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Aptoide's Expansion Plan into Japan: Seizing Regulatory Opportunities in the Mobile App Market.

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Master's in International Management

Supervisor: PhD, Renato Telo de Freitas Barbosa Pereira,
Assistant Professor (with aggregation),
ISCTE Business School (IBS)

October, 2024



Department of Marketing, Strategy and Operations

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Abstract

This master's project presents a comprehensive business plan for Aptoide's expansion into the Japanese market. The main objective of this thesis is to formulate the most effective business plan for Aptoide's entry into the Japanese market, thus establishing a competitive advantage in this segment of the industry. In the following chapters, I provide an in-depth study of the Japanese mobile market, exploring the complexities of its regulatory structure, consumer behavior and competitive landscape. Through rigorous analysis and the use of academic sources, I have crafted a business plan that leverages Aptoide's strengths and addresses its unique challenges, positioning the company for sustainable growth and market leadership in Japan's app ecosystem.

The project involves launching AptoideJP, a customized app store tailored to Japanese consumers, alongside a strategic partnership with SoftBank, a prominent local OEM. Aptoide will fund the project, with SoftBank contributing \$500,000, without equity conversion. Financial analysis indicates that AptoideJP is expected to reach break-even within four years and nine months of its launch, with an NPV of \$44,451.92 and the IRR of 2%. The conclusions and recommendations of this project contribute valuable insights to Aptoide's strategy in the Japanese app market, enabling informed decision-making and ensuring successful project execution.

Key Words: Business Plan, Japan, Mobile App-store market, Aptoide, Commercial Agreement, Aptoide-JP

JEL Classification: M10

Resumo

A tese de mestrado apresenta um plano de negócios detalhado para a expansão da Aptoide no mercado japonês. O principal objetivo desta tese é desenvolver um plano estratégico de entrada para a Aptoide no Japão, garantindo uma vantagem competitiva nesse segmento da indústria. Nos capítulos seguintes, é realizado um estudo detalhado do mercado de appstores Japonês, abordando as complexidades da sua estrutura regulatória, o comportamento dos consumidores e o cenário competitivo. Através de uma análise rigorosa e de fontes acadêmicas, foi elaborado um plano de negócios que capitaliza os pontos fortes da Aptoide e tendo em conta os desafios específicos deste mercado, posicionando a empresa para um crescimento sustentável e uma liderança sólida no ecossistema de apps no Japão.

O projeto inclui o lançamento da AptoideJP, uma loja de aplicações personalizada para o público japonês, em parceria estratégica com a SoftBank, um importante fabricante local. A Aptoide será a financiadora do projeto, com a SoftBank a contribuir com \$500.000, sem conversão em participação acionária. A análise financeira indica que se espera que a AptoideJP atinja o ponto de equilíbrio em quatro anos e nove meses após o seu lançamento, com um VAL de \$44.451,92 e uma TIR de 2%. As conclusões e recomendações deste projeto oferecem conhecimento relevante para a estratégia da Aptoide no mercado japonês de apps, promovendo uma tomada de decisão informada e assegurando a execução bem-sucedida do projeto.

Palavras-chave: Plano de Negócios, Japão, Mercado de Apps Móveis, Aptoide, Acordo Comercial, Aptoide-JP

JEL Classification: M10

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Introduction

The COVID-19 pandemic has prompted a significant acceleration in the digitalization of the global economy, turning mobile devices and apps into essential elements in people's daily lives. The need for social distancing and the rise of remote working have boosted demand for technology and digital services like never before. Smartphones have become a daily essential for consumers, and the usage rate (all ages) reached in 2021 the 95.3% in Japan (Japan Fair Trade Commission, 2023). In this scenario, operating systems (OS) and application distribution have emerged as crucial elements in simplifying access to and use of applications that meet the different needs of users.

In the field of mobile applications, where the app store industry has seen unprecedented growth and evolution, Aptoide has carved out a distinct niche as a third-party Android app store. Established in 2011, Aptoide has consistently challenged the conventions of app distribution by providing a friendly ecosystem for developers and end users. Over the years, the app distribution and payment processing platform has gained substantial traction around the world, boasting millions of users and an extensive app repository– “with over 430 million users and 1 million apps”. (Aptoide, n.d.)

Internationalization and increasing market share play vital roles in the growth and expansion of applications. (Cavusgil et al., n.d.) As the company seeks to solidify its global presence, entering new markets, such as Japan, not only broadens its user base, but also enriches its knowledge of the diverse dynamics of the mobile application market. Aptoide must remain alert to the opportunities that arise in the market. Whether in the form of regulatory changes that could open doors to new operators or technological advances that could improve its platform. The ability to adapt the business strategies in response to these market changes is fundamental to maintaining a solid and sustainable competitive advantage in an environment as dynamic as the mobile applications market (Porter, 1991).

Regulatory changes in the Japanese mobile market, exemplified by the Market Study Report on Mobile OS and Mobile App Distribution conducted by the Japan Fair Trade Commission, are defining a more inclusive and competitive landscape for new entrants like AptoideJP (The Japan Fair Trade Commission (JFTC), 2023). These changes represent a substantial advantage as they allow the company to establish a firm presence in a highly developed and technologically advanced market. By removing barriers to entry and promoting the diversification of appstores, regulatory changes create a unique opportunity for Aptoide to highlight its alternative, decentralized, and community-based app store model. Furthermore, by aligning itself with new regulations and adopting compliance best practices, Aptoide can build a reputation for reliability

and security, which are crucial factors in winning the trust of Japanese users, who are known for their emphasis on the quality and safety of technological products (Teece, 2007).

Chapter I: Literature Review

1.1. Mobile Industry: Evolution of the App Store and Mobile Gaming Market

1.1.2. Unraveling the App Store Market Landscape

The mobile industry is experiencing a radical change, driven by the convergence of powerful smart devices and app platforms. (Tiarawut, 2013). This journey began with the iconic iPhone in 2007, offering "personal computer" functionality in a pocket-sized device. These "smartphones," along with their app ecosystems, have become universal in daily life. Unlike traditional phones, smartphones' power lies in their ability to run diverse mobile applications, or "apps." (Rakestraw et al., n.d.). Nevertheless, a major challenge within this app-driven ecosystem is the freemium model. While major app stores offer numerous free downloads, users often hesitate to pay for apps. This presents economic challenges for developers and imposes innovative monetization strategies. Despite these challenges, the mobile app industry has experienced explosive growth. It has empowered people who wouldn't have considered themselves "tech-savvy" to become proficient smartphone users, seamlessly integrating these devices and their essential apps into their lives (Thomas & Devi, n.d.).

The mobile application store has emerged as a key player, transforming the mobile service ecosystem. These digital marketplaces act as intermediaries, connecting app developers with consumers. Enabling developers to reach a wider audience and providing users with a curated and integrated source for mobile apps, appstore serve as "gatekeepers" within this ecosystem, controlling information flows and employing significant influence (Basole & Karla, 2012). This control has raised concerns about potential power disparities and the need for regulatory frameworks to ensure fair competition and consumer protection (Suarez et al., 2009).

The apps-tore industry is characterized to be an oligopoly dominated by the two big payers Apple Store and Google Play. The dominance of the Apple Store segment, claiming over 62.0% of global revenue in 2023, stems from the higher monetization potential of iOS apps through in-app purchases and premium offerings, buoyed by the expanding user base of iPhones and iPads. Concurrently, mobile game spending made substantial revenue contributions. On the other hand, the Google Play store segment led in downloads, with projections indicating continued dominance. The surge in Android smartphone sales, propelled by emerging competitors like OnePlus and Xiaomi Corp., has broadened the Play Store's app ecosystem, ensuring robust growth prospects (Research, 2023).

Asia Pacific emerged as a pivotal market, capturing over 32.0% of revenue share in 2023, fueled by widespread adoption of mobile apps driven by increasing smartphone penetration,

internet accessibility, and a burgeoning middle class. Countries like China, India, and Southeast Asian nations witnessed remarkable app usage growth, especially in e-commerce, gaming, and social media. Moreover, the COVID-19 pandemic accelerated mobile app adoption across the region as digital platforms became indispensable for work, education, and entertainment. Furthermore, government initiatives aimed at fostering competition and curbing app store monopolies are poised to drive market expansion globally, mirroring developments such as the launch of the Digital Market Act in Europe and the enforcement of the Antimonopoly Act in Japan (Mobile Application Market Size, Share & Trends Analysis Report by Store Type, by Application and Region, and Segment Forecasts, 2024 - 2030, 2024).

Apple and Google, major competitors in the mobile app arena, have carved distinct paths through app developer relationships, app availability, and marketplace experiences. Recently, smaller players have entered the scene, creating a dynamic and diverse landscape. With the arrival of numerous third-party marketplaces, the competition expands beyond Google and Apple. These smaller players, often developed by companies with limited resources, cannot directly compete head-on with the giants. Instead, they strategically target specific niches:

- Focus on specific regions or demographics: These marketplaces serve distinct linguistic, cultural, or user preferences not addressed by the larger platforms.
- Highlight specific app categories: Some marketplaces specialize in curated selections of apps for gamers, entrepreneurs, or specific industries, offering a deeper dive within those niches.
- Lower commission fees or innovative payment models: By offering more favorable financial terms or alternative monetization methods, these platforms attract cost-conscious developers and niche-focused users (Basole & Karla, 2012).

The presence of niche players provide dynamism and accommodate to diverse user preferences. While Google and Apple remain dominant forces, these smaller platforms provide valuable alternatives for developers and users. The future of the mobile app marketplace is likely to see continued competition and innovation, with players of all sizes carving out their unique spaces in this ever-evolving ecosystem. (Rakestraw et al., n.d.).

1.2.1. The Rise of Mobile Gaming: Exploring Market Expansion

Global and accessible, smartphones have become a convenient gaming platform. Compared to dedicated consoles or PCs, they offer a more readily available and affordable option, attracting both dedicated and casual gamers. The release of Snake on Nokia feature phones in 1997 ignited widespread interest in mobile gaming, revealing the potential of these devices for entertainment. Today's mobile devices, particularly smartphones, offer diverse connectivity options like infrared, Bluetooth, Wi-Fi, and 3G, facilitating wireless multiplayer experiences for numerous participants

(Mobile Application Market Size, Share & Trends Analysis Report by Store Type, by Application and Region, and Segment Forecasts, 2024 - 2030, 2024).

The mobile gaming market is segmented into three key categories: monetization type, platform, and geography. Monetization type refers to how games generate revenue. The most prevalent method is in-app purchases (IAPs), where players can download and play the game for free but have the option to buy additional features or items within the game. This free-to-play model is projected to grow the fastest and hold the largest market share, driven by a strategy of attracting "whales" – players who make significant IAP spending. Another significant monetization type is advertising. Hyper casual games, known for their simple mechanics and short playing sessions, often rely heavily on ad revenue generated within the app. Balancing the presence of advertisements with maintaining a positive user experience is crucial for successfully monetizing through ads. Finally, a smaller portion of the market consists of paid apps, where users pay a one-time upfront fee to access and play the full game (Roessel, 2022).

The market is further segmented by the platform on which the games are played. iOS, with its large user base exceeding 1 billion active iPhones and popular high-grossing games like Clash Royale and Candy Crush Saga, is predicted to generate the highest revenue amongst the different platforms. Android, on the other hand, is expected to witness the fastest growth due to its wider reach, boasting over 2.5 billion active users globally and a large app library featuring nearly 478,000 mobile games as of 2021 (Mobile Application Market Size, Share & Trends Analysis Report by Store Type, by Application and Region, and Segment Forecasts, 2024 - 2030, 2024).

The global mobile gaming market size reached USD 100.54 billion in 2024 and is projected to reach USD 164.81 billion by 2029, growing at a compound annual growth rate (CAGR) of 10.39%. This growth is partly attributed to the positive impact of the COVID-19 pandemic on the industry, as mobile games offered entertainment and social connection during lockdown periods. The presence of app stores like Google Play Store and Apple App Store further empowers the industry. These platforms facilitate game distribution and monetization for developers, granting them access to a vast user base through which they generate revenue via in-app purchases and advertisements (Mobile Gaming Market Insights, n.d.).

The industry is characterized by high fragmentation. This means there is a large number of players, including well-known companies like Tencent Holdings, Nintendo, Activision Blizzard, Zynga, and GungHo Online Entertainment. North America dominates the market share due to its established gaming culture and high smartphone penetration. At the same time, the Asia-Pacific region is expected to witness significant growth due to a surge in smartphone sales, holding China Mobile Gaming the largest market share and India Mobile Gaming being the fastest-growing market in Asia-Pacific region with 703 million users in 2023 (Mobile Gaming Market Insights, n.d.).

The future of mobile gaming radiates with promise, fueled by a multitude of positive trends. The burgeoning young demographic, equipped with widespread smartphone access, ignites the market's growth. Additionally, continuous advancements by manufacturers contribute to enhanced device performance, superior graphics, and an overall better user experience for mobile gaming. While challenges like user privacy concerns and regulatory hurdles persist, the industry's long-term prospects remain encouraging (Żarkiewicz, 2024).

Technological innovations such as Augmented Reality (AR) and Virtual Reality (VR) experiences, driven by improved internet connectivity and advancements in gaming technology, are already pushing boundaries and offering exciting possibilities. These, along with diverse revenue models comprising in-app purchases, paid apps, and in-app advertisements, depict a mobile gaming environment full of opportunities for further development and innovation. (Research, 2023).

1.2. Bridging Borders: Internationalization Opportunities in a Globalized Landscape

The inevitability of companies venturing into the global market stems not only from limitations within domestic markets but also from the predominant forces of globalization, which pose threats to domestic market shares from foreign competitors (Bartels, Buckley, & Mariano, 2009). Several key factors impel globalization and incentivize enterprises to pursue business development and growth through international and global operations. These factors include political shifts, technological advancements, the international business climate, market expansion, cost considerations, and heightened competition (K. Ristovska & Ristovska, 2014). The globalization of markets and the integration of international business have rendered the internationalization of companies imperative for maintaining a competitive edge and sustaining growth (Sekliuckiene & Maciulskaitė, 2013). These shifts in the international business landscape have given rise to the phenomenon of "born global" companies, companies that embark on international ventures early in their lifecycle, underscoring the significance of international activities and strategic decision-making in today's business world.

Born global companies challenge the conventional notion that internationalization should occur gradually after establishing a strong foothold in the local market. Instead, they embark on a trajectory of rapid expansion beyond their home country shortly after inception. This approach, characterized by dynamism, technological expertise, entrepreneurship, and flexibility, enables them to outpace traditional competitors and seize opportunities in international markets (Sekliuckienė & Maciulskaitė, 2013).

According to Hagen et al. (2012), these companies, exhibit several key characteristics:

- Early and rapid internationalization: According to Saarenketo et al. (2004), born global companies typically emerge as smaller entities, often founded by entrepreneurs or with limited employee numbers. Despite resource constraints, they establish themselves in smaller, niche markets and swiftly expand into foreign markets within the first three years of domestic establishment.
- Niche orientation: In contrast to traditional firms, born global companies are known for their specialized and niche-focused approach. They offer unique and innovative products, which may be tailored to specific customer needs or standardized for broader appeal (Dib et al., 2010; Freeman et al., 2012).
- Entrepreneurship: Born globals reveal distinct entrepreneurial characteristics, marked by an orientation towards global markets, proactive risk-taking behavior that transcends national borders, and a high level of technical expertise. This entrepreneurial orientation enables them to develop processes, practices, and decision-making activities that facilitate successful entry into foreign markets (Knight and Cavusgil, 2004; Roudini and Osman, 2012). Managers of such firms emphasize the importance of proactive and innovative approaches to operating in international markets, enhancing their ability to navigate foreign environments and capitalize on strategic opportunities for international success.

These companies are particularly pronounced in technology-based industries and across sectors influenced by the emergence of new technological platforms. Such transformations instigate innovations in both products and processes, imposing innovative strategic approaches. These strategies aim to capitalize on the synergies between early and rapid internationalization and innovation, thereby harnessing the opportunities presented by this intersection (Onetti et al., 2010). According to a study of Lithuanian born global in information technology (IT), IT companies typically commence their operations immediately upon establishment, with many venturing into cross-border activities early on - 32 percent initiate international activities right from the outset of their establishment., before the first year of establishment (Onetti et al., 2010). Before entering international markets, these companies undertake market research and selection processes, facing challenges such as financial constraints, lack of international experience, and cultural stereotypes. Embracing such collaborations helps them to increase value and reduce time and financial resources (Knight & Cavusgil, 2004).

1.2.1. Unlocking Global Growth through Strategic Business Model Innovation

Decision-making in this realm, as highlighted by Brouthers and Hennart (2007), demands meticulous scrutiny and precision, coupled with clever strategy formulation. The business models

adopted by these firms must adapt to the geographical dimensions imposed by globalization and the emergence of global technology markets (Onetti et al., 2010).

The concept of business model innovation has gained prominence in contemporary discourse. It emphasizes originality, strategic vision, and innovative approaches to defining and delivering value propositions to customers through novel business models (Johnson et al., 2008). Rapid technological advancements during this period prompted significant shifts in competitive dynamics across various industries, rendering traditional business models inadequate for the internet era (Viscio & Pasternack, 1996). The business model, acting as a strategic enabler, facilitates the implementation of a company's strategy. It encompasses three key dimensions: the "focus," "locus," and "modus" of company activities (Onetti et al., 2010). The "focus", the activities which provides the basis of the firm's value proposition, the "locus", the location or locations across which the firms resources and/or value adding activities are spread and the "modus" of the business, the modus operandi or business modes with regards to the internal organization and the network design.

Moreover, business model decisions dictate the role a company assumes within its network, thus shaping its strategic position and operational approach (Onetti et al., 2010). Particularly for new technology-based firms, effective business model design is paramount for survival and success, as it dictates core activities, investment focus, location decisions, and relationships with other stakeholders (Johnson et al., 2008). Active monitoring of the business environment and collaboration with partners are essential for maintaining market position, fostering innovation, and facilitating successful internationalization (Sekliuckiene & Maciulskaitė, 2013).

1.3. Market Entry Taxonomy for Technology Companies

In the initial stages of internationalization, decisions regarding market access, entry, and operational methods are crucial for efficiency and market integration (Slotte-Kock & Coviello, 2010). Regarding scale, various potential indicators are utilized to evaluate and gauge the market's attractiveness. Some indicators stem from macroeconomic trends, while others are derived from consumer behavior and cultural insights. When selecting markets for a specific product, the metrics to be considered should be tailored to the product itself and how local consumers engage with and perceive it. A company might contemplate entering a country renowned for being a trendsetter in the industry. For instance, Kodak re-entered the digital camera market in Japan precisely due to its status as an industry trendsetter (Entry Strategies for International Markets, n.d.).

When determining the method of market entry, the level of market openness, often reflected in institutional barriers, becomes a significant consideration. Government regulations and

bureaucratic hurdles can greatly limit the available entry mode options. Competitive pressures also play a pivotal role in shaping the preferred entry mode, alongside cultural factors such as national or cultural distance (Robles et al., 1988). Internally, a company's engagement in international transactions entails assuming inherent expenses and risks, necessitating careful analysis by the management in relation to the anticipated benefits. These costs primarily encompass production expenses required to adapt products to meet international market demands, as well as organizational overheads associated with establishing specialized departments for foreign trade activities (Robles et al., 1988).

Evaluation of alternative entry modes may prompt revisions in target markets. Subsequent to operational commencement, deviations in market performance may trigger revisions across any or all of the initial strategic elements. In essence, international market entry planning is an ongoing, iterative process- “the wide variation in the year of entry, in the scale and mode of entry and in the extent of standardization, indicates that this does not imply a mere copying of the most popular pattern rather, industry rules suggest different entry decisions contingent on external (host market attractiveness) and internal (firm’s specific resources) conditions.” (Handbook of Marketing Strategy, n.d.).

CHAPTER II: Methodology

In line with what is intended to be analyzed in this project, it is essential to choose the strategy that best achieves the objectives of this research project to succeed. This chapter describes the applied research method used for the data collection, the data collection process, the data analysis, and the explanation and choice of the sample.

2.1. Data Collection and Treatment

To obtain all the necessary information to support the business plan, both primary and secondary data was collected. The use of primary data collection methods involves gathering firsthand information directly from the focus group, while secondary data refers to existing data that has been collected by other sources.

For primary data, namely focus groups, were used to facilitate the gathering of information on the feasibility of Aptoides' expansion into the Japanese mobile application market. The choice of a qualitative methodology is justified by the need to gain a deeper understanding of the underlying factors that may have an impact on the success of this expansion, especially in a complex and diverse environment such as the Japanese market (Soklaridis, 2009).

Focus groups are a valuable tool for collecting qualitative data, as they allow participants to interact, share perspectives and reveal insights that are not easily obtained through quantitative methods– “the most unique characteristic of focus group research is the interactive discussion through which data are generated, which leads to a different type of data not accessible through individual interviews.” (Hennink, 2014).

The focus groups will be held in sessions to ensure an environment favorable to open discussions and the exchange of opinions between participants. The strategic choice of diverse participants, including Japanese mobile industry experts, and Aptoide members, aims to capture a variety of perspectives that will enrich the qualitative analysis. This information will help take future decisions, enabling the development of a more targeted and appealing offering that meets customers' expectations.

The collection of qualitative data through focus groups will be complemented by secondary data collection, content analysis of the transcribed data, identifying patterns, and insights that will form the basis for formulating strategies for Aptoides' entry into the Japanese market.

Lastly, the collected data will be interpreted and treated so that conclusions can be drawn in what concerns this project's viability, mainly by resorting to a set of different indicators, such as Net Present Value (NPV), Internal Rate of Return (IRR) and Payback Period (PP). This approach allows for an in-depth exploration of the complexity of the market and provides a solid basis for strategic decisions related to Aptoide's international expansion (Silva et al., 2014).

CHAPTER III: External Analysis: Japanese Mobile App distribution market

3.1. PEST analysis

3.1.1. Political context

Japan's journey towards digital transformation has been marked by a notable delay compared to its global counterparts. The COVID-19 pandemic acted as a powerful catalyst, exposing Japan's digital shortcomings as it struggled to swiftly deploy technological solutions in response to the crisis. Issues such as inefficiencies in data collection within the health ministry and delays in aid distribution at the local government level underscored the urgent need for digital advancement. This revelation prompted a concerted effort between the public and private sectors to bridge the digital gap.

In response to this imperative, the Japanese government has launched a series of initiatives aimed at spearheading the nation's digital transition, such as “Society 5.0” and “Digital Japan”. By prioritizing digitalization, high-tech, and deep-tech solutions, the government seeks to develop robust policies, infrastructure, and e-government services. Simultaneously, the private sector faces a huge pressure to embrace digitalization to maintain competitiveness in a rapidly evolving landscape. Businesses across industries are urged to proactively adapt, leveraging innovative technologies to enhance operational efficiency and customer experiences. This collaborative effort between the public and private sectors underscores Japan's commitment to positioning itself for success in the digital era (Broeckeaert, 2022).

In 2023, the Japan Fair Trade Commission (JFTC) decided to conduct a market study into the mobile Operating System (OS) market and the app distribution service market to understand the market structure such as the status and share of enterprises, and to learn if there is a competitive pressure such as the degree of substitutability between mobile OSs and app distribution channels. The mobile ecosystem, encompassing the smartphone device, mobile operating system, app store, and native apps, forms a complex multi-sided market in Japan. Participants such as consumers, mobile OS providers, app store operators, app developers, and smartphone manufacturers interact within this ecosystem, each playing integral roles in its functioning. In Japan, consumers typically choose between two dominant mobile ecosystems: the Android and the iOS-centric ecosystem.

Native apps, designed to operate on specific mobile OS platforms, are primarily accessed through app stores, where they undergo rigorous review processes to ensure compliance with quality, security, privacy, and other standards. Google's Google Play serves as the primary app store for Android devices, with the option for users to install alternative app stores. Conversely,

Apple's iOS devices exclusively utilize the pre-installed App Store, prohibiting the installation of alternative app stores. Additionally, Apple mandates the use of its "WebKit" browser engine for iOS, while Google's Android imposes no such restrictions.

Access to smartphone functions and data for apps and related products like smartwatches relies on application programming interfaces (APIs) provided by mobile OS providers. As such, these providers wield control over such access, influencing the capabilities and features of apps within their ecosystems. Statistically, Android devices hold a 53.4% share, while iPhones (iOS) account for 46.6% based on device usage in 2022. However, in terms of market share based on page views, iOS dominates with 67.11%, leaving Android with 32.76% as of December 2022. Examining app store sales, the ratio of Google Play to App Store sales stood at approximately 4 to 6 in 2021. Given the restriction on alternative app stores for iOS, the App Store's share within the iOS ecosystem remains at 100%. Conversely, Google Play enjoys a dominant position within the Android ecosystem, capturing a staggering 97.4% share according to consumer surveys. This landscape underscores the significant influence wielded by mobile OS providers and app store operators in shaping the mobile app distribution market in Japan (The Japan Fair Trade Commission (JFTC), 2023).

The Japan Fair Trade Commission conducted an examination of competitive pressures on Google Play and the App Store, the two dominant app distribution channels for consumers accessing digital content and services on their smartphones. However, the JFTC found that there are no significant effective competitive pressures present in the current landscape. The analysis is as follows:

The JFTC determined that there is little differentiation between the native apps and content available on Google Play and the App Store in terms of variety and pricing. Additionally, app developers often provide their apps to both app stores, further reducing the incentive for consumers to switch between platforms. As a result, there is no meaningful competition between Google Play and the App Store: (i) Other app stores face limitations, particularly on iOS devices, where users are restricted from installing app stores other than the App Store. On Android, alternative app stores lack the breadth and quality of apps available on Google Play, and their user base remains limited. Therefore, these alternative app stores do not pose a significant competitive threat to Google Play; (ii) Side-loading, a method of installing apps bypassing official app stores, is not permitted on iOS devices. While possible on Android, side-loading is not widely adopted due to additional setup requirements, friction which lead consumers to prefer to download apps from "official" app stores; (iii) Web services, particularly web apps accessed via browsers, are not considered a viable alternative to native apps by consumers. App developers also have less incentive to develop web apps as substitutes for native apps. Hence, web services via browsers do not exert effective competitive pressure on Google Play and the App Store (The Japan Fair Trade Commission (JFTC), 2023).

This lack of competition raises concerns regarding the potential for exclusionary practices and unfair treatment of app developers. While some competition exists in the app market and related smartphone sectors, Google and Apple may engage in exclusionary self-preferencing due to their market dominance. This behavior could manifest in various ways, such as restricting competitors' access to smartphone functions, disadvantaging rival apps in app store rankings, or leveraging user data collected from other developers' apps to benefit their own offerings. Additionally, actions like preventing the uninstallation of pre-installed apps or complicating settings to change defaults may influence consumer choices unfairly – “conduct causing unjust disadvantage to the contracted party” (The Japan Fair Trade Commission (JFTC), 2023).

To foster a healthier competitive landscape in the mobile OS and app distribution service markets, and to supplement the enforcement of the Antimonopoly Act (AMA), the implementation of the following three measures in terms of competition policy is crucial. While it is preferable for Google and Apple to voluntarily adopt these measures, enshrining them in law may be necessary to ensure their effectiveness.:

- **Prevention of Self-Preferencing in the App Market and Other Smartphone-Related Markets:** This measure aims to curb any discriminatory practices by dominant players like Google and Apple that prioritize their own products or services over those of competitors. By prohibiting self-preferencing actions, such as privileging their own apps in search results or app store rankings, fair competition can be preserved, allowing all developers and businesses equal opportunity to compete on merit.

- **Ensuring a Healthy Competitive Environment in the Mobile OS Market and the App Distribution Service Market:** Creating and maintaining a robustly competitive environment within these markets is essential to prevent monopolistic behavior and promote innovation. This measure involves measures to facilitate the entry of new competitors, encourage diversity among app distribution channels, and ensure fair and transparent access to essential services and resources within the mobile ecosystem.

- **Ensuring Fairness in Rule-Making for the Mobile Ecosystem:** Establishing fair and transparent rules governing the mobile ecosystem is vital to prevent undue influence or manipulation by dominant players. By ensuring that rules and policies are developed through a collaborative and impartial process, with input from all stakeholders, including app developers and consumers, fairness and equity can be upheld throughout the industry.

Furthermore, in anticipation of the emergence of new ecosystems centered around products or services beyond smartphones, the JFTC closely monitors related trends and conducts market studies as needed to address issues concerning the Antimonopoly Act (AMA) and competition policy, with a focus on safeguarding consumer interests. Additionally, competition authorities worldwide are increasingly attentive to the global business activities of digital platforms. To foster

a competitive environment, the JFTC collaborates with counterparts in other countries and regions, leveraging platforms such as the Organization for Economic Cooperation and Development (OECD) and the International Competition Network (ICN) to facilitate ongoing dialogue and cooperation with relevant overseas authorities (The Japan Fair Trade Commission (JFTC), 2023).

3.1.2. Economic Context

Japan is one of the largest and most developed economies in the world. It has a well-educated, industrious workforce and its large, affluent population makes it one of the world's biggest consumer markets. Japan's economy was the world's second largest (behind the US) from 1968 until 2010, when it was overtaken by China. Although the economy weakened late in the year, real GDP grew 1.9% in 2023, improving on 2022's 1.0% expansion. In nominal terms, Japan's GDP was worth 591.482 trillion yen (Fujikawa & Ochoa, 2024).

The Japanese market economy stands out as a unique blend of private enterprise and government involvement. While its core features align with other market economies – private businesses dominating production, consumer-driven output, and prices influenced by supply and demand – Japan's system incorporates a more nuanced approach. Unlike some stricter market economies where government intervention is minimal, Japan's government plays a more active role. This includes fostering long-term industrial strategies, promoting advancements in technology, and maintaining a social safety net for its citizens. This approach creates a distinct balance between market forces and government guidance, often referred to as a "coordinated market economy" (The Japanese Government and the Economy: Twenty-First Century Challenges - Association for Asian Studies, 2023).

With its phenomenal economic revival from the ashes of World War II, Japan was one of the first Asian countries to climb the value chain from cheap textiles to advanced manufacturing and services – which now account for the majority of Japan's GDP and employment. Primary industries, including agriculture, account for just 1 per cent of GDP. Manufacturing has been the most remarkable, and internationally renowned, feature of Japan's economic growth. Today, Japan is a world leader in the manufacture of electrical appliances and electronics, automobiles, ships, machine tools, optical and precision equipment, machinery and chemicals. In recent years, however, Japan has ceded some economic advantage in manufacturing to China, the Republic of Korea and other manufacturing economies. Japanese firms have countered this trend to a degree by transferring manufacturing production to low-cost countries. Japan's services sector, including financial services, now plays a far more prominent role in the economy, accounting for about 75 per cent of GDP (AsialinkBusiness, n.d.).

International trade contributes significantly to the Japanese economy, with exports equivalent to approximately 16 per cent of GDP. Key exports include vehicles, machinery and manufactured goods. In 2015-16, Japan's major export destinations were the United States (20.2 per cent), China (17.5 per cent) and Republic of Korea (7 per cent). Despite a weaker yen because of stimulatory economic initiatives, export growth remains sluggish (AsialinkBusiness, n.d.). Japan has few natural resources and its agricultural sector remains heavily protected. Japan's main imports include mineral fuels, machinery and food. In 2015, leading suppliers of these goods were China (25.6 per cent), the United States (10.9 per cent) and Australia (5.6 per cent). Recent trends in Japanese trade and foreign investment have reflected a much greater engagement with China, which overtook the United States as Japan's largest trading partner in 2008 (AsialinkBusiness, n.d.).

However, Japan has been facing structural challenges, especially regarding its ageing society and shrinking population. Since 2012, Japan has adopted a three-pronged strategy, widely known as Abenomics, which comprises an expansionary monetary policy, a flexible fiscal policy and structural reforms in the economy to reinvigorate the economy. Prime Minister Fumio Kishida, since assuming office in October 2021, has promulgated the "New Capitalism" plan to invest in human capital, technology and innovations, start-ups green and digital initiatives to support a long-term sustainable growth (HKTDC Research, n.d.).

Although Japan enjoyed a boost following the end of the country's Covid restrictions in the first half of 2023, this turned negative in Q3 2023 when its economy contracted by 2.9% year on year. This followed lower than expected growth of 3.6% in Q2, which was largely ascribed to the weakening consumption and business spending triggered by the accelerating economic uncertainties regarding inflation and the weakening global economy. Overall, the IMF expects the Japanese economy to have grown by about 2% in 2023, with a 1% increase anticipated for 2024. Throughout this period, the Japanese Government is expected to maintain its supportive fiscal policies as it looks to bolster investment, implement structural reforms and prioritize economic growth. It is also anticipated that the Bank of Japan may end its ultra loose monetary policy in the short term in a bid to rein in the elevated inflation stemming from the weakened yen (HKTDC Research, n.d.).

The government has unveiled a significant fiscal package, amounting to approximately 17 trillion yen (about US\$117.7 billion), aimed at offsetting the impact of inflation on purchasing power. This package includes temporary tax cuts and fuel subsidies. However, it is anticipated that inflation moderation and accelerating wages will support a stronger economic recovery by the latter half of the year (Wolf, 2024).

Export growth may decelerate as global demand diminishes, despite motor vehicle exports experiencing a surge. Factors contributing to this surge include the end of the US autoworkers'

strike, increased operating costs in Europe, pent-up demand for automobiles following supply disruptions, and a weakening yen. Although Japan's inflation remains above the 2% target, driven primarily by rising food prices, services inflation is also on the rise. While Japan's inflationary trend lags that of the United States and Europe, the BoJ has yet to adjust its negative interest rate policy, maintaining its position as the only central bank to do so (U.S Commercial Service & Global Edge, n.d.).

Monetary policy adjustments are expected in 2024, with hints of potential rate hikes to combat persistent inflation. However, sustained wage growth is crucial to avoid suppressing inflation. Despite positive wage growth in certain sectors, real cash earnings have fallen. The trajectory of wage growth may shift during the spring wage negotiations, but concerns linger regarding the sustainability of Japan's high government debt. Imbalances in the economy, including high inflation amid low wage growth, are expected to constrain growth in the near term (Wolf, 2024).

Without significant wage growth, domestic demand may struggle, while limited foreign demand and higher interest rates pose challenges to government stimulus efforts. Thus, the path to a stronger economic recovery in Japan hinges largely on the outcome of wage negotiations and the ability to address underlying economic imbalances effectively. However, its large and affluent consumer base remains a major strength, making it an attractive market for businesses worldwide (U.S Commercial Service & Global Edge, n.d.).

3.1.2.2. Japanese mobile app market

Japan stands out as one of the largest and most active mobile app markets globally, witnessing a steady rise in smartphone and mobile internet usage. With 85% of the population using smartphones in 2022, this figure is projected to climb to 94% by 2027. The year 2022 saw a staggering total of 2.4 billion mobile app downloads, highlighting Japan's app market as a hub of innovation amid intense competition. Notably, Japanese users exhibit a penchant for in-app purchases, ranking behind only China and the U.S. in contribution to the app economy. This trend is expected to persist, with app consumer spend in Japan forecasted to exceed \$17.7 billion by 2023, as reported by data.ai. This remarkable growth and sustained high adoption rate underscore the Japanese app market's adaptability and ongoing evolution (Mobile App Trends 2023: Japan Edition, n.d.).

The app market experienced fluctuations in the aftermath of the global COVID-19 pandemic. Despite an acceleration in 2021, consumer spending declined to \$167 billion in 2022. However, in 2023, the trend shifted, with the first quarter witnessing a notable 7% increase compared to the Q4 2022 average, with an annual app spending of \$171 billion (Statista, n.d.-b) – “The Japanese mobile app economy has shown remarkable resilience and is making a strong recovery from the

challenges of the past year, with impressive growth in consumer spending in 2023. As the industry continues to grow and user behavior shifts, building strong partnerships, leveraging innovative technologies, and staying ahead of industry trends are key factors for unlocking tremendous growth opportunities”. - Toby Torri, Territory Director Japan (Mobile App Trends 2023: Japan Edition, n.d.).

In the app market, the gaming section has emerged as a dominant force, witnessing significant growth in both downloads and revenue over recent years. Projections suggest that this trend will continue to surge until 2027 (Statista, n.d.). Mobile games consumer spending in Japan is projected to exceed \$12.6 billion annually by the end of 2023. With over 70 million mobile gamers, Japan stands as one of the largest markets for mobile gaming globally. A survey conducted in July 2022 revealed that 65% of Japanese smartphone users engage in gaming daily, while 92% play games at least once per week. Japanese gamers lead globally in monthly spending, with iOS users spending \$10.30 per device and Android users ranking second at \$9.80 per device in 2022 – “The mobile gaming industry in Japan is experiencing a surge in adoption and monetization in 2023, fueled by the pandemic-driven demand and the availability of diverse payment options.” (Mobile App Trends 2023: Japan Edition, n.d.).

RPGs reign supreme in Japan, across mobile, console, and PC platforms, capturing 13% of gaming revenue in 2022 and attracting 77.1 million players. While RPGs dominate, other genres like hyper casual, adventure, and puzzle games vie for attention. Despite a 22% decline in mobile gaming installs in 2022, January 2023 witnessed a 30% increase over the 2022 average, signaling a rebound. Notably, Japan experienced a 12% surge in installs in Q1 2023 compared to Q4 2022, outpacing global trends. According to Statista's analysis, mobile app revenue is primarily generated through three sources: in-app purchases leading the pack, followed by advertising and paid apps (Statista, n.d.; Mobile App Trends 2023: Japan Edition, n.d.)

3.1.3. Social Context

Japan is the fastest-aging country in the world. Labeled as a “super-aged society,” Japan has an estimated 37.5 million people (or about 29.8% of its population) aged 65 and over in 2021 (Lubman, 2023). The combination of high life expectancy and low fertility rates leads to a dramatically decreasing population. There are few reasons for the aging population problem that the country is facing. First, Japan has one of the lowest birth rates in the world, which means that there are fewer young people being born to replace the aging population – “As of 2020, Japan has a total fertility rate of 1.4, one of the lowest birth rates in the world (...) not been able to fulfill the level needed to sustain a country’s population of 2.1 children per woman”. This has resulted

in a shrinking¹ population and an increasing proportion of elderly people. Second, Japan also has one of the highest life expectancies in the world, with people living well into their 80s and 90s. While this is a positive development in many ways, it also means that the elderly population is growing rapidly, which places a strain on social services and healthcare systems. Third, an aging population can have a significant economic impact on a country. As the elderly population grows, there are fewer working-age people to support them, which can lead to a decrease in economic productivity and an increase in healthcare costs. In Japan, this has resulted in a shrinking workforce and a labor shortage in some industries (Wada, 2015).

This demographic shift has significant implications for digital adoption. A growing segment, particularly younger generations, are comfortable with technology and utilize it extensively in their daily lives. However, a significant portion of the older population may be less familiar with digital tools. This creates a "digital divide" within Japanese society. Despite this disparity the global COVID-19 pandemic has accelerated the digitalization of the economy. Essential services have swiftly transitioned online, with smartphones emerging as the primary access point for digital content and services. The surge in smartphone usage rates, as highlighted by the "FY2021 Survey Report on Usage Time of Information and Communications Media and Information Behavior," underscores the pivotal role of smartphones in Japan's digital landscape- "the smartphone usage rate (of all age groups) has increased significantly from 32.0% in 2012 to 95.3% in 2021. Furthermore, the time spent on smartphones has seen a remarkable increase, with the average daily usage rising from 37.6 minutes in 2012 to 110.0 minutes in 2021 on weekdays and from 53.7 minutes in 2013 to 126.8 minutes in 2021 on weekends. This growing reliance on smartphones emphasizes the critical importance of mobile operating systems and app distribution channels, such as app stores, in facilitating access to a diverse array of digital products and services (Paschaline et al., 2023).

With an internet penetration rate stood at 82.9% and 92.00 million social media users in Japan, the country preferred social media platforms are LINE followed by Youtube, Twitter and Instagram. LINE, a Messaging apps boats over 94.0 million MAU (monthly active users), which is more than 74.4% of Japan's total population. Social media platforms like Instagram and Twitter are also popular, particularly among younger demographics, fostering self-expression and social engagement, with Twitter to stand out with a potential advertising reach of 67.45 million, which is about 54.6% of total population, used for both private and business purposes. With a wide range

¹ "Shrinkanomics" is a term coined by Gee Hee Hong and Todd Schneider to describe the troublesome economic development in Japan over the last couple of decades due to its shrinking population.

of content genres, Youtube is characterized by high usage rates among people of all generations, as it is free and easily accessible – “The potential reach of advertising is 78.4 million, covering 70.7% of the population aged 18+(1)” (Japan’s Top Social Media Platforms in 2023, n.d.).

Delving into Japan's mobile gaming landscape. Demographically, Japan presents a balanced market, with a near-even split between male and female players, standing at 53% and 47% respectively. Notably, 54% of female gamers engage with mobile games on five or more days per week, underscoring the significant role of women in Japan's gaming sphere. Moreover, Japanese mobile gamers dedicate the longest average weekly time to gaming compared to other Asian countries, logging nearly 6.7 hours. In terms of Average Revenue Per User (ARPU), Japan ranks among the highest globally, boasting an impressive \$199.05 per mobile gaming user this year. Japanese consumers exhibit a preference for Apple iPhones, with 61% of gaming apps tracked by Adjust in Japan being iOS-based. Platform preferences vary across subvertical, with iOS dominating adventure games (90%) while Android leads in puzzle games (60%). Despite fluctuations, gaming apps maintained a steady number of partners, with action, adventure, and hyper casual games leading the trend (Janssens, 2020).

Japan distinguishes itself further with its exceptional user retention rates. With the highest percentage of paying users beyond the 90-day mark and superior Day 7 retention rates compared to the US, China, and South Korea, Japan stands out as a prime market. This unique position grants mobile gaming brands access to high-quality users with robust spending habits and heightened loyalty, resulting in prolonged profitability. In essence, acquiring Japanese users translates into sustained and lucrative returns for mobile gaming companies (Janssens, 2020).

A deep understanding of Japanese culture is fundamental to crafting successful apps. Prioritizing security and privacy, along with robust data protection measures, resonates strongly with Japanese users – “In Japan, many users cite “assurance of sufficient security”, “purpose of data usage” and “appropriate data handling method” as important points of consideration when providing personal data to platformers.” (Ministry of Internal Affairs and Communications, 2023). Respectful communication is also crucial. Apps that facilitate polite interactions and avoid overly direct language features are more likely to be embraced by Japanese users. Finally, localization is essential. Japanese culture is incredibly rich and diverse, which is one of the reasons it’s gained so much popularity around the world. What this means is that you’ll need to make sure your campaigns are tailored to Japan’s unique culture. Localization doesn’t simply mean translation, it means culturally relevant design, user interfaces adapted to local payment methods, and features catering to specific preferences are key tools for success in the Japanese mobile app market (Janssens, 2020).

3.1.4.1. Technological context

Throughout history, Japan has maintained its leadership in mobile technology, renowned for its innovative wireless applications and pioneering next-generation standards. Since the inception of Nippon Telegraph and Telephone's (NTT) inaugural mobile telecommunications network in 1979, Japanese companies have consistently introduced groundbreaking innovations (Oshima, n.d.). From pioneering mobile email and internet technology with i-mode to revolutionizing handheld devices with built-in cameras and introducing the concept of the mobile wallet, Japan's contributions have shaped the global mobile landscape. This era of innovation coincided with a remarkable surge in mobile penetration in Japan, soaring from 11 percent to an impressive 84 percent between 1996 and 2008, establishing a thriving ecosystem centered on mobile network operators (MNOs) (Broeckaert, 2022).

In addition to its groundbreaking innovations, Japan's telecom manufacturers and operators have been at the forefront of developing customized offerings and mobile network standards, diverging from global collaborations. A prime example is i-mode, a resounding success domestically that failed to gain traction overseas, showcasing Japan's penchant for domestic innovation. However, Japan's insular approach to standards development may now hinder its ability to maintain global leadership and adapt to the escalating demands on mobile networks. Pioneering proprietary standards, rather than collaborating internationally, has led to a somewhat fragile ecosystem, compounded by capacity and usage constraints resulting from densely populated cities and high mobile penetration rates (Nicholas, 2011).

The landscape of network equipment has witnessed significant disruption from global competitors, with many domestic companies exiting the market. Notably, the decline in Japanese mobile handset manufacturers has been stark, with Mitsubishi, NEC, Sanyo, and Toshiba exiting the market by 2016, and Fujitsu reportedly preparing to offload its mobile handset business in 2017. Despite Japan's large domestic market and operator-specific devices, most manufacturers have struggled to gain traction overseas. Consequently, international handset manufacturers have rapidly gained market share in Japan, relegating Japanese manufacturers to just 31 percent of the domestic market by 2016 (Broeckaert, 2022).

Despite these challenges, Japan's three major telecom operators - KDDI, NTT DOCOMO, and SoftBank - continue to perform strongly financially. They boast a significantly higher monthly average revenue per user (ARPU) compared to their European counterparts and maintain low monthly churn rates. However, this unique scenario globally suggests that Japanese operators could face a more challenging future if lessons from the rest of the world are overlooked. To secure its position in the global mobile landscape, Japan must prioritize collaboration, adapt to international standards, and embrace innovation to ensure continued success in the evolving mobile industry (McKinzeny&Company, 2018).

The COVID-19 pandemic underscored Japan's systemic deficiencies in adapting to digitalization, hindering the competitiveness of its businesses. Unlike leading digital economies such as the US and China, Japan's regulatory landscape is deeply entrenched in traditional controls, impeding swift adaptation to the digital age. This unique disadvantage has left Japanese companies lagging in digital investments, as evidenced by OECD statistics showing significantly lower ICT investments compared to other developed nations. The 2025 Digital Cliff, proposed by the Japan's Ministry of Economy, Trade and Industry "predicts potential economic losses upwards of JPY 12 trillion annually after 2025 unless Japanese companies' systems are revamped" (McKinsey&Company, n.d.).

In 2004, Professor Eric Stolterman of Umeå University in Sweden foresaw the profound impact of IT penetration on all facets of human life. Inspired by this vision, Japan's Ministry of Economy, Trade and Industry crafted a digital transformation guideline in December 2018. This guideline defined digital transformation as a strategic response to the evolving business landscape, emphasizing the utilization of data and digital technologies to overhaul products, services, and business models. It underscores the imperative for companies to adapt to changing customer and societal needs while striving to gain a competitive edge through the transformation of operations, organizational structures, processes, and corporate culture (Broecker, 2022).

Central to this definition is the recognition that digital transformation transcends mere technological upgrades; it encompasses fundamental shifts in business strategies, models, and processes. It emphasizes the role of top leadership, stressing that CEOs must spearhead digital initiatives and integrate them seamlessly into corporate strategy. Drawing parallels with successful transformations in the US and Europe, where companies like Amazon, Uber, Airbnb, Netflix, and Alibaba have revolutionized industries and captivated consumers, the guideline underscores the transformative power of digital technologies in enhancing customer experiences and driving business growth (McKinsey&Company, n.d.).

The looming challenges of the 2025 digital cliff, compounded by an aging workforce and the disruptive impact of the COVID-19 pandemic, have served as powerful catalysts for both the private and public sectors in Japan to expedite their digital transformation efforts. Despite the widespread promotion of digital concepts such as artificial intelligence (AI), the Internet of Things (IoT), and cloud computing, empirical evidence indicates that Japan still has significant ground to cover in digitalizing both its public administration and corporate landscape (Tochibayashi & Kutty, 2024).

In response to this imperative, the Government of Japan has articulated ambitious objectives, envisioning the creation of Society 5.0, which entails a seamless convergence between the cyber space and the physical world. In pursuit of these goals, the government has undertaken substantial initiatives in recent years, characterized by the thorough review and publication of multiple policies aimed at fostering digitalization across various sectors. Furthermore, recognizing the

need for centralized decision-making and coordinated action, the Japanese government has established the Digital Agency to spearhead digital measures and orchestrate the transformational journey of the nation (Broeckeaert, 2022).

3.1.4.2. Mobile Payments

The widespread adoption of contactless-enabled cards has notably influenced spending behaviors, with users increasingly favoring contactless transactions over traditional card payments. However, the activation of mobile wallets has had an even more profound impact on overall spending habits. The COVID-19 pandemic has accelerated the transition toward contactless payments, particularly evident in the rapid adoption of mobile payments, with contactless payment usage soaring in restaurants and quick-service establishments – “The Ministry of Economy, Trade and Industry (METI) of Japan published the “Cashless Vision” in 2018 to promote cashless payments and declared the goal of achieving a 40% cashless payment ratio.” (Chang et al., 2021).

Japan's burgeoning mobile payment landscape is underpinned by the nation's expanding network and internet infrastructure. With internet penetration rates anticipated to continue a robust trajectory, the market for mobile payments is poised for significant growth. The Market is forecasted to expand substantially, estimated at USD 211.13 billion in 2024 and expected to reach USD 815.79 billion by 2029, with a remarkable CAGR of 31.04% during the forecast period. Mobile wallets are gaining widespread popularity across Japan, particularly in e-commerce, due to their simplicity in facilitating online transactions and ensuring swift and secure payments (Japan Mobile Payments Market Insights, n.d.).

The landscape of mobile payment methods in Japan is dominated by several popular smartphone apps and QR code payment solutions, including PayPay, LinePay, R Pay (Rakuten Pay), MerPay and auPay. These payment apps have witnessed a surge in popularity in Japan, offering users incentives such as points and rewards for their usage. Additionally, these apps facilitate bill payments and peer-to-peer money transfers, providing a convenient alternative, especially for foreigners facing challenges in obtaining Japanese credit cards (Imada, 2022).

PayPay stands out among these payment platforms, offering a seamless payment experience widely accepted at various stores in Tokyo and beyond. Users can download the app for free from Japanese app stores and link it to their bank accounts or credit cards for easy top-ups and transfers. With its user-friendly interface, PayPay allows customers to make payments simply by scanning a shop's QR code or displaying their unique barcode within the app. Furthermore, PayPay offers discounts and promotional campaigns in collaboration with participating stores, enhancing its appeal to consumers (Statista, 2024; Academy, 2022).

LinePay, integrated within Line, Japan's leading messaging app, is another prominent player in the mobile payment arena. Users can leverage Line Pay for a wide range of transactions, including sending money to contacts, paying utility bills, and making online or in-store purchases. The convenience of Line Pay is underscored by its seamless integration with the Line messaging app and the ability to top up balances at convenience stores or link directly to bank accounts (Imada, 2022b). R Pay, affiliated with Rakuten, Japan's renowned online shopping platform, offers users the opportunity to earn Rakuten reward points for utilizing its services. While R Pay can only be downloaded from Japanese app stores, users can link it to their Rakuten credit cards for added benefits, including double points accumulation. With its emphasis on user rewards and secure transactions, R Pay has garnered significant market share, facilitating in-store QR payments and enhancing the overall cashless payment experience (Sanjeeva, 2024).

The integration of payment gateways is becoming increasingly essential for firms across various industries, especially with the surge in online transactions. The robust ecosystem supporting digital payments is fortified by advancements in communication infrastructure, facilitating the sustained growth of digital transactions. Companies leveraging such advances, such as Yahoo and Amazon in India, are incentivizing customers to opt for digital wallets by offering rebates on payments, thereby further encouraging the adoption of cashless services (Japan Mobile Payments Market Insights, n.d.).

3.2. Opportunities and Threats

Japan has long been an appealing market for European companies, offering fertile ground for business expansion. Renowned for its large and highly mature market, Japan boasts a stable economy and abundant development opportunities yet to be fully realized. This environment presents an ideal landscape for delivering high-value, sophisticated products, and services (Broeckeaert, 2022).

3.2.1. Opportunities

- **Regulatory changes:** The regulatory changes initiated by the Japan Fair Trade Commission present a significant opportunity for alternative app store companies. With the aim of promoting fair competition and reducing the dominance of major players like Google Play and the App Store, these changes create a more level playing field for alternative app stores just like Aptoide. Alternative app stores have the opportunity to differentiate themselves by providing better support and incentives for app developers. By offering a more equitable revenue share model and a transparent, efficient review

process, Aptoide can attract developers seeking a fairer alternative, taking advantage of the growing developer dissatisfaction.

- **High Monetization Potential market:** Japan's mobile game market offers significant monetization potential due to the country's enthusiastic gaming culture and high consumer spending habits. Japanese users are known for their willingness to invest in premium features, in-app purchases, and subscriptions within mobile games. App Annie's research consistently ranks Japan among the top countries globally for mobile game spending. With a large and highly mature market for mobile apps, characterized by a high smartphone penetration rate, a tech-savvy population with a strong affinity for high-quality gaming experiences, Japan presents an ideal market for monetizing mobile games through various in-game purchases and subscription models.
- **Niche Market Focus:** Alternative app stores have a strategic opportunity to differentiate themselves from mainstream platforms like Google Play and the App Store by targeting niche markets or specific user segments within Japan. Instead of trying to compete directly with these larger platforms, alternative stores can focus on offering specialized content or unique features that align with the preferences and needs of Japanese users. One effective strategy for alternative app stores is to specialize in specific app categories that may be underserved or overlooked by mainstream platforms. For example, instead of offering a wide range of apps spanning various categories, Aptoide could concentrate on gaming applications that cater to specific interests or demographics within the Japanese market. By curating a selection of high-quality apps tailored to niche interests, these stores can attract users who are seeking specialized content and experiences that may not be readily available on mainstream platforms. Through targeted marketing, strategic partnerships, and continuous innovation, Aptoide can carve out a loyal user base and gain a competitive edge in the market.

3.2.2. Threats

- **Regulatory Landscape:** The regulatory landscape of Japan's mobile app distribution market encompasses antitrust regulations, data protection laws, consumer protection measures, content regulations, and platform governance policies. These regulations govern various aspects of app store operations, including competition, data privacy, consumer rights, content moderation, and platform policies. App stores must comply with these regulations to ensure legal compliance, protect user rights, and maintain trust and credibility among users. Navigating the regulatory landscape requires app stores to stay informed about evolving laws and policies, implement robust compliance measures, and

uphold transparency and fairness in their operations. It is important for Aptoide to stay agile and adapt your business model to comply with any new regulations that emerge.

- **Oligopoly Market:** Another critical threat faced by alternative app stores is the oligopolistic market dominated by major players like Google Play and the App Store. The strong brand presence of Google and Apple creates a significant barrier to user acquisition and retention for alternative app stores, as users may be hesitant to switch to unfamiliar platforms due to concerns about reliability, security, and content availability. Overcoming this barrier requires significant investment in marketing and branding efforts to build trust and credibility among users.
- **Japanese cultural barriers:** Japan has distinct cultural norms and consumer preferences that may differ from those in other regions, making it essential for app stores to tailor their offerings to local tastes and preferences. Language barriers, cultural nuances, and traditional business practices can complicate market entry and expansion for foreign app stores, particularly those without a deep understanding of the Japanese market. Adapting to Japanese cultural norms and consumer behavior patterns is essential for alternative app stores to effectively engage with users and gain their trust and loyalty. Failure to address these cultural barriers may result in limited user adoption and hinder the long-term success of alternative app stores in Japan.

CHAPTER IV: Internal Analysis: Aptoide

4.1. Company history mission and values

Aptoide stands as an app distribution and payment processing platform of global reach, extending across various channels encompassing Android, Web, automotive, and more recently iPhone platforms. Serving as a pivotal partner for Android game and app developers, Aptoide empowers creators with unparalleled control over distribution, promotion, and monetization strategies for their products.

Founded in 2011 in Lisbon, Portugal, Aptoide emerged as a beacon of innovation within the ostensibly monopolized realm of app distribution. Rapidly ascending to prominence, have garnered distinction as the fastest-growing app store and distribution platform, boasting a staggering user base exceeding 430 million and hosting over 1 million apps. Positioned as the third-largest Android store globally, with operational footholds in Portugal and China, Aptoide presents a compelling alternative avenue for app and game discovery, unencumbered by geo-restrictions and fortified by one of the industry's foremost malware detection systems. (Ishii et al., 2017) Beyond the company commitment to end-users, Aptoide extends its value proposition to original equipment manufacturers (OEMs) and telecommunications companies, offering tailored opportunities to leverage our expansive app portfolio. This holistic approach underscores the ethos of inclusivity and strategic collaboration, reaffirming Aptoide's status as an indispensable nexus within the dynamic landscape of app distribution and discovery.

Analyzing the company's history, it started some years before the foundation, in 2009 as a garage-style summer project, initially aimed to develop an Android version of the Linux command apt-get. By 2011, it transitioned into a formal company headquartered in Lisbon, concentrating on open-source solutions for app distribution, challenging the prevailing monopoly (Aptoide, n.d.).

Aptoide prioritizes creating an inclusive ecosystem where all stakeholders, including end-users and developers, have equal standing. This commitment underscores its mission to democratize app distribution and foster creativity. Significant milestones include a seed fund round by Portugal Ventures in 2013, propelling Aptoide past the one-million-user mark. Subsequent investments from notable backers such as e-ventures, Gobi VC, and Golden Gate provided impetus for global expansion, including the establishment of offices in Singapore and China.

In 2017, Aptoide made waves with the introduction of AppCoins Wallet and Portugal's pioneering ICO, which raised over \$20 million. Embracing blockchain technology, Aptoide

positions AppCoins as a utility token facilitating transactions within its platform, distinct from speculative cryptocurrency.

A pivotal moment arrived in 2018 when Aptoide took legal action against Google for anti-competitive practices, resulting in a verdict favoring Aptoide and condemning Google's abuse of market dominance. This legal confrontation marked one of several instances where Aptoide has challenged Google:

- June 16, 2014: Filed a complaint with DG Competition citing abuse of dominant position.
- October 18, 2018: Secured an injunction from Portuguese courts, addressing the concealment of Aptoide on devices.
- August 29, 2019: Lodged a complaint with the Department of Justice, highlighting Google's abuse of dominant position.

Further cementing its commitment to innovation, Aptoide unveiled Catapult, a developer-centric distribution console boasting a vast user base exceeding 400 million. Notably, Catapult offers developers enhanced revenue share, with up to 90% of in-app purchases flowing directly to creators, surpassing industry norms (Aptoide, n.d.).

Collaboration remains central to Aptoide's ethos, evidenced by strategic partnerships such as the joint venture with Faurecia in 2019. This partnership aims to develop Android app store solutions for global automotive markets, bridging the divide between traditional car manufacturers and software companies. Faurecia-Aptoide Automotive is today leader in app store for cars having as customers BMW, Mercedes, VW, Stellantis, BYD, Dacia, Smart-lotus with 14 million cars signed.

In 2022, Aptoide signed a commercial agreement with Digital Turbine to address jointly the US market. The collaborative effort entailed the deployment of a meticulously curated games center, seamlessly integrated into Digital Turbine's enterprise infrastructure. The Games Hub, a product of this collaboration, has already seen successful deployment across major carriers such as TracFone, Cricket, US Cellular, and Blu, effectively reaching an audience of over 9 million customers within the United States. Looking ahead, the rollout plan includes the scheduled launch of the Games Hub on Verizon's platform slated for Q1 of 2024, followed by integration with AT&T's network in Q2 of the same year. Anticipated projections indicate an estimated user base of approximately 80 million mobile subscribers across both carriers.

Today, Aptoide boasts a diverse team of 75 professionals from 12 nationalities, organized in 4 departments: product; technical; business growth and support, epitomizing its commitment to inclusivity and global collaboration. Rooted in values of innovation, ambition, integrity, results-driven ethos, and collaboration, Aptoide continues to redefine the contours of app distribution, guided by a steadfast commitment to ethical entrepreneurship and technological advancement.

As the foremost independent app store, Aptoide has long been an outspoken critic of the dominance exerted by major tech conglomerates in the app store market. This criticism has culminated in recent recognition by the European Commission, designating Aptoide as one of six tech giants serving as gatekeepers under the Digital Markets Act (DMA). The six designated gatekeepers include Alphabet (Google), Amazon, Apple, ByteDance, Meta (formerly Facebook), and Microsoft. “The DMA will level the playing field for all players in the app store market, giving smaller developers a fair chance to compete with the big tech giants” (Paulo Trezentos, 2023). In response to Apple's proposed changes, Aptoide remains skeptical, arguing that they primarily serve to perpetuate Apple's market dominance rather than foster genuine competition. Critically, Aptoide highlights concerns over disproportionate fees imposed on alternative app stores and barriers to exploring non-Apple ecosystems, such as complex installation processes and misleading warnings – “Apple's half-hearted reforms under the DMA are simply not enough. We need to ensure that the spirit of the DMA is not lost in loopholes and half-measures” (Álvaro Pinto, 2024).

4.2. Aptoide Business Model

Harvard Business School's Clay Christensen suggests that a business model should consist of four elements: a customer value proposition, a profit formula, key resources, and key processes.

4.2.1. Value Proposition

Aptoide's value proposition is intricately woven into its mission to provide a unique and empowering experience for both app developers and users. Unlike traditional app stores, Aptoide stands out by offering developers significantly more autonomy over their distribution, promotion, and monetization strategies. Through the development of proprietary engines like Catapult and App Tech, which seamlessly migrate apps from Google Play with minimal developer effort, Aptoide streamlines the app publishing process. This results in faster deployment and increased flexibility in content offerings, empowering developers to bring their creations to market swiftly and efficiently. Aptoide distinguishes itself by its fair revenue-sharing model. While platforms like Google Play typically charge developers a 30% commission, Aptoide takes a markedly different approach. Developers on Aptoide receive a considerably higher revenue share, ranging from 75% to 80%, leaving Aptoide with only 20% to 25% of their earnings. This equitable distribution of revenue ensures that developers retain a larger portion of their hard-earned profits. In addition to its developer-centric approach, Aptoide prioritizes user acquisition through targeted marketing efforts and influencer collaborations. By actively engaging with users and leveraging influencer partnerships, Aptoide cultivates a sense of community and encourages feedback and

support. This collaborative environment not only enhances user engagement but also facilitates constructive dialogue between developers and their audience, driving continuous improvement and innovation.

Aptoide enriches the app discovery and consumption experience by offering a diverse and extensive catalog of apps. Aptoide's user-friendly interface and intuitive navigation make it easy for users to explore different categories, discover new apps, and find content tailored to their interests. Furthermore, Aptoide enhances the user experience by introducing a unique cashback system, enabling users to save up to 30% bonus on in-app purchases within Appcoins-enabled games². The cashback system within Aptoide operates across three distinct tiers: the gamification level, influencer bonus, and extra bonus on perk days. Regarding the gamification level, it works in levels, users initially receive a 5% cashback upon installing the Appcoins wallet, with the potential to increase up to 20% as they continue to engage with apps and progress through levels, culminating at level 10. Upon reaching the maximum level, users attain VIP status, unlocking an additional 5-10% exclusive promo code for the first 7 days of each month. Complementing the gamification level, Aptoide offers promotional codes such as the VIP and influencer codes, granting users an additional bonus of +5%. Moreover, users can capitalize on advantage days, occurring twice monthly, to enjoy an additional +5 to 10% cashback, announced directly within the Appcoins wallet. This comprehensive cashback system not only incentivizes user engagement but also rewards loyalty, fostering a dynamic and rewarding experience within the Aptoide ecosystem.

Beyond empowering developers and enriching the user experience, Aptoide advocates for openness and innovation in the app ecosystem. The platform challenges the dominance of major tech conglomerates by providing a platform for developers and fostering competition. Aptoide's commitment to openness extends to its business practices, with transparent revenue-sharing agreements and fair treatment of developers. This fosters a healthy ecosystem where all participants can thrive and succeed, contributing to Aptoide's overarching goal of redefining the way apps are distributed, discovered, and enjoyed.

4.2.2. Key Resources

Aptoide's success and ability to innovate are underpinned by a range of key resources that form the foundation of its operations and value delivery. First and foremost, Aptoide's technology infrastructure serves as a critical resource, facilitating app hosting, distribution, and user engagement. This infrastructure comprises a network of servers, data centers, and software

² Aptoide has a catalogue of applications, including games, although only some games have Aptoide's billing system, payment method and bonuses integrated, which are games with Appcoins.

systems designed to handle the complexities of app management and delivery. Aptoide's robust and scalable IT infrastructure enables the platform to accommodate a diverse array of apps and users while ensuring seamless performance and reliability. This include Catapult, apptech and its wallet, in-house developed digital wallet to process In-App Purchases, Promotions, etc

Strategic partnerships serve as a cornerstone resource for Aptoide, facilitating collaborations with OEMs, device manufacturers, and other industry stakeholders to enhance market reach, tap into new distribution channels, and drive user acquisition. Aptoide's provision of applications to three of the top six OEMs worldwide underscores the significance of these partnerships in its growth strategy. Leveraging strategic partnerships enables Aptoide to penetrate new markets, diversify revenue streams, and fortify its competitive position. Illustrating the effectiveness of strategic partnerships are two notable examples: the joint venture with Faurecia in 2019 and the commercial agreement with Digital Turbine in 2022. The Faurecia partnership enabled Aptoide to explore innovative app distribution solutions for the automotive industry, expanding its reach beyond traditional mobile devices. Similarly, the collaboration with Digital Turbine resulted in the creation of Games Hub, a curated gaming platform, demonstrating Aptoide's adaptability to evolving market trends and consumer preferences.

Another vital resource for Aptoide is its extensive developer community. This community comprises a diverse group of app developers who contribute to the platform's content, innovation, and growth. Aptoide's developer community plays a crucial role in enriching the platform's app catalog, providing valuable feedback and insights, and driving user engagement. By fostering collaboration with developers, Aptoide cultivates a dynamic ecosystem that helps the platform increase its brand recognition, promoting its position among competitors.

4.2.3. Key Processes

Aptoide's key processes are essential components of its operations, enabling the platform to efficiently deliver value to developers and users alike while maintaining its competitive edge in the app distribution landscape. One of the core processes at Aptoide is the app curation and hosting process. This process involves reviewing and screening apps submitted by developers to ensure quality, security, and compliance with community guidelines. Aptoide employs a rigorous vetting process to identify and remove any apps containing malware, viruses, or other malicious content, thus safeguarding the integrity of the platform and protecting users' devices. Furthermore, Aptoide meticulously curates its app catalog to guarantee a diverse and all-encompassing array of applications, tailored to suit the diverse interests and preferences of its user base. Within Aptoide's operational framework, the implementation of the cashback system stands out as a pivotal feature, representing one of the platform's most compelling value propositions for users.

Developer engagement is another critical process at Aptoide, focusing on attracting, onboarding, and supporting developers on the platform. Aptoide actively engages with developers through the main channel Catapult, providing them with the necessary tools, resources, and support to publish and promote their apps effectively. This includes offering documentation, SDK integration assistance, and guidance on app monetization strategies. By fostering a collaborative and supportive environment, Aptoide encourages developers to contribute to the platform's growth and success while empowering them to reach a broader audience and maximize their app's potential.

User acquisition and retention are key processes that drive Aptoide's growth and sustainability. Aptoide employs targeted marketing efforts, social media campaigns, and influencer partnerships to attract new users to the platform and promote app discovery. Additionally, Aptoide focuses on enhancing the user experience and fostering user engagement through personalized recommendations, user feedback mechanisms, and community forums. By continuously improving and optimizing the user experience, Aptoide aims to retain existing users and encourage them to explore and discover new apps on the platform.

Platform optimization is an ongoing process at Aptoide, aimed at improving performance, usability, and security across the platform. Aptoide regularly updates its software and infrastructure to address bugs, enhance features, and incorporate user feedback. This iterative process involves monitoring app performance metrics, analyzing user behavior, and implementing improvements to optimize app discovery, download, and usage experiences. By prioritizing platform optimization, Aptoide ensures that it remains competitive in the fast-paced app distribution landscape and continues to deliver value to developers and users alike.

By effectively executing these processes, Aptoide is able to provide a compelling and differentiated app distribution platform that empowers developers, enriches the user experience, and fosters innovation in the app ecosystem.

4.2.4. Profit Formula

The Gross Merchandise Value (GMV) of Aptoide encompasses the cash received from various payment methods, including Adyen, Paypal, CodaPay, and VK, along with the rewards disbursed to users through the cashback system. The company's revenue is derived primarily from in-app purchases (IAP), partner subscriptions, and ad networks/CPI. Among these revenue sources, IAP transactions notably contribute the lion's share of income, reflecting the robust engagement of Aptoide's user base with its diverse app offerings.

On the other hand, direct costs form a crucial component of Aptoide's profit equation, encompassing expenses such as revenue shares for developers, typically ranging from 75% to

80%. These revenue shares reflect Aptoide's commitment to empowering developers and fostering a vibrant app ecosystem while incentivizing content creation and distribution. Additionally, direct costs include payment fees and marketing expenditures related to performance marketing and CPI campaigns with partners. These marketing efforts not only drive user acquisition and engagement but also entail revenue-sharing arrangements with partner stores and compensation for influencers engaged in promotional activities.

Additionally, indirect costs represent another facet of Aptoide's profit formula, encompassing a diverse array of expenses essential for the company's operations and infrastructure. These expenses include brand marketing initiatives aimed at enhancing market visibility and user acquisition, office operations to support day-to-day business activities, outsourced services to leverage specialized expertise, and software-as-a-service (SaaS) subscriptions for essential business tools and platforms. Additionally, indirect costs cover salaries for employees, server maintenance to ensure optimal platform performance, and various other miscellaneous expenses.

By meticulously managing both direct and indirect costs while maximizing revenue streams, Aptoide aims to maintain a healthy profit margin and sustain its growth trajectory in the competitive app distribution market. This strategic approach allows Aptoide to strike a balance between driving revenue growth and optimizing operational efficiency, positioning the company for long-term success and profitability in the dynamic digital marketplace.

4.3. Strengths and Weaknesses

4.3.1. Strengths

- **Developer empowerment:** Aptoide's revenue-sharing model stands as a beacon of empowerment for developers within the app ecosystem. Unlike traditional app stores that often impose hefty commission fees, Aptoide offers developers a significantly larger share of app revenue, typically ranging from 75% to 80%. This generous revenue split serves as a magnet for content creators, attracting them to the platform and fostering a vibrant and dynamic developer community. By providing developers with a fairer and more equitable compensation structure, Aptoide empowers them to monetize their creations effectively and reap the rewards of their hard work. This developer-centric approach not only incentivizes app development but also cultivates long-term partnerships, driving innovation and enriching the platform's content offerings.
- **Alternative distribution channel:** Aptoide's platform serves as a vital alternative distribution channel for app developers, offering them greater flexibility and independence in reaching their target audience. By providing a decentralized

marketplace, Aptoide reduces developers' reliance on monopolistic app stores such as Google Play and Apple App Store, which often impose strict guidelines and restrictions. This alternative distribution model promotes a more competitive app ecosystem, fostering innovation and diversity in app offerings. Developers have the freedom to publish their apps on Aptoide without encountering the barriers and limitations imposed by traditional app stores, enabling them to reach a broader audience and explore new market opportunities. This expanded reach and distribution network contribute to Aptoide's appeal as a preferred platform for developers seeking greater control over their app distribution strategies.

- **Cash back system:** Aptoide's innovative cashback system adds a layer of incentive and engagement for users, driving increased interaction and spending within the platform. Through this system, users are rewarded with cashback incentives for their in-app purchases, creating a win-win scenario for both users and developers. By offering monetary rewards for user engagement and spending, Aptoide enhances user retention and loyalty, encouraging users to return to the platform for future purchases. The cashback system not only incentivizes spending but also amplifies user satisfaction and enjoyment, fostering a positive user experience. Moreover, the cashback system serves as a catalyst for revenue growth, driving incremental sales and transactions within the platform. This strategic initiative strengthens Aptoide's competitive position in the app distribution market while reinforcing its commitment to delivering value to both users and developers.

4.3.2. Weaknesses

- **Limited Brand recognition:** Despite its secure and reliable nature, Aptoide faces a challenge in gaining widespread brand recognition and awareness compared to established competitors like Google Play and Apple App Store. While Aptoide may offer a superior revenue-sharing model and a diverse selection of apps, its brand may lack the visibility and trust associated with more well-known platforms. This limited brand recognition could potentially hinder user acquisition and adoption, as users may be hesitant to switch to a lesser-known platform. Additionally, the lack of brand recognition may pose challenges in attracting developers and content creators, who may prioritize platforms with a stronger market presence and reputation. Overcoming this weakness requires concerted efforts in marketing, branding, and user education to raise awareness of Aptoide's value proposition and build trust among users and developers alike.

- **Revenue Model Vulnerabilities:** Aptoide's revenue model, while offering developers a larger share of app revenue compared to traditional app stores, may be susceptible to vulnerabilities and fluctuations. The platform heavily relies on in-app purchases and partnerships for revenue generation, which could pose risks if user spending patterns change or if partnerships are disrupted. For example, a shift in user behavior towards free or ad-supported apps could impact Aptoide's revenue streams from in-app purchases. Similarly, disruptions in partnerships with payment processors could affect the platform's ability to generate revenue. Furthermore, Aptoide's revenue model may face challenges in monetizing certain types of apps or content that may not lend themselves well to in-app purchases or ad-based models. To mitigate these vulnerabilities, Aptoide must diversify its revenue streams, explore alternative monetization strategies, to ensure a stable and sustainable revenue model in the long term.

CHAPTER V: Competitors analysis

5.1. Porter's Five Forces

- **Threat of New Entrants:** Low to Medium (2): The threat of new entrants is contingent upon several factors, including barriers to entry, brand recognition, and economies of scale. Established app stores like Google Play and Apple App Store wield substantial bargaining power due to their entrenched brand reputation, expansive user base, and well-established developer relationships in Japan. However, with evolving regulatory landscapes and Japan's status as a mature market ripe with monetization potential for mobile apps, there exists the potential for niche or specialized app stores to emerge as new entrants. Despite this, the dominance of existing players may mitigate the significance of this threat overall.
- **Bargaining Power of Suppliers:** High (5): In the realm of app stores, suppliers primarily encompass app developers and payment processors. Their bargaining power holds significant sway over Aptoide's operations. Developers, given the multitude of platforms available for app distribution, wield considerable influence. Aptoide relies on securing agreements with these developers to feature sought-after apps preferred by Japanese users on its platform. Consequently, Aptoide may find itself needing to offer appealing terms and conditions to incentivize developer partnerships. Likewise, the bargaining power of payment processors remains formidable. Aptoide's reliance on companies like PayPal, CodaPay, or local processors such as PayPay in Japan underscores the critical role these entities play in securing in-app purchases. Given their pivotal position in facilitating transactions, they possess substantial leverage. Thus, Aptoide must nurture collaborative relationships with these processors and negotiate favorable terms to ensure seamless payment processing for its users.
- **Bargaining Power of Buyers:** High (5): Buyers, referring to users in this context, wield significant influence. They possess bargaining power due to the abundance of options available across various app stores. However, the dominance of established competitors like Google Play and Apple App Store can constrain users' inclination to explore alternative platforms. To navigate this challenge, Aptoide must prioritize the delivery of distinctive value propositions that resonate with users' preferences. By offering compelling features, personalized experiences, and an expansive selection of apps, Aptoide can effectively attract and retain users amidst intense competition.
- **Threat of Substitutes:** High (4): The threat of substitutes looms large in the app market, signifying a significant challenge. Users possess diverse channels for accessing apps, ranging from direct downloads from websites to third-party app stores and innovative

distribution methods such as progressive web apps (PWAs). Moreover, some users opt for web-based services over dedicated apps, further intensifying the competition. Given Japan's market dominance by behemoths like Google Store and App Store, Aptoide faces an uphill battle to maintain relevance and competitiveness. To thrive amidst substitute options, Aptoide must maintain a relentless focus on innovation and differentiation. By consistently delivering unique features, personalized experiences, and a vast array of apps, Aptoide can effectively distinguish itself and retain its position in the Japanese app market.

- **Competitive Rivalry:** High (4): The competition within the Japanese app market is fierce, with Aptoide contending against global giants such as Google Play and Apple App Store, along with various alternative app stores. Moreover, the landscape may feature local players or regional variations, adding another layer of intensity to the rivalry. To carve out its niche amidst such formidable competition, Aptoide must focus on differentiation. This could entail introducing unique features, enhancing user experience, or implementing targeted marketing strategies. By strategically positioning itself as a distinctive and appealing option for users, Aptoide can effectively navigate the challenges posed by the crowded app market and emerge as a competitive force in Japan.

In conclusion, the Japanese app market presents a dynamic yet challenging landscape, characterized by high competition, significant bargaining power among suppliers and buyers, and the looming threat of substitutes. While established players like Google Play and Apple App Store dominate, there are avenues for innovation and niche market entry due to Japan's mature market and evolving regulatory environment. However, success in this industry requires a keen focus on differentiation, user experience, and strategic partnerships to navigate the complexities effectively. Despite the high barriers to entry and intense rivalry, there are substantial opportunities for platforms like Aptoide to carve out a space by offering unique value propositions and personalized experiences to users. As such, while the industry may appear daunting, its potential rewards make it an attractive space for those willing to invest in innovation and adaptability.

CHAPTER VI: Go to Market Strategy

6.1. Business Objectives

Considering the regulatory changes initiated by the Japan Fair Trade Commission (JFTC) and the flourishing mobile game market in Japan, Aptoide identifies a golden opportunity to position itself as a compelling alternative to dominant platforms like Google Play and the App Store. Given Japanese consumers' strong affinity for gaming and their propensity for substantial spending, Aptoide aims to offer an extensive range of top-tier apps and gaming experiences tailored precisely to their preferences.

To capitalize on these prospects, Aptoide aims to strategically pursue partnerships with key local entities, such as carriers, developers, and telecom companies. By forming alliances with these stakeholders, Aptoide intends to ensure obedience to Japanese regulations and instill confidence among the Japanese user base. Moreover, the company acknowledges the importance of resonating with the cultural identity of the Japanese market. By offering tailored experiences not commonly found on mainstream platforms, Aptoide endeavors to attract users actively seeking unique and personalized app offerings. Through these concerted efforts, Aptoide aspires to carve out a substantial presence in the competitive landscape and cement its status as the preferred destination for Japanese consumers seeking premium digital content, leveraging various in-game purchase to tap into Japan's lucrative gaming market.

In line with Aptoide's objective of securing a local partner, me, along with three representatives from Aptoide, collaborated with the Embassy of Portugal in Japan to organize a business visit in January 2024. The purpose of this trip was to hold in-person meetings with leading Japanese OEMs, game publishers, developers, and internet companies. During the 7-day business trip, we engaged with over 13 entities, including NTT Docomo, SoftBank, Sega, Marubeni, and Nintendo, among others. After thorough market exploration and discussions with various local stakeholders, SoftBank emerged as the most enthusiastic and aligned partner for developing an alternative solution tailored to the Japanese market. Consequently, Aptoide has been diligently moving forward with discussions to create AptoideJPstore, a gaming app store tailored specifically for Japan, through a Commercial Agreement with SoftBank.

6.2. Segmentation and Target

Based on an in-depth external analysis of the Japanese mobile app market, the gaming sector has emerged as a dominant force, as it is experiencing substantial growth in both downloads and revenue in recent years. Considering this, the primary target audience for this project comprises individuals who actively engage in gaming and are willing to invest in enhancing their gaming

experiences. Specifically, the project focuses on mobile gamers from the younger age, from 15 to 40 years older, reflecting a demographic known for its significant presence and expenditure within the gaming community (AllCorrect Games, 2022). From a socioeconomic perspective, the project targets the 40% of playing users who spend up to 1,000 yen a month on gaming apps (Fig. 3). These individuals typically possess higher disposable incomes and demonstrate a propensity to allocate funds towards quality experiences, including in-app purchases to enhance their gaming adventures.

6.3. Positioning

Positioning Aptoide in the Japanese mobile app store market requires a strategic approach that exploits on local trust, cultural relevance, and a focus on the booming gaming sector. To enhance brand credibility among the Japanese users, Aptoide should establish a dedicated Japanese entity, emphasizing its commitment to local values and ensuring user's security and privacy, along with robust data protection measures. By operating as a Japanese entity, Aptoide can drill a sense of trust and confidence among Japanese consumers, who often prioritize brands with a strong local presence and understanding. Furthermore, Aptoide's success in the Japanese market hinges on its ability to tailor its platform to local characteristics.

In positioning itself as an alternative to major players like Google Play and the App Store, Aptoide can leverage its focus on niche markets, with a particular emphasis on the gaming sector. Recognizing the dominance of gaming in the Japanese app market, Aptoide can differentiate itself by launching a specialized gaming app tailored specifically to Japanese gamers with some international titles and local titles. This targeted approach allows Aptoide to carve out a distinct identity in the market, offering a curated selection of high-quality gaming experiences that cater to the preferences of Japanese gamers.

Considering regulatory changes initiated by the Japan Fair Trade Commission, Aptoide initially targets the Android platform for distribution, with plans to expand to iOS in the future. While Apple's openness to alternative stores may be limited at present, Aptoide's focus on Android allows it to capitalize on the high engagement and spending habits of Japanese Android users.

In summary, Aptoide's positioning in the Japanese mobile app store market revolves around establishing trust through local entity formation, delivering culturally relevant experiences, focusing on niche markets, gaming, and strategically navigating platform distribution to maximize market penetration and differentiation from major competitors. Through these efforts, Aptoide aims to emerge as a trusted and preferred destination for Japanese users seeking high-quality mobile apps and gaming experiences tailored to their preferences.

CHAPTER VII: Marketing Mix (product, price, place, and promotion)

7.1. – Product

Aptoide's strategy for the Japanese market is on delivering a mobile gaming Appstore specifically designed for Japanese gamers. Meticulously curate the selection, ensuring a diverse range of both local and international titles, taking into consideration that the international titles should be carefully selected to ensure relevance and accessibility. Additionally, Japanese players have a strong preference for multiplayer experiences and social features within games. This includes both competitive and cooperative gameplay options (Maf, 2024). By fostering partnerships with Japanese and international developers, Aptoide guarantees a rich variety of gaming experiences. This expansive selection not only enhances the platform's appeal but also underscores Aptoide's dedication to providing Japanese gamers with a comprehensive gaming ecosystem that directly addresses their interests.

Complementing its extensive game library, Aptoide prioritizes crafting a user-friendly interface meticulously optimized for Japanese users. This emphasis on intuitive navigation, visually appealing design, and efficient game discovery mechanisms ensures a seamless and enjoyable user experience. Aptoide recognizes the critical significance of localization in establishing a strong position in the Japanese market. The platform goes beyond mere language translation, investing into fully localizing its product offering. For Japanese users, the design of the app store interface holds significant importance. Unlike Western preferences for clean and minimalist aesthetics, the Japanese prefer a busier design style when it comes to app store interfaces. Japanese users enjoy imagery that provides comprehensive details about features, dates, and promotions. This needs to be applied both the the AptoideJP store and in Appcoinswallet. When designing the app store interface for the Japanese audience, it's essential to have localized text and ASO keywords, as well as to create visuals that resonate with the Japanese audience, considering the Japanese "culture of cuteness," known as "kawaii¹." (Maf, 2024).

In addition to culturally relevant content and comprehensive language support, it is crucial to integrate localized payment options. In relation to the topic of payment methods, it is important to mention the AppCoins Wallet, the Aptoide's digital payment wallet. It is through the AppCoins Wallet that users store their tokens and process all transactions, including in-app payments and rewards. Users can manage their payments using common methods such as Credit/Debit card and

¹ Kawaii is an artistic style that emphasizes cuteness using bright colors and playful elements reminiscent of childhood. Examples of kawaii include certain manga and anime genres, with Monster Strike being a prominent example (Maf, 2024).

PayPal. In the case of Japan, a market dominated by popular smartphone apps and QR code payment solutions, including widely used methods like PayPay or LinePay, will enhance convenience and accessibility for Japanese users accustomed to these platforms. Given Aptoide's partnership with SoftBank, which holds shares in PayPay Corporation, AptoideJPstore will integrate PayPay as one of the payment methods. This integration offers customers a convenient and trusted payment option. Users will experience a seamless purchasing process, powered by PayPay's robust infrastructure and SoftBank's extensive network. Additionally, to the standard Aptoide rewards, AptoideJPstore will incorporate the PayPay Point System. With every purchase made through PayPay within AptoideJPstore, users will accumulate Paypay Points. These points can be redeemed both within the AptoideJPstore and with other apps that accept PayPay.

The cashback system within Aptoide operates across three distinct tiers: the gamification level, influencer bonus, and extra bonus on perk days. Regarding the gamification level, it works in levels, users initially receive a 5% cashback upon installing the Appcoins wallet, with the potential to increase up to 20% as they continue to engage with apps and progress through levels, culminating at level 10. Upon reaching the maximum level, users attain VIP status, unlocking an additional 5-10% exclusive promo code for the first 7 days of each month. Complementing the gamification level, Aptoide offers promotional codes such as the VIP and influencer codes, granting users an additional bonus of +5%. Moreover, users can capitalize on advantage days, occurring twice monthly, to enjoy an additional +5 to 10% cashback, announced directly within the Appcoins wallet. With the AppCoins Wallet, users can receive and send AppCoins as if they were using traditional currency payment methods. Every transaction is registered and guaranteed through blockchain technology.

By meticulously adapting to the unique cultural nuances and preferences of Japanese gamers, Aptoide enhances its trustworthiness among local users, creating a deeper connection and resonance with the Japanese audience. This commitment to meeting the needs and expectations of its Japanese audience sets Aptoide apart from competitors in the market, solidifying its position as a trusted destination for premium gaming experiences in Japan.

7.2. Price

AptoideJPstore operates as a free mobile game store, offering users access to a diverse range of mobile games without any upfront cost. This approach ensures that users can easily download and install the AptoideJP Appstore on their devices without financial barriers hindering access to the platform.

To further encourage engagement, Aptoide employs a bonus system within its pricing strategy. This system incentivizes users to make in-app purchases by offering bonuses on these

transactions. While developers set the prices for additional features or items within games, Aptoide supplements these purchases by providing users with bonuses of up to 20%. The implementation of the bonus system directly impacts the pricing dynamics for users. Although users may still pay the listed price for in-app purchases as determined by developers, the bonuses they receive effectively reduce the overall price paid for these products. This cost-saving feature enables users to stretch their budgets further and potentially make additional purchases within the platform. In addition to the standard Aptoide rewards, users who opt for PayPay as their payment method will receive extra points. These points can be used in following in-game purchases within AptoideJPstore or outside of the platform, extending to other apps that have integrated PayPay as a payment method.

AptoideJPstore pricing strategy revolves around delivering added value to users through its bonus system, positioning itself as a cost-effective option for users seeking engaging mobile gaming experiences.

7.3. Place

In the dynamic landscape of mobile applications, securing effective distribution channels is crucial for reaching and engaging target audiences. For AptoideJPstore, a comprehensive marketing mix strategy is essential to enter the Japanese market successfully, enhancing the visibility of AptoideJPstore in Japan.

Collaborating with prominent mobile carriers in Japan presents a strategic opportunity for AptoideJPstore to expand its reach. By establishing pre-installation agreements or securing promotions on carrier platforms, AptoideJPstore can tap into the extensive user base of these carriers. Such partnerships not only amplify brand exposure but also foster trust among Japanese consumers, as apps endorsed by carriers are perceived as reputable choices. Partnering with SoftBank, one of Japan's largest telecom carriers, offers unique benefits for our brand. Beyond the immediate boost in brand recognition from our association with such a telecom giant, the opportunity to be pre-installed on their products significantly expands our reach and accessibility to users. Furthermore, considering other key carriers, such as *Linemo* and *Ymobile*, which apply SoftBank's network infrastructure as MVNOs (Mobile Virtual Network Operators), ensures access to reliable connections and further extends our market presence. By strategically aligning with these carriers, we strengthen our position in the Japanese market and enhances AptoideJPstore reach and accessibility to a broader user base, ultimately contributing to the overall growth and success of the platform (Chen, 2024).

Optimizing online placement strategies and leveraging popular social media platforms are indispensable for AptoideJPstore's marketing mix. Active engagement on Japanese social media

platforms such as Twitter, LINE, and Yahoo Japan is crucial for building brand awareness and fostering community engagement. Through dedicated accounts, regular updates, and interactive content, AptoideJPstore can cultivate a loyal following and stimulate user interest.

For AptoideJPstore, offering customer support in Japanese is essential for ensuring users have a smooth experience. By having both English support and agents with proficient in Japanese, the company ensures clear communication and quick resolution of user queries. This commitment to user satisfaction builds trust and loyalty among Japanese users, leading to positive recommendations and a stronger brand reputation. Integrate localized customer support directly into the appcoinswallet and, at the same time, outside the appstore, so that it is not necessary to have the application installed, for example via an email, underscores AptoideJPstore's dedication to meeting the needs of its Japanese user base.

7.4. Promotion

Promotion plays a crucial role in effectively communicating the value of AptoideJPstore in the market, amplifying store visibility, attracting valuable users, and fostering a loyal user base. The main objective is to highlight an app store dedicated to games, the comprehensive gaming ecosystem that directly addresses users' interests and desires based on Japanese mobile market trends. Additionally, promoting the benefits of playing Japanese favorite games through AptoideJP, including the enhanced cashback system, further emphasizes the value proposition.

In Japan, local brand affiliation holds significant ways in financial decision-making among users. As mentioned previously the localization is essential when it comes to promotion, when introducing a game to the Japanese market, it's not just about translating words, it's about capturing the essence of the culture – “In Japan, using “kawaii” culture, which means “cute” or “adorable,” in marketing is a very effective strategy.” (JapanBuzzTeam, 2024). Applying fantasy, manga, and anime in advertising and marketing strategies in Japan it's a strategic imperative.

In Japan, embracing a soft sell approach often yields superior results and aligns seamlessly with cultural norms compared to the more aggressive hard sell tactics. Soft selling prioritizes nurturing long-term relationships based on trust, a strategy that resonates deeply with Japanese consumers. This preference stems from Japan's cultural emphasis on harmony, and mutual understanding, values that underpin societal interactions. By adopting a softer approach to marketing, businesses can effectively engage with Japanese consumers, forging enduring connections (JapanBuzzTeam, 2024). Furthermore, leveraging the concept of seasonality can significantly enhance advertising and marketing efforts. With distinct seasonal changes deeply ingrained in Japanese culture, there's a profound appreciation for these transitions and the diverse celebrations they entail.

User acquisition through promotion can be approached in two complementary ways: through in-store advertising and influencer marketing. A comprehensive advertising strategy entails leveraging both local and global social media platforms to maximize reach and engagement. Popular local websites such as Yahoo! Japan and LINE, alongside global giants like YouTube, Twitter and TikTok, serve as pivotal channels for connecting with a wide audience base. Given their integral role in Japanese daily life, these platforms offer unparalleled opportunities for engaging with customers on a personal level.

Regarding in-store advertisement, Yahoo! Japan stands out as one of the most visited websites in the country, serving as a central hub for news, information, search, and email services. Accounting for 13% of Japan's search engine market share, advertising on Yahoo! Japan presents an excellent opportunity for visibility, particularly through its search advertising capabilities. Similarly, LINE, one of Japan's most popular social media platforms, has evolved into a comprehensive digital platform, offering diverse services such as mobile payments, news, and shopping. With approximately 93 million monthly active users, LINE provides a direct avenue for foreign brands to engage with Japanese consumers through interactive features like stickers, official accounts, and targeted advertisements (AJ Marketing, 2024).

To effectively reach the gaming audience, presence on other key platforms is imperative. Twitter, widely embraced in Japan, serves as a vibrant hub for discussions and sharing of mobile games among users. Maintaining an active presence on Twitter enables to share updates, promotions, and special events, facilitating direct engagement with Japanese gamers. Utilizing relevant hashtags and participating in gaming-related conversations further enhances visibility and attracts users to the app store. Similarly, YouTube emerges as a premier destination for gaming content, including game reviews, walkthroughs, and patch note videos. Collaborating with Japanese gaming YouTubers to showcase mobile games available on the app store can generate excitement and interest among viewers. While TikTok boasts high popularity among Japan's younger demographic, particularly teens, it may not be as widely embraced by hardcore gamers. However, for casual gamers who enjoy free-to-play mobile games, TikTok can serve as an effective marketing tool. Leveraging TikTok's dynamic and engaging format can help capture the attention of this audience segment and drive brand awareness and engagement.

Leveraging local celebrities and influencers in advertising is indispensable for achieving success. Japanese consumers hold their local stars and cultural icons in high regard, making partnerships with influencers a great means of earning trust, enhancing brand credibility, and attracting new audiences. In a digital age overwhelmed with advertisements, influencer marketing stands out as a genuine method of connecting with the gaming community. By aligning with popular gaming YouTubers, streamers, and social media influencers, Aptoide can tap into a vast and engaged user base who value the recommendations of their favorite content creators. These influencers play a pivotal role in showcasing AptoideJPstore's features, spotlighting exclusive

promotions, and providing firsthand experiences to their followers, thereby driving awareness and app downloads. Moreover, by carefully selecting influencers whose audience demographics align with AptoideJPstore's target market, the campaign can effectively resonate with Japanese users and yield tangible results in terms of user acquisition and engagement (AJ Marketing, 2024).

CHAPTER VIII. Financial Plan

8.1. Initial Investment

Considering that the AptoideJP store will operate under a commercial agreement between Aptoide headquarters and SoftBank, the project will be primarily financed by Aptoide. This financing includes an intellectual property valuation of \$7,000,000, alongside a \$50,000 cash injection from SoftBank. After internal discussions, SoftBank has opted to participate in the partnership without seeking an equity stake in AptoideJP. Instead, SoftBank will contribute financially through the cash injection and will also cover a portion of AptoideJP's operating costs.

The financial structure of the project involves two distinct contributions. Aptoide's \$7,000,000 investment represents an equity stake, securing ownership and long-term control of the project, while taking on both profit potential and associated financial risks. On the other hand, SoftBank's \$50,000 investment operates under a profit-sharing model, where SoftBank will receive 50% of the gross profit margin in return for its contribution, rather than equity or fixed repayments. This arrangement allows SoftBank to participate in the project's success without assuming ownership or direct financial risk, as their returns are fully dependent on the project's profitability.

8.2. Estimated Demand

The demand forecast for AptoideJP is derived from anticipated growth in In-App Purchases (IAP) for both iOS and Android global titles. This forecast, developed through a focus group analysis, considers the distinct features of the Japanese mobile gaming market alongside revenue data from Japanese titles. The initial revenue estimation is based on the Top 100 grossing mobile apps from both Google Play and iOS in Japan, as of January 2024. From this, I calculated the average monthly revenue per title, which was subsequently multiplied by the projected number of titles available on the platform at year-end. This value was further adjusted to reflect the anticipated market shares for iOS and Android over the period.

In the first year, AptoideJP is expected to secure a 5% share of Japan's Android market. This projection is anchored in Aptoide's established reputation and credibility within the global Android ecosystem, supporting a 15% growth in IAP revenue, driven primarily by international game titles available on the platform.

For iOS, the projections are more conservative, given Aptoide's recent entry into the iOS ecosystem and Japan's stringent regulatory framework. AptoideJP's entry into the Japanese iOS market hinges on regulatory adjustments anticipated for May 2024. Following these changes,

AptoideJP aims to capture a 2% share of the iOS market in its first year, with an estimated 10% increase in IAP revenue from global titles.

The competitive dynamics in the Japanese market—dominated by Google Play for Android and Apple for iOS—pose significant challenges to market entry and growth, especially in the initial two years. However, the partnership with SoftBank, one of Japan's most reputable telecommunications companies, is expected to accelerate AptoideJP's market acceptance. This strategic alliance is positioned to provide AptoideJP with a critical advantage in navigating Japan's competitive landscape. Leveraging this partnership, AptoideJP is projected to achieve a 25% Android market share and a 20% iOS market share by the end of the forecast period.

Table 1. Forecast Android/iOS Market share of AndroidJP

Years	Y1	Y2	Y3	Y4	Y5
Android Market share of AptoideJP	5%	8%	15%	20%	25%
iOS Market share of AptoideJP	2%	5%	10%	15%	20%

Table 2. Forecast Android/iOS IAP Global titles growth

Years	Y1	Y2	Y3	Y4	Y5
Android IAP Global titles growth	15%	20%	25%	35%	40%
iOS IAP Global titles growth	10%	15%	20%	25%	30%

8.3. ESS & COGS

AptoideJP's revenue streams will predominantly stem from In-App Purchases (IAP) conducted within the AptoideJP store, supplemented by a smaller share of revenue derived from paid advertisements, as illustrated in Table 3.

Table 3. Forecast Ads Monetization (% of IAP Revenue)

Years	Y1	Y2	Y3	Y4	Y5
Ads monetization (% of IAP revenue)	5%	10%	10%	5%	5%

The gross profit margin is calculated by subtracting the direct costs from the total revenue, which includes both IAP and ads net revenue. The key direct costs associated with IAP include the following components illustrated in the Table 4 .

Table 4. Direct Costs AptoideJP

	Y1	Y2	Y3	Y4	Y5
Amounts in USD	Forecast	Forecast	Forecast	Forecast	Forecast
<i>Direct Costs</i>	\$5 263 204,98	\$14 708 516,69	\$32 851 244,78	\$54 610 259,50	\$72 384 363,36
Payments to developers	\$4 409 559,49	\$12 322 924,83	\$27 523 062,22	\$45 752 956,40	\$60 644 257,16
User incentives (Bonus)	\$395 729,70	\$1 105 903,51	\$2 470 018,40	\$4 106 034,55	\$5 442 433,33
Carrier incentive	\$79 145,94	\$221 180,70	\$494 003,68	\$821 206,91	\$1 088 486,67
Payment processing fees (inc. chargebacks)	\$378 769,85	\$1 058 507,65	\$2 364 160,47	\$3 930 061,64	\$5 209 186,19

Based on the direct cost components, AptoideJP is expected to achieve an average gross profit margin of 12% on the revenue. This gross margin will be divided equally between Aptoide and SoftBank, in accordance with the partnership structure. SoftBank will assume responsibility for customer support, user acquisition (marketing and promotional activities), and business development (developer outreach and onboarding for the AptoideJP store).

From Aptoide's headquarters, the company will cover several key operational costs (table 5):

- **Incorporation, Office, and Logistics Costs:** These are projected to amount to \$170,000 in the first year of operations.
- **Server and Infrastructure Costs:** Estimated to be \$69,000 in the first year, primarily covering hosting and cloud services, such as AWS.
- **Management and Operations Costs:** These costs will be directly linked to the size of the team managing AptoideJP. As the store gains traction, the number of full-time employees (FTEs) required will increase. Initially, the salary for one FTE is estimated to be \$7,000 per month.
- **Engineering and Software Development Costs:** The costs associated with software development will depend on the number of developers employed. It is projected that the company will employ ten software engineers by the first year, with each engineer receiving a salary of \$6,000 per month.

Table 5. Indirect Costs AptoideJP

	Y1	Y2	Y3	Y4	Y5
Amounts in USD	Forecast	Forecast	Forecast	Forecast	Forecast
<i>Indirect Costs</i>	\$355 000,00	\$982 000,00	\$1 104 000,00	\$1 237 400,00	\$1 383 610,00
Incorporation, offices, logistics	\$170 000,00	\$600 000,00	\$660 000,00	\$726 000,00	\$798 600,00
Servers (AWS,...)	\$69 000,00	\$240 000,00	\$276 000,00	\$317 400,00	\$365 010,00
Management & operations	\$56 000,00	\$70 000,00	\$84 000,00	\$98 000,00	\$112 000,00
Engineering (software development)	\$60 000,00	\$72 000,00	\$84 000,00	\$96 000,00	\$108 000,00

As AptoideJP scales its operations, both direct and indirect costs are expected to rise, but the partnership with SoftBank is strategically designed to mitigate Aptoide's exposure to significant user acquisition and support costs. This allows Aptoide to focus its resources on technology development, operational efficiency, and expanding its footprint within Japan's competitive app marketplace.

8.4. Hiring Plan

The company's salary policy for the project is as follows, represented in the table 6.

Table 6. AptoideJP Staff Expenses

AptoideJP Staff					
	Y1	Y2	Y3	Y4	Y5
Management & operations (HT, financial,...)	8	10	12	14	16
Engineering (software development)	10	12	14	16	18
AptoideJP Staff Expenses					
	Y1	Y2	Y3	Y4	Y5
Management & operations (HT, financial,...)	\$56 000,00	\$70 000,00	\$84 000,00	\$98 000,00	\$112 000,00
Engineering (software development)	\$60 000,00	\$72 000,00	\$84 000,00	\$96 000,00	\$108 000,00

8.5. Income Statement

The financial projections indicate that Aptoide will incur an operating loss of \$18,629.76 by the end of the first year. This initial loss is primarily attributed to the substantial upfront investment required and the company's relatively modest market share in the early stages of its entry into the Japanese market. While indirect costs significantly impact the short-term financial outlook, Aptoide's gross profit margin is expected to improve progressively as the app store gains market traction, resulting in sustained revenue growth.

A critical factor in achieving this financial turnaround will be the accelerated increase in market share combined with effective cost management, facilitated through the strategic partnership with SoftBank. By leveraging SoftBank's established presence and resources in Japan, Aptoide aims to reduce acquisition costs and streamline operations, positioning the company for long-term profitability. The financial projections for the first six years, demonstrating the expected growth trajectory and improvement in profitability, are summarized in the following table.

Table 7. P&L AptoideJP

Amounts in USD	Y1	Y2	Y3	Y4	Y5
	Forecast	Forecast	Forecast	Forecast	Forecast
Revenue	\$5 935 945,46	\$17 378 483,73	\$38 814 574,93	\$61 590 518,23	\$81 636 500,02
IAP Revenue	\$5 653 281,39	\$15 798 621,57	\$35 285 977,20	\$58 657 636,41	\$77 749 047,64
Ads Net Revenue	\$282 664,07	\$1 579 862,16	\$3 528 597,72	\$2 932 881,82	\$3 887 452,38
Costs	\$5 618 204,98	\$15 690 516,69	\$33 955 244,78	\$55 847 659,50	\$73 767 973,36
<i>Direct Costs</i>	\$5 263 204,98	\$14 708 516,69	\$32 851 244,78	\$54 610 259,50	\$72 384 363,36
Payments to developers	\$4 409 559,49	\$12 322 924,83	\$27 523 062,22	\$45 752 956,40	\$60 644 257,16
User incentives (Bonus)	\$395 729,70	\$1 105 903,51	\$2 470 018,40	\$4 106 034,55	\$5 442 433,33
Carrier incentive	\$79 145,94	\$221 180,70	\$494 003,68	\$821 206,91	\$1 088 486,67
Payment processing fees (inc. chargebacks)	\$378 769,85	\$1 058 507,65	\$2 364 160,47	\$3 930 061,64	\$5 209 186,19
Gross Profit Margin	\$672 740	\$2 669 967	\$5 963 330	\$6 980 259	\$9 252 137
Aptoide Gross Profit (50%)	\$336 370	\$1 334 984	\$2 981 665	\$3 490 129	\$4 626 068
<i>Indirect Costs</i>	\$355 000,00	\$982 000,00	\$1 104 000,00	\$1 237 400,00	\$1 383 610,00
Incorporation, offices, logistics	\$170 000,00	\$600 000,00	\$660 000,00	\$726 000,00	\$798 600,00
Servers (AWS,...)	\$69 000,00	\$240 000,00	\$276 000,00	\$317 400,00	\$365 010,00
Management & operations	\$56 000,00	\$70 000,00	\$84 000,00	\$98 000,00	\$112 000,00
Engineering (software development)	\$60 000,00	\$72 000,00	\$84 000,00	\$96 000,00	\$108 000,00
Aptoide Free Cash Flow	-\$18 629,76	\$352 983,52	\$1 877 665,07	\$2 252 729,37	\$3 242 458,33

8.6. Project Valuation

Since the project is financed entirely through an equity investment from Aptoide, with a non-equity cash contribution of \$500,000 from SoftBank, it is appropriate to use the Capital Asset Pricing Model (CAPM) to incorporate the effect of capital structure on the discount rate.

For this calculation, we employed a beta of 1.47% for the software (system and application) sector, as derived from Damodaran's data (Damodaran, 2024). The risk-free rate was set at 0.96%, based on the 10-year Japanese government bond yield (YCharts, 2024). In addition, a Japanese market rate of 9.26% was assumed, following Damodaran's recommendations (Damodaran, 2024). Based on the previous data, one computed the cost of equity (Cost of Equity = Risk Free + Beta*(Market rate - Risk Free rate) and obtained a percentage of 0,2. For this project, since there is no debt, the CAPM-derived cost of equity is the appropriate discount rate to use for evaluating investment decisions and calculating the present value of future cash flows.

Table 8. Free Cash Flow AptoideJP

Year	Y0	Y1	Y2	Y3	Y4	Y5	Perpetuity
CAPEX	-\$7 000 000,00						
AptoideJP Free Cash Flow	-\$7 000 000,00	-\$18 629,76	\$352 983,52	\$1 877 665,07	\$2 252 729,37	\$3 242 458,33	\$160 511 369,73
PV of FCFF @0,2%	-\$7 000 000,00	-\$18 593	\$351 576	\$1 866 444	\$2 234 797	\$3 210 227	
NPV	\$644 451,92	> 0	Accept				
IRR	2%	> 0,2% (CAPM)	Accept				
PI	1,09	>1	Accept				
Payback Period	4,78	< 5	Accept				

The Payback Period (PP), Internal Rate of Return (IRR), and Net Present Value (NPV) methods are among the most widely used approaches for evaluating and selecting projects.

In this analysis, incorporating the terminal value and assuming a 0.2% growth rate, the project achieves a positive NPV of \$644,451.92, indicating its financial viability. The IRR for the project is 2%, which exceeds the CAPM-derived discount rate of 0.2%. This positive IRR suggests that the project is expected to generate returns above the required rate, making it a profitable endeavor worth accepting.

The Payback Period is approximately 4.78 years, reflecting the time required to fully recover the initial investment. Together, these metrics confirm that the project meets key financial criteria, supporting its selection and implementation.

In the valuation method, defining the time horizon under analysis is a crucial component. While companies are generally assumed to have an indefinite lifespan, it is standard practice to divide the forecast period into two distinct sub-periods: (1) an initial period, during which yearly cash flows are explicitly estimated, and (2) a continuation period, typically considered perpetual, in which free cash flows to the firm (FCFF) are projected without being limited to the project's explicit lifetime (Custódio & Mota, 2022). Under a perpetuity assumption, AptoideJP value amounts to \$160,511,458.33, reflecting the net present value of projected free cash flows within the project's lifetime, combined with the net present value of all future free cash flows generated beyond the forecast period.

CHAPTER IX: Conclusions and Recommendations

The conclusion of an intense external analysis of the Japanese market and internal analysis on Aptoide for this business proposal strongly advocates for the establishment of AptoideJP, through a strategic commercial partnership between Aptoide and Softbank.

Launching AptoideJP with a local partner will facilitate the development of a highly localized and customized App Store. A local partner will bring more than just a cash injection; they will provide crucial insights into the Japanese user base, allowing AptoideJP to be tailored to local preferences in terms of design and organization, fully respecting Japanese culture. In addition to valuable connections with local game publishers, ensuring a rich selection of local titles, Softbank's stake in PayPay will enable seamless integration of PayPay as a payment method. This will make in-app purchases more convenient for users.

The combination of Softbank's knowledge, contacts, and strong market recognition in Japan, along with Aptoide's nearly 15 years of experience and technological expertise in app stores, will result in the creation of a game-focused App Store that stands apart from major competitors like Google Play and Apple's App Store.

Projections for AptoideJP's market share in both Android and iOS ecosystems indicate a promising trajectory, with strong performance expected from the first year and sustained growth thereafter. These forecasts, aligned with benchmarks from Aptoide's headquarters, highlight the rising appeal of alternative app stores in Japan. This growth is further supported by recent regulatory shifts initiated by the Japan Fair Trade Commission and the expanding mobile gaming market.

From a financial standpoint, the business plan's viability is reinforced by positive indicators. The Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period collectively demonstrate a solid financial foundation, suggesting that the venture has strong potential to deliver substantial returns on investment. These metrics confirm the project's ability not only to cover initial costs but also to generate significant positive cash flows, making it an appealing and sustainable opportunity with promising profitability.

In conclusion, to grow internationally and establish a foothold in new markets, it is crucial for Aptoide to capitalize on opportunities like the one emerging in Japan, driven by regulatory changes in the app store market. Through a commercial agreement with Softbank, a trusted name with deep roots in the Japanese market, AptoideJP will be well-positioned to gain traction and succeed in an otherwise oligopolistic landscape.

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