automation into an interdependent work environment. This involves clear communication about the reasons behind the change, training, and support to adapt to new technologies, and mechanisms to maintain a sense of interdependence and collaboration even when tasks become more automated (Armenakis & Bedeian, 1999; Oreg et al., 2011).

Organizational automation significantly affects operational processes and workforce dynamics. This shift requires comprehensive change management to ensure smooth transitions, employee engagement, and satisfaction. Automation significantly alters organizational culture and role definitions, necessitating change management (Chui et al., 2016). Clear visions, thorough planning, and ongoing evaluation are needed to implement change effectively as automation replaces routine tasks. Structured change management can mitigate employee isolation and reduce task interdependence (Marks et al., 2001). Human resources must prioritize employee skills and expertise as automation redefines roles. Training and education are essential for employees to succeed in a highly automated world (Karasek & Theorell, 1990). This helps manage fear and resistance to change and creates an environment where knowledge and experience are valued, boosting job security (Arntz et al., 2016). During such transformative changes, strong internal communication and social interaction are essential for social connectedness and organizational culture (Armenakis & Bedeian, 1999). Despite automation changing their daily work tasks and interactions, these strategies make employees feel valued and essential to the organization.

However, this investigation also offers a more complex viewpoint. Automation may facilitate task interdependence, but as noted in the works of Cameron and Green (2019), Brynjolfsson, and McAfee (2014), it necessitates careful consideration of the human element in change management. Automation should be incorporated into team dynamics in a way that strengthens rather than replaces the human components of shared leadership and collaboration. This will guarantee that the positive attitudes toward change are not just fueled by technology but also by solid interpersonal and team dynamics. The importance of this moderating effect calls into question conventional wisdom regarding the function of technology in change management. It implies that, rather than only being an instrument for increasing productivity; automation can significantly affect how workers view change and behave toward it, particularly in environments with a high degree of task interdependence. The present study advocates for a more comprehensive approach to change management strategies integrating technological and human factors. This aligns with the viewpoints of Armenakis and Bedeian (1999) and Choi (2011), who have called for an understanding of the dynamics of organizational change.

Finally, the results of this study show that the relationship between task interdependence and positive belief about change is significantly moderated by automation. This provides new insights into technology's increasingly important role in influencing organizational change processes while aligning with some aspects of the extant literature.

6.3.2 Social connectedness*automation – positive belief about change

As suggested by a path coefficient ($\beta = 0.084$, $p = 0.024$), the moderating effect of automation on the relationship between social connectedness and positive beliefs about change provides important insights into how technology interacts with interpersonal aspects in organizational settings. Therefore, H2 is also supported. Although it is not as strong as it might be in other domains like task interdependence, automation does appear to play a part in amplifying the positive effects of social connectedness on positive beliefs about change, as indicated by the positive but relatively modest coefficient. This result is consistent with the larger story in the literature, which highlights the revolutionary influence of technology in the workplace, as Brynjolfsson and McAfee (2014) and Chui et al. (2016, 2018) have explored. It also suggests that, although automation can facilitate team social dynamics, its function is auxiliary rather than essential. This aligns with the theory that human interactions and relationships with others continue to be fundamental to organizational dynamics despite the world becoming more automated.

Second, the moderating effect is slight but significant significance points to a complex relationship between technology and social aspects of the workplace. Research conducted by Coun et al., (2019) and Ali et al. (2023) has highlighted the significance of shared leadership and social ties in organizational settings. The results of this study suggest that automation may improve these social dynamics by, for example, promoting cooperation and communication and fostering a more positive view of change. This lends credence to the notion that human and technological components of an organization should not be seen as separate entities but rather as parts of a complex system that are interdependent.

Finally, the modestly positive relationship casts doubt on the idea that social connectivity within teams is inevitably disrupted by automation. Rather, it implies that when properly incorporated, automation can enhance and even augment the social structure of organizations, contributing to the development of a positive attitude regarding change. This is consistent with the viewpoint put forth by D'Innocenzo et al., (2016), who made the case that team dynamics and shared leadership in contemporary organizations have multiple facets.

This aligns with the literature, emphasizing the importance of social connectedness in fostering positive attitudes towards change (Aarons et al., 2015). Likewise, the potential efficiency gains from automation contribute to positive beliefs about change (Frank et al., 2019). However, the moderating effect between social connectedness and automation is negatively related to positive belief about change, indicating that when both factors are high, the positive effect on belief about change is diminished. This is attributed to the fact that while automation improves efficiency, it could disrupt an organization's social dynamics, making interpersonal relationships and collaborations less necessary (Brynjolfsson & McAfee, 2014). This, in turn, decreases social connectedness, thus affecting the overall positive belief about change. This finding underscores the complexity of managing change within organizations, suggesting the need for a balanced approach that carefully considers change's technological and human aspects. While automation yields substantial efficiency gains, organizations must maintain strong employee social connections to facilitate change acceptance (Ford et al, 2008).

The qualitative findings show that while social connectedness and automation supports change, their interaction can sometimes undermine positive perceptions of organizational transformations. Social connectedness is essential for a change friendly environment. According to Ford et al., (2008), connectivity promotes open communication and collaboration, which helps change initiatives succeed. Internal communication channels and social interactions help organizations navigate change by improving transparency and problem solving (Internal communication Channels for teams, 73 references). Conversely, automation

improves productivity and lowers costs, boosting optimism about change (Frank et al., 2019). However, as automation spreads, workplace social dynamics may change. High levels of automation could reduce the need for interpersonal interactions and collaborations, essential to connected and communicative workplace (Brynjolfsson & McAfee, 2014). Automation may reduce task interdependence, leading to employee isolation and job security fears, lowering their positive belief in change (Jha et al., 2021).

Organizations should strategically balance automation with social connectedness to manage these dynamics. Robust change management strategies prioritizing technological change and an engaging and inclusive workplace can achieve this. Leadership development is essential because leaders create and communicate the change vision and ensure that the workforce feels valued and supported throughout the transformation (Investing in leadership development, 10 references). Organizations should also encourage shared leadership and knowledge sharing to preserve social connectedness by involving employees at all levels in decision-making and promote a more inclusive approach to change (Knowledge sharing, 39 references). Automation improves organizational efficiency and effectiveness, but organizations must also invest in and prioritize social connectedness strategies. They can improve workforce perception of change, enabling smoother and more successful organizational transformations.

6.3.3 Knowledge sharing*automation – positive belief about change

In the context of organizational change and technology integration, the moderating effect of automation on the relationship between knowledge sharing and positive belief about change is somewhat counterintuitive, as evidenced by a negative path coefficient ($\beta = -0.062$, $p = 0.010$). Therefore, H3 is also supported and accepted. The negative coefficient raises the possibility that greater automation could counteract the positive impact of knowledge sharing on attitudes toward change. This may suggest that although automation improves data management and information processing, better attitudes, or perceptions of change in the context of knowledge sharing may only sometimes follow. This result runs counter to the widespread optimism—found in publications such as Davenport (2015) and Heimerl et al. (2014)—about technology's role in promoting knowledge sharing. Although the current study indicates that automation may have a more complex or even negative effect on how knowledge-sharing influences attitudes towards change, these studies frequently highlight the potential of automation to enhance knowledge-sharing processes.

Second, the nature of knowledge sharing in an automated setting is called into question by this finding. It implies that although automation might improve and streamline the process of disseminating knowledge, it might not sufficiently address the human elements of knowledge sharing, like social interaction, trust, and contextual understanding of information, all essential for the perception of positive change. Research such as that conducted by Cummings (2004), who highlighted the significance of social dynamics in knowledge sharing within organizations, supports this viewpoint.

Finally, the significance of automation's negative moderating effect on this relationship may indicate a possible mismatch between technology and the human components of organizational transformation. Automation can facilitate knowledge sharing by offering tools and platforms. Still, it might not automatically create the cooperative, trusting environment required to grow positive beliefs about organizational change. This is consistent with research by Ford et al. (2008) and Hayes (2013), emphasizing the difficulties and possible obstacles associated with organizational change initiatives.

The idea is that knowledge sharing promotes understanding and acceptance of change, helping to reduce resistance and foster a positive attitude towards it (Wang & Noe, 2010). Similarly, automation also has a positive relationship with a positive belief about change. This aligns with the concept that automation improves organizational efficiency, effectiveness, and competitiveness, leading to positive beliefs about change (Chui et al., 2018). Interestingly, however, the moderating effect between knowledge sharing and automation on positive belief about change is negative. This suggests that when knowledge sharing and automation are both high, their combined effect on positive belief about change is less than the sum of their individual effects. This could be explained by the fact that while automation can streamline processes, it may also reduce human interaction and the need for knowledge sharing, which could potentially disrupt the existing social and knowledge-sharing dynamics in the organization (Huang & Rust, 2018).

This finding emphasizes the delicate balance organizations must strike between automation and maintaining the human element of knowledge sharing. While pursuing automation for efficiency, organizations also need to ensure that they maintain an environment conducive to knowledge sharing, which might require additional strategies such as creating online forums or periodic face-to-face meetings to compensate for reduced human interaction due to automation (Davenport, 2015).

The qualitative findings suggest a complex relationship between automation, knowledge sharing, and organizational change beliefs. While automation and knowledge

sharing individually promote positive change beliefs, their combined effects may be weaker. Automation disrupts traditional knowledge-sharing practices, which rely on human interactions and relationships (Wang & Noe, 2010). Automation may undermine these social dynamics necessary for effective knowledge sharing, a key driver of positive change attitudes (Huang & Rust, 2018). The study stresses the importance of managing automation without stifling knowledge sharing in organizations. Organizations must proactively create new knowledge sharing channels in automated environments that can complement or improve the latest technology. One option is digital collaboration platforms that make idea sharing easy and fun (Davenport, 2015). These platforms should encourage tacit knowledge, which is often shared through causal interactions and shared experiences, to foster a sense of community and social connectedness among employees (Internal communication channels for teams, 73 references).

Organizations should also consider integrating these technologies with interpersonal relationship building strategies. Regular face-to-face interactions and team-building activities can sustain informal networks with much organizational knowledge (Brougham & Haar, 2018). Organizations can ensure their leaders are equipped to foster a culture of openness and collaboration in the face of increasing automation by investing in leadership development (10 references). Leaders can set the tone for how technology should change human capabilities and work rather than replace them. Therefore, organizations must use technological innovations and human-centric strategies to maintain and improve knowledge sharing in increasingly automated environments. This method will help implement organizational change and address the psychological and social factors that effect employee acceptance and support (Argote & Ingram, 2000). By doing so, organizations can use automation to boost efficiency and foster a knowledge sharing culture, making them more resilient and adaptable.

6.3.4 Shared leadership culture*automation – positive belief about change

The significant negative moderating effect of automation on the relationship between shared leadership culture and positive belief about change ($\beta = -0.300$, $p < 0.0$) presents an interesting and slightly surprising dynamic within organizational change management. Therefore, H4 is also supported and rejected. This negative coefficient implies that the beneficial effect of a shared leadership culture on workers' beliefs regarding change may be negatively impacted by automation. This result somewhat defies expectations set by the literature, which, as noted by Davenport (2015) and Ford (2015), frequently sees automation as a facilitator of organizational effectiveness and efficiency. However, the results of this study

suggest that automation and shared leadership principles may need to work better together. This could be because automation centralizes or simplifies decision-making processes, which would reduce the perceived usefulness or value of shared leadership techniques.

Second, the strong negative impact suggests that a shared leadership culture's collaborative and participative nature is seen as threatened or challenged by automation. Ensley et al., (2006), who highlight the value of shared leadership in start-ups and creative settings, can understand this in the context of research. Automation lessens the flexibility and autonomy essential to shared leadership by introducing inflexible structures or preset algorithms, which could lower favorable attitudes toward change. Finally, this research emphasizes how difficult it is to incorporate technological improvements into organizational cultures prioritizing people. It emphasizes that although automation can result in many efficiencies, there are several ways in which it interacts with organizational culture and leadership philosophies that can have unexpected effects. This aligns with the viewpoints of Dent & Goldberg (1999) and Cummings (2004), who talk about how organizational change is complex and frequently unpredictable, particularly when it involves technology.

The finding shows that while shared leadership culture and automation individually promote a positive belief about change, their combined effect is less potent. This suggests that high levels of automation reduce the positive impact of a shared leadership culture on the positive belief about change. Shared leadership culture is characterized by a collective approach to decision-making and the delegation of leadership roles within a team or organization (Carson et al, 2007). It fosters collaboration, shared responsibility, and participative decision-making, which are key elements in promoting a positive belief about change (Hoch, 2013). However, automation, which entails the use of technology to perform tasks previously done by humans, might disrupt the dynamics of a shared leadership culture. While automation increases efficiency and reduce human error, it could also limit opportunities for shared decision-making and collaboration by centralizing control and decision-making processes (Ford, 2015). Moreover, the transition to automated processes creates uncertainty and fear, which undermines the trust and shared responsibility inherent in a shared leadership culture (Kolbjørnsrud et al, 2016). Thus, the negative moderating effect between shared leadership culture and automation on positive belief about change might be a reflection of these disruptive dynamics.

To conclude, organizations implementing automation need to ensure that their shared leadership culture is not adversely affected. Strategies to preserve shared decision-making and collaboration in an increasingly automated environment could include involving employees in

the automation process, regularly updating them about the changes, and providing opportunities for them to upskill (Brynjolfsson & McAfee, 2014).

The qualitative findings show how automation and organizational leadership culture clash. Automation improves process efficiency and accuracy but changes the organizational structure and decision-making paradigms, potentially resulting in a more centralized control system. This shift challenges shared leadership cultures that rely on distributed decision-making and collective leadership (Hoch et al., 2010). Automation may reduce the roles and inputs of multiple leadership tiers, affecting trust, collaboration, and empowerment in shared leadership (Ford, 2015). Automation often changes the workforce's roles and skill requirements, causing uncertainty and apprehension. Fear and concerns about job security and re-skilling can damage trust and cohesion in shared leadership environments (Kolbjørnsrud et al., 2016). In today's fast-changing business landscapes, such disruption threatens organizations' adaptive and innovative capacities and operational efficiency.

Organizations should combine automation and shared leadership to address these issues. This requires restructuring decision-making processes to ensure that automation complements human leadership. Leadership development is essential to help leaders manage technological transitions and create an inclusive environment that values human insights alongside automated processes (10 references). Strong internal communication channels and transparency in decision-making can also mitigate the effects of automation on shared leadership structures and make all team members feel valued and involved in organizational changes (Internal Communication Channels for Teams, 73 references).

Finally, organizations need a strong change management framework that embraces technological advances and actively integrates them into their cultural and operational systems. Automation enhances rather than detracts from the shared leadership culture, supporting a seamless transition that aligns with the organization's long-term strategic goals and maintaining a positive change culture across all levels.

6.3.5 Task interdependence*type of organizational change – positive belief about change

Perspectives on the dynamics of organizational change are provided by the moderating effect of the type of change on the relationship between task interdependence and positive belief about change, as shown by a path coefficient ($\beta = 0.081$, $p = 0.551$). First, the high p-value and relatively low value of the coefficient point to a weak and statistically insignificant effect between the kind of change and task interdependence's impact on optimistic beliefs about

change. Therefore, H5 is rejected. This suggests that task interdependence may not significantly influence how employees perceive change, regardless of the kind or nature of change taking place within the company. This result is partly at odds with the literature that highlights how important change types are to organizational dynamics. For example, Lewin (1951) and Kotter (1996, 2007) pointed out that different kinds of changes (such as transformational vs. incremental) could have different effects on employee attitudes and organizational processes. The results of this study imply that independent of the kind of change, task interdependence consistently positively affects beliefs about change.

Secondly, the outcome suggests that variables other than the nature of the change may matter more in determining how task interdependence influences beliefs about change. This is consistent with studies by Madsen et al., (2005) and Marks et al., (2001), highlighting the importance of social relationships, organizational commitment, and team processes in determining how team interdependence affects change perceptions. The results of this study indicate that although the type of change is a significant contextual factor, it does not have a significant moderating effect on the relationship between task interdependence and positive belief about change.

Last, this research adds to the current discussion on change management by pointing to a more complex understanding of the interactions between various factors during organizational change. Although the literature frequently highlights the important role that different types of changes play, this study suggests that the type of change may have less of an impact than previously believed in the particular context of task interdependence and positive beliefs about change. As scholars like Oreg et al., (2011) and Herold et al., (2008) suggest, this necessitates a more thorough investigation of the variables that impact employee attitudes toward change.

The findings illustrate that task interdependence and the type of organizational change both contribute positively to the belief about change. Task interdependence, or the extent to which team members rely on each other to complete their tasks, has been linked to a more positive perception of change (Hirst et al, 2009). When team members are interdependent, they tend to share information more readily, which facilitates a smoother transition during organizational change. The type of organizational change also plays a role in shaping beliefs about change. It is generally agreed upon that incremental changes, which are small and continuous improvements, are typically more positively perceived than radical changes, which involve dramatic shifts in the organizational structure or business model (Herold et al, 2008). However, the moderating effect between task interdependence and the type of organizational

change is negatively related to a positive belief about change. This implies that in an interdependent team, the introduction of a significant organizational change might cause a disruption to established patterns of collaboration and information sharing, thereby potentially reducing the positive belief about change (Rafferty et al., 2013).

The qualitative findings show the challenges of managing major organizational changes in interdependent teams. Task interdependence can improve team efficiency under stable conditions, but transformative changes that require major changes to organizational processes and structures can make it difficult (Santos et al., 2015). Disrupting collaboration and information sharing, which is essential in interdependent environments, is the main issue. Disrupting these patterns can reduce positive beliefs about the change, increasing team resistance and insecurity (Lines, 2004; Rafferty et al., 2013). Applying these findings, task interdependence dynamics are strongly influenced by organizational changes, whether incremental or transformative. Due to their broad and deep impact, transformative changes disrupt team dynamics more than incremental changes. This disruption can make it difficult for teams to maintain transparency and problem-solving efficacy, requiring tailored change management strategies that account for task interdependence (Internal Communication Channels for Teams, 73 references).

Organizations should improve internal communication and social interaction to maintain a cohesive work environment despite change. This approach involves redefining collaboration and information sharing to fit the new organizational structure and investing in leadership development to help teams transition (Investing in leadership development, 10 references). Change management in highly interdependent settings requires leaders to ensure that all team members are aligned with the new direction and that their roles and contributions are clearly defined. Additionally, organizations must consider how such changes affect their culture and employee skills. Training and education programs must match change intensity to help employees adapt to new technologies and processes (Training and Education, 37 references). In addition, organizational culture should be improved to foster innovation and flexibility, which are essential for navigating major changes (Importance of Organizational Culture, 23 references).

A thorough review of the progress and results of the change initiative is needed to ensure that these strategies are achieving their goals and that necessary adjustments are made quickly (Review the Progress and Results, 17 references). The goal is to create an organization where all employees manage and receive change well and positively, reducing resistance and fostering agility and responsiveness.

6.3.6 Social connectedness*type of organizational change – positive belief about change

Path coefficient ($\beta = 0.298$, $p = 0.003$) indicates a significant moderating effect of the type of change on the relationship between social connectedness and positive belief about change, which provides insight into the complex dynamics of organizational change. Therefore, H6 is supported and accepted. According to the positive and statistically significant coefficient, the type of change and social connectedness significantly influences employees' positive beliefs about change. This result is consistent with the body of research highlighting the role of social factors in change processes. For instance, Higgs & Rowland (2005) and Kotter (1996, 2007) have talked about how different kinds of changes—whether transformational or incremental—require different amounts of social support and interaction. The current study adds to this understanding by demonstrating that the kind of change can increase the beneficial influence of social connectedness on beliefs about change. This suggests that social connections within the organization become even more important in specific change scenarios, which may be more complex or transformative.

Second, as studies like Lewin (1951) and Marks et al., (2001) have shown, the outcome emphasizes the importance of social dynamics in organizational change. According to these studies, social connectedness—the caliber of connections and a person's sense of identity within a group or company significantly influence how an employee responds to change. The conclusion that the type of change modifies this relationship raises the possibility that the significance of social connections may increase or change depending on whether the change is developmental, transitional, or transformational.

In the end, the findings advance knowledge of change management by emphasizing the interaction between change type and social factors. Although a significant portion of the literature on change management, as written by Oreg et al., (2011), concentrates on organizational and individual resistance to change, this study offers a fresh perspective by examining how various forms of change can either increase or decrease the impact of social connectedness. This implies that when using social dynamics to promote positive beliefs about change, managers and change leaders should consider the nature of the change initiative.

The finding indicates that social connectedness significantly contributes to a positive belief about change, as reflected by the significant beta value. This finding aligns with the body of literature, which suggests that strong social relationships within an organization promote positive attitudes towards change by fostering trust, improving communication, and reducing uncertainty (Choi, 2011; Oreg et al, 2011). Interestingly, in this case, the organizational change

type does not significantly influence the positive belief about change. This suggests that regardless of whether the change is incremental or transformative, the belief about change is unaffected, possibly due to other overpowering factors such as social connectedness. This finding contrasts with some studies that propose that the type of change can influence employees' perceptions and reactions to change (Bordia et al, 2004). Moreover, the moderating effect between social connectedness and the type of organizational change does not significantly affect the positive belief about change. This suggests that the effect of social connectedness on positive beliefs about change remains constant across different types of organizational change. It also implies that fostering social connectedness might be an effective strategy for promoting positive beliefs about change, irrespective of the nature of the change involved.

The qualitative findings suggest that maintaining social connectedness across organizational change types is crucial to managing employees' reactions and attitudes. According to Madsen et al. (2005) and Kiefer (2005), organizational interpersonal relationships can stabilize employees and help them cope with change. During transitions, this buffering mechanism is essential for morale, productivity, and commitment. To better understand and examine how themes and sub-themes relate to organizational change. The "Importance of Organizational Culture" (11 files, 23 references) and "Internal Communication Channels for Teams" (19 files, 73 references) are essential to social connectedness. These elements promote information exchange and make all employees feel part of the organizational journey, fostering collective resilience during significant change.

"Digital Collaboration Platforms" (20 files, 55 references) and "Future Technological Integration" (16 files, 23 references) help improve social connectedness by supporting continuous interaction and collaboration in increasingly digital and remote work environments. These platforms can bridge team members' physical distances, maintaining information flow and workplace collaboration. These technologies also affect "Knowledge Sharing" (18 files, 39 references) and "Social Connectedness" (18 files, 29 references), which can improve or hurt interactions depending on how they are implemented and integrated into daily workflows. The sub-theme of "Training and Education" (21 files, 37 references) emphasizes the need to train employees to use new technologies and adapt to changing work environments. This training should cover communication and teamwork in a digitally changing world to help employees maintain high-quality relationships.

These processes depend on leadership, as shown by "Active Participation of CEOs" (5 files, 10 references) and "Investing in leadership development" (9 files, 10 references). Leaders

must uphold shared goals and collective effort, ensuring digital solutions and transformative changes maintain shared leadership and collaborative decision-making. Finally, social connectedness in an environment of frequent and varied organizational changes requires a multifaceted approach. This approach promotes open communication, invests in collaborative technology, and trains employees to adapt to new challenges. By focusing on these areas, organizations can improve resilience and change management to keep employees engaged and positive during transformation.

6.3.7 Knowledge sharing*type of organizational change – positive belief about change

An understanding of organizational change dynamics is provided by the moderating effect of the type of change, as indicated by a negative path coefficient ($\beta = -0.210$, $p = 0.003$), on the relationship between knowledge sharing and positive belief about change. Therefore, H7 is supported and accepted on the study's setting. The negative coefficient raises the possibility that several kinds of change (such as transformational and incremental) could have a negative effect on how positively employees view change and how knowledge sharing affects that belief. This somewhat contradicts the literature's general presumption that knowledge sharing always helps facilitate change. Wang and Noe (2010) and Zhu et al. (2018), for example, highlight the benefits of knowledge sharing in organizational processes, such as change management. However, depending on the nature of the change, the current study suggests that knowledge sharing may be less effective at forming positive beliefs about it. This result of the uncertainty or complexity of some kinds of change could outweigh the advantages of information sharing.

Furthermore, this research suggests that knowledge sharing might not be enough to promote favorable attitudes about some types of change, especially those that are more difficult or complex. Rather, a greater influence may come from other variables like the organizational culture surrounding the change, how it is managed, and how it is communicated. This is consistent with Herold et al. (2008) and Rafferty et al. (2013), who highlighted the complexity of change processes and the requirement for a change management strategy beyond knowledge sharing.

Finally, emphasizing how knowledge sharing's efficacy is contingent, the study's findings advance the conversation about change management. Even though sharing knowledge is generally regarded as a good organizational practice, the kind of change being implemented can affect how knowledge sharing is perceived. As discussed by Kotter (1996) and Schein

(2010), this points to the need for more specialized change management techniques that consider the change's unique nature.

The analysis indicates that knowledge sharing has a significant positive effect on beliefs about change, which aligns with past research findings emphasizing the importance of knowledge sharing for organizational change (Connelly & Kelloway, 2003; Wang & Noe, 2010). Knowledge sharing fosters a sense of inclusivity, transparency, and mutual trust, which promote a positive attitude towards change (Cummings, 2004). However, the moderating effect between knowledge sharing and the type of organizational change on positive beliefs about change is insignificant. This suggests that the positive impact of knowledge sharing on belief about change does not vary significantly across different types of organizational changes. In other words, whether the change is transformational or incremental, the role of knowledge sharing in fostering positive beliefs about change remains consistent. This finding is explained by the enduring nature of knowledge sharing as a social process that builds trust, understanding, and collaboration, irrespective of the type of change being implemented (Argote et al, 2003). Finally, these findings underscore the importance of fostering a culture of knowledge sharing within organizations. Regardless of the type of organizational change, knowledge sharing plays a critical role in promoting positive beliefs about change.

The qualitative findings show that knowledge sharing is a vital social process that builds organizational resilience and adaptability for transformational and incremental changes (Schepers et al., 2008). Knowledge sharing builds trust, understanding, and collaboration, reducing organizational change anxiety (Van den Hooff & De Ridder, 2004). This emphasizes the importance of open communication and a cooperative culture, especially during change. Expanding these insights, "Internal Communication Channels for Teams" (19 files, 73 references) becomes crucial. Communication channels facilitate information flow and reinforce social dynamics needed for knowledge sharing. These channels align and inform all organization members, fostering a shared understanding of the change and its implications (Argote et al., 2003). "Social Interaction and Information Exchange" (14 files, 23 references) also provides a knowledge-sharing network, improving the collective ability to adapt to new challenges.

Additionally, "Training and Education" (21 files, 37 references) ensures all employees have the skills and knowledge to contribute to and engage with change processes. Operational competencies should be taught alongside communication, problem-solving, and adaptive skills to foster a culture of shared knowledge and collective learning (Armenakis & Bedeian, 1999). Implementation strategies, especially "Decision Making" (19 files, 54 references) and

"Implementation Strategies" (12 files, 21 references), should integrate knowledge sharing into change management processes. Through transparency and employee participation in decision-making (Transparency and Problem Solving, 17 files, 33 references), organizations can create an environment where change is implemented, understood, and supported.

The "Importance of Organizational Culture" (11 files, 23 references) is a key factor in how organizations perceive and implement change. Creating a culture that values and supports learning and knowledge sharing improves adaptability and resilience to change. "Digital Collaboration Platforms" (20 files, 55 references) and "Integration of AI and data analytics" (8 files, 14 references) are also important knowledge-sharing technologies. When thoughtfully integrated into organizational practices, these technologies can enable seamless and efficient knowledge exchange across levels and locations, strengthening the organization's ability to manage and adapt to change.

6.3.8 Shared leadership culture*type of organizational change – positive belief about change

The result is not statistically significant, but it does provide an interesting perspective on organizational dynamics during change processes, as the moderating effect of the type of change on the relationship between shared leadership culture and positive belief about change is indicated by a negative path coefficient ($\beta = -0.199$, $p = 0.217$). Therefore, H8 is rejected because it is not supported. The negative coefficient points to a trend where various forms of change could lessen the impact of a shared leadership culture on encouraging optimistic beliefs about change, even though the p-value is high (signaling a lack of statistical significance). This may suggest that a shared leadership culture's collaborative and distributed nature is less successful in fostering positive attitudes toward change in some types of change scenarios, especially those that are more complex or disruptive. The literature by Pearce & Conger (2002) and Zhu et al. (2018) highlights the general support for shared leadership in change processes, contrasting this finding. These authors argue that shared leadership promotes adaptability and positive perceptions of change.

The outcome also highlights the difficulty of managing change and the necessity of taking the particulars of the change into account when evaluating the influence of different organizational culture components. For instance, in transformational change scenarios, which frequently involve substantial changes in organizational paradigms, the difficulties of managing the change itself may outweigh the customary advantages of shared leadership, such as improved collaboration and group decision-making. This aligns with the perspective of

writers such as Kotter (1996) and Tichy (1983), who highlight the complex nature of change management.

Therefore, the results emphasize how crucial context is when assessing the effectiveness of shared leadership cultures in change projects. It implies that although shared leadership is generally advantageous, positive attitudes about change might not always be enhanced in all change scenarios. This is consistent with research by Wang et al., (2014) and Vandavasi et al. (2020), who found that the type of task or change at hand and the organizational context affects how effective shared leadership is.

The qualitative findings show how shared leadership affects organizational change in many ways. Distributing leadership roles among team members improves adaptability, decision-making, and solution quality, according to D'Innocenzo et al. (2016). This distribution complicates the change process because each member may have different views on the change, which can lead to disagreements and delay decision-making (Sivasubramaniam et al., 2002). Shared leadership also depends on the type of change—transformational or incremental. Transformational changes may require centralized leadership to ensure cohesive direction and rapid decision-making, while incremental changes may benefit from participative shared leadership (Higgs & Rowland, 2005). Organizations must focus on several key areas to manage shared leadership change management complexity. First, "Training and Education" (21 files, 37 references) are essential for equipping a shared leadership team with the skills to manage their distributed roles during change. This training should cover conflict resolution, change management, and communication to ensure all leaders are on the same page and can advance the organization.

Second, "Importance of Organizational Culture" (11 files, 23 references) and "Internal Communication Channels for Teams" (19 files, 73 references) need improvement. Openness, trust, and mutual respect are essential for effective organizational communication and collaboration in a shared leadership culture. Improved internal communication can help maintain this culture, especially during change, by keeping all team members informed and engaged. "Implementation Strategies" (12 files, 21 references) should also allow flexibility and inclusivity in decision-making to accommodate shared leadership. This involves creating platforms where all leaders can share their insights and feedback to improve strategies and align them with the organization's goals. "Digital Collaboration Platforms" (20 files, 55 references) can help distributed leaders communicate and share information seamlessly.

Finally, "Resistance to Change" (6 files, 11 references) must be addressed. Leaders may resist shared leadership structures because they feel their autonomy or influence is being

compromised. Proactively managing this resistance requires continuous engagement, transparency, and validation of each leader's change role.

The foundation of shared leadership theories is that authority comes from a single source within an organization, typically a single leader or a group of top executives. The idea of shared leadership challenges this paradigm by dividing the duties of leadership among various team members. Along with democratizing the decision-making process, this includes a wider range of perspectives and competencies. The research expands and builds upon D'Innocenzo et al. (2016) work, which emphasized the advantages of shared leadership in boosting team adaptability and decision-making quality, by highlighting this shift. The novel insight in this argument is that shared leadership, by its very nature, spurs innovation but can also make navigating organizational change challenging. While shared leadership has many advantages, it can also present some difficulties, particularly in change management. In arguing that different perspectives on change initiatives may arise from the distributed nature of leadership roles, our study concurs with the conclusions of Sivasubramaniam et al. (2002). We do, however, go into more detail about the implications of these differences. Due to the need to reach a consensus or handle divergent viewpoints, a distributed leadership model might cause decision-making processes to take longer. This highlights the dynamics of decision-making within shared leadership models and how they might differ from conventional hierarchical structures in the broader context of change management theories.

An in-depth analysis of organizational change types reveals an interaction effect between shared leadership and the proposed change's characteristics. We distinguish between transformational changes, which might call for a brief return to centralized leadership, and incremental changes, which seem more amenable to the shared leadership approach, building on the work of Higgs & Rowland (2005). This distinction is important for organizations because it provides a strategic roadmap for deciding which leadership style might be more productive depending on the proposed change's nature. Our research adds to the body of knowledge by synthesizing these results and highlighting the complex relationship between shared leadership and change management. It implies that while shared leadership can help promote adaptability and produce high-quality solutions, its effectiveness is closely related to the type of organizational change pursued. Thus, by bridging the gap between the theories of leadership and change management, this research provides new insights into how shared leadership can be effectively tapped in the context of an organizational landscape that is constantly changing.

Table 6.1 highlights shared leadership by comparing how various leadership philosophies interact with organizational dynamics to affect favorable attitudes toward change. It demonstrates which combinations of organizational elements and leadership philosophies are better suited to promote positive change beliefs. For example, task interdependence and automation work well together to support shared leadership, indicating that shared leadership can effectively promote a positive belief in a change in environments where tasks are interdependent, and automation is common. This might be because distributed leadership makes it easier to adjust to automated processes by allocating responsibilities and decision-making authority. Comparably, humble and developmental leadership styles benefit knowledge sharing in the context of automation. These styles probably offer a transparent, goal-oriented atmosphere that promotes knowledge sharing, which is crucial in automated environments. However, servant and participative leadership—approaches prioritizing employee empowerment and involvement—are the most effective means of addressing the relationship between automation and shared leadership cultures. These cultures are known for their emphasis on shared leadership.

Task interdependence is consistent with participatory and shared leadership approaches when the type of organizational change is a factor. This suggests these leadership philosophies work well when the change affects task-related interdependencies. As the type of change affects social connectedness, the best way to address it is to promote shared leadership alone. This highlights the significance of teamwork and collective involvement in change processes. Humble leadership works best for knowledge sharing in various organizational change models, maybe because it emphasizes transparency and values the contributions of all parties involved. Last but not least, participatory and nurturing shared leadership approaches, which encourage teamwork and collaborative decision-making—two crucial components in preserving a Positive Belief about Change within a shared leadership environment—benefit shared leadership cultures affected by the kind of organizational change.

Table 6.1: Impact of Organizational Dynamics on Positive Belief about Change: A Shared Leadership Perspective

Core Element(s)	Approach	Humble Leadership	Developmental Leadership	Servant Leadership	Participative Leadership	Fostering Shared Leadership
Task Interdependence * Automation	Positive belief about change	Promotes collaborative work and trust, enhancing overall team performance.			Encourages collaborative decision-making, ensuring team members feel valued and engaged.	Encourages team cohesion and mutual support, which enhances collective efficacy.
Knowledge Sharing * Automation	Positive belief about change		Encourages continuous learning and growth, fostering an environment where knowledge is freely shared.		Promotes open communication and collaborative learning.	Facilitates the free flow of information, enhancing innovation and problem-solving.
Shared Leadership Culture * Automation	Positive belief about change			Cultivates a service-oriented mindset, focusing on the growth and well-being of team members.	Encourages distributed leadership, allowing team members to take initiative and lead in their areas of expertise.	Creates an environment where leadership is a shared responsibility, enhancing team collaboration and effectiveness.
Task Interdependence * Type of Organizational Change	Positive belief about change			Emphasizes the importance of working together towards a common goal, fostering	Promotes teamwork and collective problem-solving, ensuring that all team	Reinforces the necessity of collaboration and mutual dependence, which is

				unity and collaborati on.	members are aligned with organizatio nal changes.	crucial during organizati onal transitions .
Social Connectedness * Type of Organizational Change	Positive belief about change					Enhances the sense of communit y and support within the organizati on, which is vital during periods of change.
Knowledge Sharing * Type of Organizational Change	Positive belief about change	Encourag es transpare ncy and openness , which builds trust and supports the sharing of informati on.				
Shared Leadership Culture * Type of Organizational Change	Positive belief about change			Empowers team members to take ownership and lead initiatives, fostering a sense of responsibil ity and accountabi lity.		Promotes a culture where leadership is a collective effort, supporting the organizati on through changes with unified efforts.

Source: Developed by the researcher

6.4 Managerial implications

6.4.1 Managerial implications for Egyptian SMEs

The study offers the practical implications for managers and stakeholders. These managerial implications are tailored to Egyptian SMEs and based on the study's earlier findings. SMEs incorporating automation into their operations must adopt a shared leadership strategy. This entails fostering teamwork and allocating leadership duties to different tiers (Grieve et al., 2013). By encouraging a sense of shared ownership and adaptability among team members, shared leadership can help transitions go more smoothly in an environment where tasks are interdependent and automated systems are in place. Managers should push teams to collaborate to comprehend and optimize automated processes to ensure a unified approach to technology adoption. In light of growing automation, managers ought to actively encourage knowledge exchange. This can be accomplished by fostering an environment that values ongoing education and the free flow of knowledge. Since automation can occasionally result in knowledge silos, managers must organize cross-functional learning sessions where staff members can exchange tips and tactics for using technology wisely. This will maintain the organization's agility and informedness while improving team and individual capabilities.

To improve their preparedness for change, Egyptian SMEs should concentrate on creating a shared leadership culture. This entails creating an atmosphere where team members, regardless of their official position, are empowered to assume leadership roles. Giving staff members, the chance to take the lead on projects, make decisions, and participate in strategic talks will help to foster such a culture. Employees who feel more invested and accountable for results may be more adaptable and have a more positive attitude toward organizational change due to empowerment. Managers need to understand that different leadership philosophies are needed for organizational changes. For example, more visionary and directive leadership are beneficial for transformational changes, while a participative approach may be more effective for managing incremental changes (Ford et al., 2008). Change projects can be considerably more successful if the leadership style is modified by the nature of the change and its nature. Because of its flexibility, leadership can always adjust to the unique requirements and dynamics of the change process.

Finally, preserving and promoting social connectedness is essential in the face of organizational change. It is the responsibility of managers to facilitate team interactions and relationship building. This could be accomplished through cooperative projects, open discussion forums, or team-building exercises. Strong social ties within the team can serve as

a safety net for workers as they adjust to uncertainties caused by change. Additionally, it promotes a more inclusive and cooperative method of managing change that values a range of viewpoints and ideas.

Therefore, a strategic focus on shared leadership, knowledge sharing, flexible leadership styles, and building social connections is crucial for Egyptian SMEs to manage change challenges, especially in an increasingly automated environment. These strategies can aid in developing an innovative, resilient, and adaptable corporate culture appropriate for the changing business environment.

6.4.2 Managerial implications for Managers

The findings provide the practical and managerial implications for SME managers to navigate organizational change and technological advancement. SME managers should improve automated task interdependence. This involves linking tasks and requiring collaboration. Automated environments should support human collaboration, not replace it. Managers should hold regular team meetings to discuss integrating automated processes into their workflow. This approach boosts efficiency and makes workers feel valued and important in the automation age. SME managers must prioritize knowledge sharing as technology becomes more important. This requires platforms and opportunities for employees to share new technology and process knowledge. Managers should promote an open, learning-focused culture. This could involve workshops, mentorship, or informal knowledge sharing. Such initiatives will improve employees' skills and encourage continuous learning and adaptability. A culture of shared leadership can help SMEs adapt to technology. Managers should involve employees in technology adoption and implementation decisions to empower them. Collaboration through project teams or cross-departmental technology integration committees is possible. Change management requires innovative solutions and employee ownership, which a shared leadership culture can foster.

SME managers must understand change and adapt their leadership style. Different management styles are needed for structural, strategic, and technological changes. Radical or transformational changes may require a visionary and directive approach, while incremental changes may benefit from a participatory and consultative style. Managers must be flexible and adapt their leadership style to change. Finally, managers should promote social connection during change. This requires creating a workplace where employees feel connected to tasks and each other. Team-building activities, idea-sharing forums, and team check-ins can build community and support. Making employees feel like a team can reduce change-related stress

and uncertainty, improving receptivity. SME managers must improve task interdependence, knowledge sharing, shared leadership, leadership style alignment, and social connectedness to manage change. These strategies can help SMEs manage change, especially in a tech-driven business environment.

The introduction of programs prioritizing team collaboration and cooperation is required to incorporate the principles of task interdependence into training. Employees can adapt and succeed by simulating team-based scenarios, especially in settings with automated tasks. Workshops and training sessions should be planned to encourage social connection and knowledge sharing (Grieve et al., 2013). These discussions would center on building an open culture of knowledge sharing, effective communication, and conflict management. When considering shared leadership in training, leadership modules should be set up to prepare workers for various situations (Han et al., 2021). This entails giving them the knowledge and skills to modify their leadership philosophies in transformational or incremental change cases. These guidelines ought to guide the recruitment process' development. Candidates for task interdependence should be given preference if they have a track record of success in team-based environments (Herold et al., 2008). When thinking about the concept of social connectedness and knowledge sharing, emphasis should be placed on having strong interpersonal skills. Such candidates ought to demonstrate a sincere desire to cooperate and impart their knowledge (Gomez et al., 2015). Regarding shared leadership, the hiring procedure should be tailored to find candidates with various leadership backgrounds. Particularly, preference should be given to those who have proven their ability to adapt their leadership styles to different situations.

In organizations, career progression should follow these guidelines. Employees who promote cooperation and teamwork should be identified and placed in positions requiring greater interdependence. Similarly, those who consistently contribute to a culture of sharing and mentoring should be given advancement opportunities regarding social connectedness and knowledge sharing. A keen eye for future leaders is essential to the shared leadership concept. The organization will be prepared for both transformational and incremental changes if people are found who can seamlessly transition between centralized and decentralized leadership roles (Ford et al., 2008). These guidelines ought to be added to the performance evaluation system. Evaluations for task interdependence should take teamwork metrics into account. Employees who can maintain a collaborative spirit even in automated settings deserve praise. Employees should receive rewards from the appraisal system based on their contributions to the organization's collective knowledge regarding social connectedness and knowledge sharing.

According to the shared leadership principle, leadership contributions should be recognized. Regardless of their official titles, employees who show leadership should be appropriately acknowledged and rewarded, especially in change scenarios.

A thorough comprehension of these ideas is necessary when developing leadership profiles. Leadership roles created around task interdependence should emphasize encouraging collaboration even in highly automated environments (Ensley et al., 2006; Fard & Karimi, 2015). Leaders who model and promote social interaction and knowledge sharing are essential for an organizational culture to flourish. The various requirements of change scenarios should be considered when developing leadership profiles. While profiles with centralized solid leadership qualities may be required for transformational changes, incremental changes should favor profiles that support collaborative decision-making. Businesses can build a supportive framework to deal with the complex challenges of automation and transformational shifts (Fard & Karimi, 2015) by methodically integrating these insights into various organizational processes.

6.4.3 Managerial implications for employees

For employees, the findings underscore the importance of maintaining positive beliefs about change, even in the face of automation or significant organizational changes. They need to recognize that these changes are meant to improve organizational efficiency and effectiveness and not to undermine their roles or responsibilities. In an environment with high task interdependence, employees should strive to maintain a collaborative spirit, even when their tasks are automated. They should also seek opportunities to foster social connections and share their knowledge with others, which can create a supportive and positive environment. In a shared leadership culture, employees should be open to different perspectives and ready to take on leadership roles when needed. They should also be prepared to adapt their leadership approach based on the change's nature. Before initiating any change, SME managers must assess the current business environment, including internal and external factors. This involves understanding the intricacies of automation, its potential impacts on task interdependence, and the overall challenges and opportunities it presents. Based on shared leadership principles, managers must craft a clear vision for the change. This vision should be informed by feedback from all levels of the organization. Having shared objectives fosters a sense of mutual reliance among team members and ensures everyone is aligned toward a common goal. Promoting social connectedness is paramount, especially in a culture-rich context like Egypt. By designating change champions at various organizational levels, SMEs can ensure a personal

touch to the change management process. These champions are the go-to people for any concerns or feedback and help cascade the change message throughout the organization.

Consistent and transparent communication is vital. Egyptian SMEs should leverage formal and informal communication channels to share updates, address concerns, and highlight the benefits of the change. Emphasizing the importance of knowledge sharing can significantly reduce resistance, as it ensures everyone is well-informed and prepared. As automation and technological changes are introduced, SMEs should offer targeted training sessions. These sessions should focus on providing employees understanding of the new tools or processes and still feel valued even when some tasks are automated. Investing in such training reflects a commitment to employees and ensures they have the skills necessary to adapt. Once the change is initiated, continuous monitoring is crucial. Managers should be aware of potential challenges that arise during the change process. Feedback mechanisms, informed by the principle of shared leadership, should be in place. This allows for real-time adjustments and ensures the change process remains agile. Finally, the managerial implications of these findings highlight the need for a holistic approach to managing change. Organizations, managers, and employees should work together to foster a positive belief about change, leveraging aspects of organizational culture like task interdependence, social connectedness, knowledge sharing, and shared leadership to facilitate successful change implementation.

6.4.4 Limitations of the study

While the study provides significant insights into the interplay between the set of shared leadership and the positive belief about change, it is essential to acknowledge its limitations, which open avenues for future research. The sample of the study may limit the generalizability of the findings. The results might not hold across industries other than SMEs or demographic groups if the sample was drawn from a specific tourism industry or demographic. Similarly, if the study was conducted in a specific geographical location, cultural differences limit the applicability of the results in other regions. Future research could consider expanding the sample across different industries, demographics, and geographical locations to enhance the generalizability of the findings. The study employed a sequential explanatory research design, and it captures quantitative data at first stage and qualitative data at second stage. Consequently, it might not account for changes in beliefs about change over time or the dynamic nature of organizational culture. Longitudinal studies could provide deeper insights into the evolution of beliefs about change and organizational culture.

In addition, the measurement and operationalization of factors could be another limitation. If self-reported measures were used, they could be subject to social desirability or recall bias. Similarly, operationalizing complex concepts like task interdependence, social connectedness, knowledge sharing, and shared leadership culture might only capture some facets of these constructs. Future research could consider using multi-source or multi-method data collection to mitigate these issues. The study might have controlled for only some relevant variables that could influence the belief about change. For instance, individual characteristics such as age, gender, or tenure and organizational characteristics like size or sector could affect how employees perceive change. Future research could consider including these control variables. For instance, while the study found that task interdependence and automation interact to influence beliefs about change, it does not definitively establish that changes in task interdependence or automation cause changes in beliefs about change. Future research could consider experimental designs to establish causal relationships better.

While the study examined the interactions between various variables, it might have yet to explore all potential interactions or non-linear relationships. For instance, the relationship between social connectedness and belief about change could be moderated by other variables like organizational support or trust in leadership (Mousa et al., 2020; Röth & Spieth, 2019; Du Plessis & Nkambule, 2020). Similarly, the relationships might not be linear – they could be curvilinear or take other complex forms (Akoglu, 2018; Argote & Ingram, 2000; Armenakis & Bedeian, 1999). Future research could explore these possibilities by drawing on a diverse body of literature, including the role of shared leadership (Imam, 2021; Vandavasi et al., 2020; Han et al., 2021), the dynamics of knowledge sharing (Coun et al., 2019; Lee et al., 2020; Ahmad & Karim, 2019), and the specific context of the Egyptian organizational landscape (Elgohary & Abdelazyz, 2020; Mousa et al., 2021; Elshaer et al., 2023). By considering this breadth of sources, future studies can develop a more comprehensive understanding of how various factors intersect and influence the success of change management initiatives within Egyptian SMEs.

6.4.5 Future directions

One of the most promising avenues lies in the exploration of other potential moderating variables (automation and the type of organizational change). While this study focused on the moderating effects of automation and the type of change between task interdependence, social connectedness, knowledge sharing, shared leadership culture, and positive beliefs about change, other factors influence these relationships. Leadership styles, organizational support,

psychological safety, and individual resilience are examples of such variables that could be investigated in future research. In addition to these potential moderating variables, the role of individual differences could also be a focal point of future studies. Personality traits, risk tolerance, and readiness for change are just a few examples of individual differences that could influence how employees perceive and react to organizational change. These individual characteristics could interact with the organizational factors investigated in this study to produce more nuanced insights into beliefs about change. Notably, Mousa et al. (2020) highlighted the intricate relationships between organizational learning, leadership, and individual resistance to change in the Egyptian academic context, suggesting the possibility of varied responses based on individual characteristics. Furthermore, future research could delve deeper into specific types of organizational change. While the current study broadly categorizes change into two types, Du Plessis & Nkambule (2020) emphasized the multidimensional nature of leadership, hinting at the various forms of organizational change—be it strategic, cultural, structural, or technological. Each of these types could have distinct impacts on employees' beliefs.

External factors also shape employees' beliefs about change. For instance, Elshaer et al. (2023) discussed how the broader socio-economic environment influences employees' perceptions and attitudes towards risks, indicating the potential influence of factors like market competition, regulatory changes, and societal trends. Future research, informed by such perspectives, could examine how these external elements, in conjunction with internal organizational factors, mold beliefs about change. Importantly, the role of communication in effecting change has been emphasized (Bordia et al., 2004). How change is communicated, through what medium, and by whom, can greatly influence employees' perceptions. This corroborates the idea that the frequency, clarity, source, and medium of communication about change could be pivotal.

While the current study provides a cross-sectional snapshot, relationships between variables could change over time. Imam (2021) and Vandavasi et al. (2020) both highlighted the dynamic nature of shared leadership and its implications, suggesting the need for longitudinal research. Future studies could analyze the long-term effects of variables like task interdependence, social connectedness, and shared leadership culture on beliefs about change. Furthermore, as suggested by Ali et al. (2023), a shared leadership approach could have broader implications, potentially influencing outcomes like employee engagement, job satisfaction, and organizational performance. Lastly, the context of the study is paramount. The relationships observed might be significantly influenced by cultural, industry-specific, or regional nuances.

For instance, Allam (2018) provided insights into the unique role of women during the Egyptian revolution, underlining the importance of context in shaping outcomes and beliefs. Future research should, therefore, expand its horizon, exploring these relationships in varied contexts to enrich our understanding of this multifaceted phenomenon.

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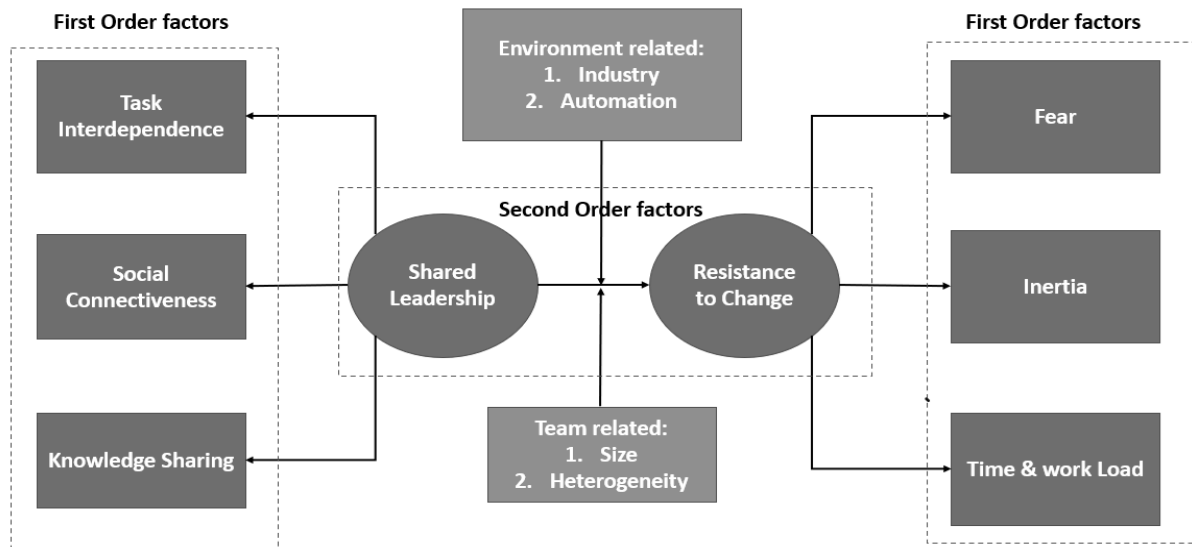
Appendices

Appendix A: Themes and Sub-themes

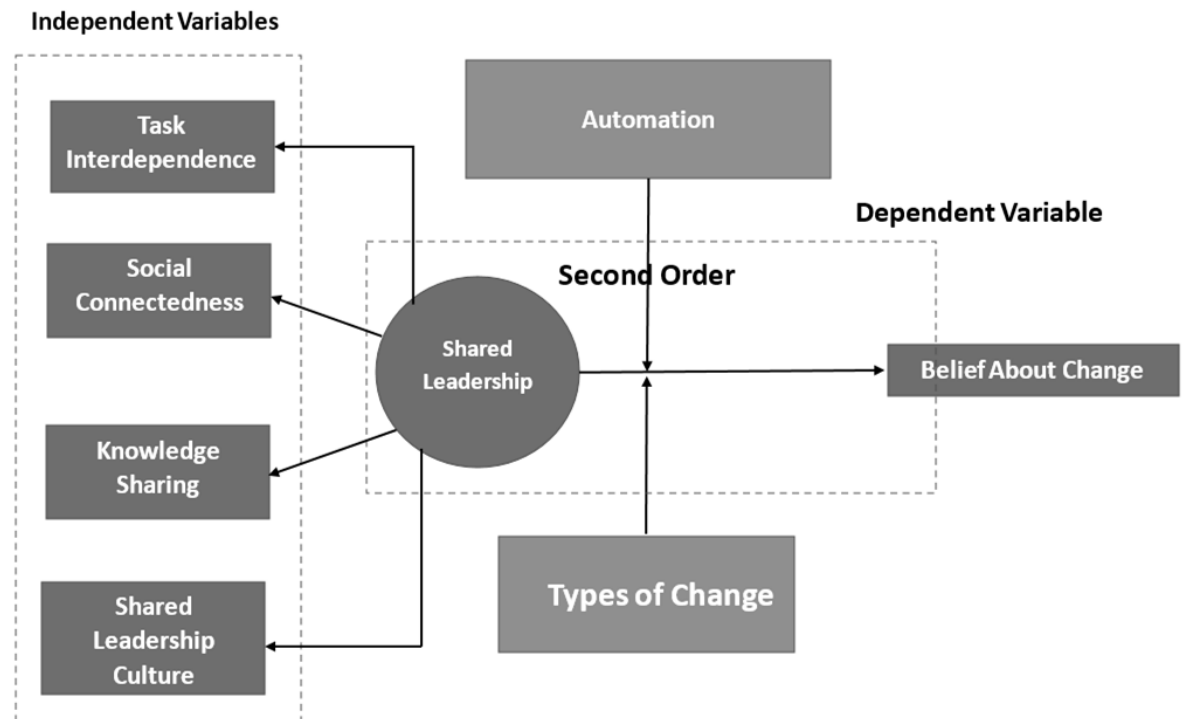
Nodes					
	Name	Sources	References	Created On	
[-]	Change Management Factors		0	0	3/23/2023 3:35 PM
	Change of Organizational Culture		6	13	3/23/2023 3:40 PM
	Implement the Change		6	14	3/23/2023 3:39 PM
	Organizational Change		6	16	3/23/2023 3:36 PM
	Review the Progress and Results		3	14	3/23/2023 3:41 PM
	Vision Crafting and Plan of Change		6	15	3/23/2023 3:38 PM
[-]	Employees Skills and Expertise		0	0	3/23/2023 4:36 PM
	Education		6	7	3/23/2023 5:01 PM
	Knowledge and Experience		6	12	3/23/2023 4:37 PM
[-]	Organizational and Executive Roles		0	0	3/23/2023 3:26 PM
	Active Participation of CEOs		5	10	3/23/2023 4:28 PM
	Central Procurement Department		3	7	3/23/2023 3:28 PM
	Consensus with other departments		4	7	3/23/2023 4:24 PM
	Social connectedness		5	11	3/23/2023 4:32 PM
[-]	Organizational Culture		0	0	3/23/2023 4:54 PM
	Automation Structure		3	6	3/23/2023 4:55 PM
	Avoid Job Leaving		5	8	3/23/2023 5:03 PM
	Industrial Supply		5	7	3/23/2023 4:55 PM
	Industrial Supply		5	7	3/23/2023 4:55 PM
	Positive Working Environment		4	12	3/23/2023 4:46 PM
[-]	Organizational Transformation		0	0	3/23/2023 3:51 PM
	Cost Saving and Time Spending		5	8	3/23/2023 4:30 PM
	Intensity of Change		6	20	3/23/2023 3:52 PM
[-]	Programs and Schemes		0	0	3/23/2023 3:44 PM
	Financial Aids		5	11	3/23/2023 3:45 PM
	Leasing and Mortgage		2	2	3/23/2023 3:45 PM
	Loans for SMEs		3	4	3/23/2023 3:46 PM
[-]	Resistance to Change		0	0	3/23/2023 3:17 PM
	Fear		4	9	3/23/2023 3:18 PM
	Inertia		4	9	3/23/2023 3:18 PM
	Rubbished Data		3	6	3/27/2023 1:15 PM
	Time and Workload		4	11	3/23/2023 3:18 PM
[-]	Shared Leadership Dynamics		0	0	3/23/2023 2:55 PM
	Knowledge Sharing		6	17	3/23/2023 2:58 PM
	Social connectivness		6	12	3/23/2023 2:58 PM
	Task Interdependence		6	16	3/23/2023 2:57 PM

Team Management Attributes		0	0	3/23/2023 3:31 PM
Divisions of Managers		4	7	3/23/2023 3:33 PM
Heterogeneity		4	7	3/23/2023 4:59 PM
Job Description		4	7	3/23/2023 3:58 PM
Leading and Mentoring		6	14	3/23/2023 3:31 PM
Size		3	6	3/23/2023 4:58 PM

Appendix B: Theoretical Model before



Appendix C: Theoretical Model after (Final)



Appendix D: Literature review table (the relationship between SLC and PBC is moderated by the type of change) - Qualitative

Social connectedness	“the feelings of belongingness and affiliation that emerge from interpersonal relationships within social networks.”	1. How far would you go to establish friendship with your teammates? 2. In what way(s) you and your teammates take care of each other’s welfare? 3. In what way(s) your supervisor takes care of his team’s welfare? 4. How far can you and your teammates go while talking about personal matters? 5. Describe your feelings if one of your teammates had to leave the organization for any reason. 6. In what way(s) do you and your teammates extend support for each other? and what usually prompts this?	Developed by the researcher
Knowledge sharing	“a social interaction culture which involves the exchange of employee knowledge, experiences	4 In what way does your organization promote knowledge sharing? (Management support, rewards, or policy). 5 What makes you share knowledge with the others? (trust, personal	(Akosile & Olatokun, 2020)

	and skills through the whole organization”	interaction, personal expectations, willingness to share) 6 What kind of information do you usually exchange with your teammates? 7 Who do you feel more comfortable to exchange knowledge with; same gender, same age, same level, management?	
Fear (job insecurity)	“The subjectively perceived and undesired possibility to lose the present job in the future, as well as the fear or worries related to this possibility of job loss”	3 In what way do you think organizational change triggers feelings of fear among staff?	Developed by the researcher
		4 How do perceptions of being able to protect one’s job via high performance affect reactions to JI?	(Shoss, 2017)
		5 In your opinion, why is organizational change associated with negative expectations?	Developed by the researcher
Inertia	“An opposing force that creates hindrance in organizational processes at individual and	1. How do inertial forces during the different stages of organizational change affect a firm’s dynamic capabilities?	(Mikalef et al., 2020)
		2. Can you describe what challenges you encountered for specific	

	organizational level.”	applications of organizational change.	
		3. How far do you think employees try to observe and learn new concepts to change their thinking and behavior.	(Wang et al., 2021)
Time and Workload (burnout)	“a psychological syndrome that involves a prolonged response to chronic interpersonal stressors on the job”	1. What guidelines did the management provide to clarify your role during the implementation of change? 2. How did the change plan impact the way you have been working? 3. If there were conflicting instructions/processes before and after the change implementation; how did you tackle that? 4. What would you identify as the most rewarding aspect of your work? 5. Pressures of the economy have seen the need for organizational change. How have you experienced this shift? 6. What advice would you offer to a peers/subordinates who come to you saying they can't cope?	Developed by the researcher

		7. How do you handle feeling a sense of hopelessness, like "Why bother? "; "Who cares anyway?"	
Resistance to Change		1. Are absences increasing or people arriving or leaving at different times than before or differently than expected? If yes, why? 2. In what way(s) is the organizational change consistent with your (the leader's) values? 3. How are you measuring change? 4. Did you resist the change and if yes, how? 5. What were the biggest obstacles during the change plan implementation? How did you solve these problems? 6. In your special case: What do you think makes your GSCM approach successful? 7. If a company asked you for advice how to implement GSCM, what would you tell them?	