

Research article

Business Models of Journalistic Startups in Portugal: an Analysis of Product Innovation, Dissemination and Monetization in Media Enterprises

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Abstract:

Purpose: Journalistic startups are thriving around the world, bringing new approaches to the news media environment in terms of concepts, contents, dissemination, internal organization, and business models. This research is relevant to create a prospective view on the evolution of the news media business in the next years, also allowing us to identify some trends and experiences which can be useful to future researchers work, and for professionals of news media companies, startups or not, to get some insights that might help to develop (or even save) their own businesses.

Methodology: Through semi-structured interviews with the editorial managers of each of the research subjects, we tried to understand the genesis, concepts, processes, and goals of these startups. We made a thematic analysis of the content, using an adapted version of the IPTC NewsCodes, to understand the editorial approach in terms of Genre, Subject, Media Topic, Media, and Priority in each of the startup's publication platform. To better understand the business, we did a business model mapping, using the Business Model Canvas conceptual tool, for all the subjects.

Findings/Contribution: The main findings indicate that all the startups in this research started through the identification of a problem or a need, within a small group of friends or colleagues. They all try to fit into a niche and not compete with legacy media, and search for alternative financing sources. All the teams are small, produce mainly long form reporting and interviews, and use mostly written text - but video tends to grow in volume. All the subjects work for niche audiences, by location or interests. These results contribute to create a structured and broader view of the journalistic startups scene in Portugal, but can also help other researchers to apply similar methods to map different realities, in geographical or thematic terms. This research can also contribute to better understanding the challenges that digital news media face in this networked society we live in.

Keywords: Journalism; Media Innovation; Journalistic Startups; Media Enterprise; Business Models; Case Study

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1. Introduction

Journalistic startups are thriving around the world, bringing new approaches to the news media environment in terms of concepts, contents, dissemination, internal organization, and business models. But the concept of startup, commonly used in the IT area (traditionally more agile in terms of innovation), is not easily adapted and redefined to the more traditional news media environment.

All over the world, innovation is growing in the news media business, with startups leading in discovery, even if the inherent fragility of many projects doesn't allow these new companies to fully accomplish all their goals, and even when they can assure its survival after the first years of activity. Media startups, in particular news startups may cause systematic changes to media ecosystems at the industry, organizational and individual levels (Horst & Hitters, 2020) and the inauguration of new business models may even impact the strategies of legacy players on traditional markets.

Whether they focus on storytelling or in exploring new monetization models (Cook & Sirkkunen, 2013), independent news projects may be hard to track and categorize, as it becomes increasingly clear that efforts must be made at industry and academy levels to develop new tools to interpret change. Communication sciences are particularly relevant as they allow us to solidify the idea of media management as "a networked process of communicative entanglement, interpretation and strategic action facilitated through digital (social) media" (Horst & Hitters, 2020: 34), Achtenagen (2020: 16) proposes the concept of "entrepreneurial orientation" as a connection between the industrial and academic sphere, harmonizing gathered knowledge and experience around five key aspects: risk, proactivity, innovativeness, competition and autonomy.

Media business model studies may also benefit from the approach to secondary structures that support the wider innovation sphere. Startup accelerators / incubators for instance are relevant study object as they allow an acceleration of project creation processes, provide HR training and development, promote highly interactive work environments, promote new work and collaboration structures as well as mentoring and permanent feedback (Salamzadeh & Markovic, 2018: 41).

This is an incredibly rich and wide field of studies, with several different approaches coming into play from different sciences for many years, with relevant contributions from economics, management, or communication sciences: Christensen (2000), Picard (2002), Alexander et al. (2004), Albarran, Chan-Olmsted, & Wirth (2006), Kay & Quinn (2010), Albarran (2010), Doctor, (2010), or Briggs (2012). The intersection of media, journalism and communication studies with economics is particularly relevant as the understanding of the journalistic startup ecosystem calls for an analysis of the wider traditional markets, and the way they influence (and are influenced) by the exploration of niche journalism and audiences (Cook & Sirkkunen, 2013). In some specific markets, the creation and development of alternative journalism structures may even be an issue of power and ideology, as the rise of new business models causes significant friction with historically established media systems (Girija, 2020).

Following a case study approach, the authors draw a panorama of the Portuguese journalistic startups scene, mapping the diversity of projects, goals and business models, and frame that analysis on the concepts of startup versus the classical definition of a news media, from the product (using an adapted version of the IPTC NewsCodes¹) to the dissemination and, of course, the monetization. We aim to contribute to understanding about how to encourage new cultures of experimentation and innovation for rethinking journalistic form and practice, following inspiring works of Deuze & Prenger (2019), Küng (2015, 2017), Nicholls, Nielsen, & Graves (2018), Lowe, & Brown (2016), Graham et al (2015), and Posetti (2018).

¹ <https://iptc.org/standards/newscodes>

Since the authors are dealing with new projects, trying to understand their goals, innovative approaches to content production / dissemination and new monetization strategies, this research intends to create a prospective view on the evolution of the news media business in the next years, allowing to identify some trends and experiences which can be useful to future research initiatives as well as for professionals within news media companies, startups or not, to get some insights that might help to develop (or even save) their own businesses.

2. Literature Review

The concept of startup is usually associated to technological ventures, or, according to Eric Ries², “a startup is a human institution designed to deliver a new product or service under conditions of extreme uncertainty” (Ries, 2011). The underlined main ideas can be seen to be the keys to connect the concept to media (human), to innovation (new) and to technology (extreme uncertainty).

In a wider spectrum, a startup is a young company that is just beginning to develop. Startups are at the very early stage usually small, seed financed and operated by a handful of founders (that might be a group of friends or school colleagues) or one individual. These companies offer a product or service that is not currently being offered elsewhere in the market, or that the founders believe is being offered in an inferior or limited manner.

The word startup goes beyond a company just getting off the ground. The term is also associated with a business that is typically technology oriented and has high growth potential. Therefore, startups tend to face a unique set of struggles, especially regarding financing, because traditionally investors look for the highest potential return on investment, while balancing associated risks.

So, a journalistic startup might be “a technology-based company with a focus on production and or distribution of media content” (Cardoso et al, 2016), or new ventures that create a strategy that links the production or distribution of news to a given technology, and a given monetization strategy that allows them to gain competitive advantages in a specific niche market.

Innovation in journalism may be understood as something new and useful, or a different way of doing things (from the incremental to the transformative transformation levels) that supports the digital era development of journalism. Innovations in newsgathering practices and storytelling, publishing and distribution, audience engagement and participation, business model design, and news organization management have been essential to journalism’s digital transformation (Posetti, 2018: 9).

Lucy Küng’s (2015) contributions on news innovation identifies several common characteristics of successful organizations: a clear strategic focus; senior leadership dedicated to change; a pro-digital culture; a deep integration of editorial, technological, and commercial expertise in developing new products and services. Journalism innovation may also be defined as “something new or useful, or a different way of doing things. These things could be radical, disruptive and transformative interventions, or more basic and incremental steps on the innovation highway. They could manifest in the following ‘spokes’ of the Journalism Innovation Wheel: 1. Reporting/storytelling; 2. Audience engagement; 3. Technology/Product; 4. Distribution; 5. Business; 6. Leadership/Management; 7. Organization; 8. People and culture” (Posetti, 2018: 14).

Since “the evolution of journalism innovation has occurred in the context of two decades of historic disruption marked by ‘catastrophe and rebirth’” (Anderson, Bell & Shirky, 2012), for achieving innovation, the “best practice can involve starting small, finding commercial partners to

² Author of *The Lean Startup* (2011)

underwrite investments, a system for allocating resources between long-term projects and those that pop up, and explicit learning goals" (Küng, 2017: 23).

In comparison to legacy media structures, journalistic startups tend to be built around very different sets of goals. Legacy / traditional media can be defined as "companies or groups that have a presence on the television or radio broadcasting and/or print business, that existed prior to the mass dissemination of the Internet or, having launched into the market in the last decade and a half, did so in order to answer the question "how can we produce and distribute news and entertainment content, and maintain our economic and social power in the network society?" (Cardoso et al., 2016) Agility is a high priority for legacy and new media organizations, according to Küng (2017). Another central issue to the media structure differentiation is, according to Labafi & Williams (2018), how disruption is handled, as well as the diversity of resources that are created / implemented – issues that relate not only to inner-organizational structure as to wider market and competitive layouts.

Some "factors affecting journalism innovation include new challenges such as trust erosion, audience polarization, and political demonization of journalists and news organizations within liberal democracies. Innovative approaches to storytelling that emphasize diversity (gender, race, class and culture) and inclusivity might be useful responses to those problems" (Posetti, 2018: 13). These factors are not restricted to journalism, some are related to wider social and political polarization issues and, in specific contexts, innovation in journalism may also be seen an issue of power and ideology that is easier to understand through the field of political economy (Girija, 2020).

We draw one main key idea from Küng (2017) about digital storytelling formats as central to mobile consumption and digital business models. "Digital storytelling is developing fast (...) At the start of the transformation is a single mental shift – abandoning the newspaper story as a default template. (...) Three dimensions of storytelling are different in digital. The first is the relationship between writer and reader, which moves towards a dialogue" (Küng, 2017: 27). The understanding of the mission and goal of the journalist should, then, "be the top apex for this new pyramid of journalistic competences or, even more, for practicing credible, rigorous and of public interest journalism, and act as an independent defender and regulator of democracy" (Crespo, 2018: 80).

Nicholls et al. (2018) tried to relate the need of a closer relation between writer and reader. "We find some evidence of a flight to quality among digital-born media, in which the difficult funding landscape and desire to build paying audiences are driving an emphasis on quality rather than clicks" (Nicholls et al., 2018: 5) and the need to remain focused on maintaining a brand and a reputation for quality rather than simply pursuing volume.

What all of these organizations have in common are the core challenges of online journalism: producing news which serves both the audience and the identified mission, handling the problem of being found by the public (discovery) and getting news into the hands of the target audience (distribution), and finding funding models which provide sufficient revenue to make the venture sustainable (Nicholls et al., 2018: 6). Khajeheian (2016) suggests that complex contextual variables may be explored by centralizing attention in one aspect all contemporary media structures have in common, which is the fact that all of them must cover in their business models two different targets, or market-sides: audiences and advertisers (Khajeheian, 2016: 44). Despite being mentioned separately, these two targets are closely related (more attention equals more ad investment) and imply the analysis of contemporary media business model building as a "multi-sided" process that relies on communication fluidity between different aspects of business architecture, even more challenged by ubiquitous digitalization and platformization of the entire business models and organizational structures.

Despite the focus on content, the business side of journalism cannot (and should not) be ignored. "Advertising remains vital as a source of revenue for digital-born outlets and some organizations

have done well with this approach. At the same time, we see an increasing interest in subscription and membership models as long-term (but not difficulty-free) sources of revenue.” (Nicholls et al., 2018: 5) Alternative funding methods such as crowdfunding continue to yield interesting outcomes both financially and in terms of audience creation, with new publics finding unprecedented emotional attachment to journalistic endeavors (Cha, 2020) offering funding specific options run through digital platforms, which can be oriented to specific projects (single campaigns) or to wider structures functioning (perpetual campaigns). New funding systems alone form a secondary study field in this context as it becomes increasingly clear that despite working well when applied to premium content, paywalls as a single business model are not enough: “the diversity of types of media content and media users’ needs and preferences indicate that a ‘one size fits all approach’ is unlikely to ensure media survival – or, better, reform and renewal” (Macnamara, 2010: 31). The creation of hybrid models, on the other hand, offers an interesting prospect as they make media structures stronger with the diversification of revenue sources and audience exploration (Carr, 2010).

3. Materials and Methods

3.1 Sampling

The subjects of this research were chosen by their diverse themes and editorial approaches, fitting the journalistic startup concept, all having a business model to assure their financial sustainability and being officially registered as a news media, according to the Portuguese legal framework. All the case studies can be placed under the umbrella of the “‘second wave’ digital-born news sites, launched from the mid-2000s onwards, produce their own content, rather than relying primarily on aggregation and wire copy. There is huge diversity among these organizations in terms of audiences, scale, funding model, and the types of news produced” (Nicholls et al., 2018: 6).

From all the possible units of analysis (from the universe of news media Portuguese startups), we first excluded those that didn’t match the startup concept (Cardoso et al, 2016), especially the ones without a clear business model - many online news media in Portugal start as a non-professional project: those where a group of friends develop and publish contents without any business strategy, especially on the revenues matter. Even without an intensive and extensive mapping of the whole panorama of news media projects/ startups in Portugal (there are not that many more which can fit the startup concept), the chosen ones to compile this case study can be considered a representative sample. The selected cases to study are Polígrafo (a fact-checking platform), Fumaça (an engaged journalism website/podcast), Sul Informação (a regional news website), QiNews (an engaged journalism website) and Shifter (a “digital generation” magazine). From the original selected sample, we had to remove O Corvo (a local news website) and Wilder (a specialized – in nature journalism - website). In the first case, their managers alleged they are redefining their future (and survival), so the timing was not adequate to give relevant information; in the second, all the efforts to establish contact (by e-mail, phone or social media) didn’t succeed.

3.2 Data collection

To develop this research we did semi-structured interviews with editorial managers from the selected journalistic startups (by their diversity), did an editorial analysis to the product (the journalistic content - using a matrix³ to map the type of contents, type of media, editorial approach, publication schedule, etc.) and to the business, using the Business Model Canvas (Osterwalder & Pigneur, 2010) to map the businesses, and compared them to create a structured and broader view of the journalistic startups scene in Portugal.

³ Based on the [IPTC NewsCodes](#)

As for the semi-structured interviews that were made to members of each startup editorial board, the option for this method was based on the possibility that they might provide richer information and reflection elements than if we had chosen a questionnaire⁴. The semi-directive interviews enabled the possibility of interviewees to express their opinions and speak freely, being at the same time guided in a way that wouldn't disrupt their thoughts, helping to better understand some of the questions we wanted to answer. One of the downfalls pointed to interviews is the possible difficulty of the researchers to stay in focus and let the interviewee speak very broadly⁵, but given the focus, we think we could get very interesting content out of the interviews that were made. The interviews were oriented to deep focus on different elements of newsroom organization, newsroom practices, business and editorial guidelines, monetization strategies, opportunities, and challenges.

3.3 Method of analysis

An editorial analysis of the product (the journalistic content) was made using an adapted categorization of the news (see Appendix I) following the guidelines of the NewsCodes of the International Press Telecommunications Council (IPTC)⁶.

It is an international consortium that comprises more than 50 companies and organizations linked to the media, that is, "gathers the main news agencies, publishers and sellers of the industry". The IPTC has created standards that aim to "simplify the distribution of information". NewsCodes⁷ are concepts that facilitate the codification of news, in the most different formats; the terms 'tree' we used (see Figure 1) has 12 dimensions, so the analyzed pieces will be categorized according to 12 terms. These are Politics; Society/national (general); International; Economics; Arts, culture and entertainment; Justice; Education; Environment; Health; Lifestyle and leisure; Science and technology; Sports.

To analyze the business itself, we adopt Alexander Osterwalder & Yves Pigneur definition of a business model to describe "the rationale of how an organization creates, delivers, and captures value" (2010: 14). This concept can become a shared language that allows us to easily describe and analyze business models to create our research design with multiple case studies as well as to understand strategic alternatives and innovative approaches to the news industry.

Osterwalder & Pigneur (2010) describe nine basic building blocks that show the logic of how a company intends to make money and summarize them into a business model canvas (Figure 2). "The business model is like a blueprint for a strategy to be implemented through organizational structures, processes, and systems" (2010: 15) and comprises four main areas of a business: offer, infrastructure, customers, and financial viability.

The application of the business model canvas (see 2) allows us to compare all chosen outlets in a more analytical and unified way.

⁴ Raymond Quivy. Luc Van Campenhoudt. Manual de investigação em Ciências Sociais., pp. 192, 2013, 6th Edition in Portuguese, Gradiva, Lisbon.

⁵ Raymond Quivy. Luc Van Campenhoudt. Manual de investigação em Ciências Sociais., pp. 194, 2013, 6th Edition in Portuguese, Gradiva, Lisbon.

⁶ <https://iptc.org/about-iptc/>

⁷ <https://iptc.org/standards/newscodes/>

Genre (Género)	Subject description (Descrição do tema)	Media topic (Assunto)	Media	Priority (Prioridade)
- Feature (Reportagem)	- Title (Título do artigo)	- Politics (Política)	- Text – even with some photos (Texto – mesmo que tenha algumas fotos)	1 – Higher (mais alto)
- News (Notícias)		- Society/national – general (Sociedade/nacional – geral)		5 – Lower (mais baixo)
		- International (Internacional)	- Video (Vídeo)	
- Interview (Entrevista)		- Economics (Economia)		
		- Arts, culture and entertainment (Artes, cultura e entretenimento)	- Audio (Áudio)	
- Opinion (Opinião)		- Justice (justiça)	- Photo – gallery (Foto – tipo fotogaleria)	
		- Education (Educação)		
		- Environment (Ambiente)		
		- Health (Saúde)	- Multimedia (Multimédia)	
		- Lifestyle and leisure (Estilo de vida e lazer)		
		- Science and technology (Ciência e tecnologia)		
		- Sports (Desporto)		

Figure 1 - Adapted table to code media contents (based on the IPTC NewsCodes), in English and Portuguese

The Business Model Canvas		Team or Company Name: COMPANY NAME		Date: MM/DD/YY	☐ Primary Canvas ☒ Alternative Canvas
Key Partners Who are our Key Partners? Who are our Key Suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform?	Key Activities What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?	Value Proposition What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?	Customer Relationships What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they?	Customer Segments For whom are we creating value? Who are our most important customers?	
	Key Resources What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams?		Channels Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?		
Cost Structure What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?		Revenue Streams For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?			

Source: www.businessmodelgeneration.com

Figure 2 - The Business Model Canvas, by Osterwalder & Pigneur

4. Results

4.1. The subjects

The subjects of this research were chosen by fitting several criteria on production, distribution, entrepreneurial and business practices, and legal framework. So, we looked for their diverse structural and editorial approaches, fitting the journalistic startup concept, have a business model to assure their financial sustainability and being officially registered as a news media, according to the Portuguese law, which implies being registered with the regulatory body for the sector (ERC – Entidade Reguladora para a Comunicação)⁸.

4.1.1. Fumaça

Fumaça⁹, an engaged journalism website/ podcast, was founded after a group of young friends became aware that there was a lack of in-dept information on relevant matters for the development of the society - from politics, equality, fairness. First, they (just some were journalists) started just as that: a group of people united by the need of being counter-power, to tell stories that cannot be found anywhere else, in an amateur and volunteer way (Santos, 2019). Soon they realized they could do more, in a professional way, and Fumaça was founded – even if only after the first scholarship/ grant from the Open Society Foundation, in 2018, they assume their professional role. From then on, professional journalists in the team – with previous experience in traditional legacy media - took a more important role, and all the produced content became more professional. In 2019 the team – all paid for their work – includes 6 journalists, 2 web developers, 1 art director, 1 multimedia designer and 1 marketer/fundraiser.

⁸ <http://www.erc.pt/>

⁹ <https://fumaça.pt/>

With goals like defend and promote social progress and human rights, or to question and scrutinize democracy's process and structures, Fumaça doesn't have some of the constraints most media have: they don't produce breaking news (only features – sometimes serials – and interviews), they don't have advertising, and they are not driven by audience numbers (they are growing, and to have 3.000 listeners to a more than an hour long podcast can be considered an interesting result for Portugal).

The independence motto is applied in every stage. Even if Pedro Miguel Santos assumes the editor-in-chief role, all the decision-making process is horizontal, based on fortnightly meetings, where the features in progress are evaluated and future articles are defined. To have time to prepare, investigate, produce, and reflect on the articles is a basic principle of the project.

In terms of media, Fumaça started as a podcast, then evolving for a more complex multimedia construction, including video and text, but always with audio as prime content. The main references came from all over the world, from *El Salto*¹⁰ (Spain) to *The Correspondent*¹¹ (global) and *The Intercept*¹² (USA), or *Mediapart*¹³ (France).

4.1.2. Polígrafo

Polígrafo¹⁴ started its activity on the 6th of November 2018 as an online media, hosted by the biggest Portuguese web portal, Sapo.pt (with around 140 million monthly page views). Since the beginning of April 2019, the outlet established a partnership with SIC television network, a free-to-air national channel, for producing a weekly fact-checking segment in the prime-time news (also broadcasted afterwards on SIC Notícias news TV channel), "Polígrafo SIC".

Fernando Esteves (founder, CEO and editor-in-chief) explains the importance of the partnership with a major Portuguese portal. "To have Sapo as a partner allowed us to reduce the need of initial capital, because they have the technological know-how and resources. Sapo built the website. Suddenly I had six people to develop and solve all the platform questions, without having to invest in it. It was the best solution from the technological point of view. Sapo also solved my problem of needing to build a commercial department" (Esteves, 2019). A financial investor just appeared when Polígrafo was already working with Sapo. Polígrafo shareholders¹⁵ became to be The Emerald Group, which took 30% of the project. BCreative Media (21%) and Fernando Esteves (49%).

The Polígrafo team¹⁶ currently has eight full time employees, and several external journalists/contributors, who are paid for packages of 15 fact-checks. According to the editor-in-chief, "the 2019 elections in Portugal (European, Regional and Legislative) will force the team to increase." (Esteves, 2019) But its mentor is sure that, just "after four months, Polígrafo is a project that is already institutionalized and is relevant in the Portuguese media."

"Polígrafo is more than a journalistic project, like PolitiFact¹⁷ and FactCheck¹⁸ or The Washington Post Fact-Checker¹⁹ are. It is a return to the basic principles of journalism, something that I realized would spread to the rest of the world many years ago". One of the basic principles of

¹⁰ <https://www.elsaltodiario.com/>

¹¹ <https://thecorrespondent.com/>

¹² <https://theintercept.com/>

¹³ <https://www.mediapart.fr/>

¹⁴ <https://poligrafo.sapo.pt/>

¹⁵ <https://poligrafo.sapo.pt/institucional/artigos/o-nosso-financiamento>

¹⁶ <https://poligrafo.sapo.pt/institucional/artigos/ficha-tecnica>

¹⁷ <https://www.politifact.com/>

¹⁸ <https://www.factcheck.org/>

¹⁹ https://www.washingtonpost.com/news/fact-checker/?noredirect=on&utm_term=.7dc28ba39aa4

Polígrafo is the focus: “we don't check the work of journalists, but screen the protagonists”, which fits perfectly in a more broaden goal: “it is essential to verify the major issues of democracy” (Esteves, 2019).

But Polígrafo is not set to be “a mass media organization and may not want to be.” (Esteves, 2019) The project is more set to be a watchdog of democracy and of its institutions, even if it intends to spread the messages produced. “Our content is very shareable and deeply viral because of the stamps²⁰ (True, True but..., Imprecise, False, “Pepper in the tongue”²¹), which make them much replicated on Twitter by political influencers, and in private WhatsApp groups of political parties.” (Esteves, 2019) Polígrafo publishes just four fact-checks per day. “Intentionally there is no concern about having scale: we are concerned with format and quality.” (Esteves, 2019)

The relationship with readers is also fundamental. “We have WhatsApp²² and Telegram²³ accounts just for that, so that readers can make requests to us, and we receive dozens and dozens every day (see “Peça-nos um fact-check” – “Ask us a fact-check” on the homepage). At launch we felt a lot of goodwill, the project was well received and had a lot of media exposure that generated buzz. Of course, the timing was important, because it was in the aftermath of the Brazilian presidential elections, where the theme of fake news became very strong and had a lot of echo in Portugal.” (Esteves, 2019)

4.1.3. Sul Informação

Sul Informação²⁴ is a regional news website with focus on information from and for Algarve and South Alentejo. It was created in September 2011, when a group of five journalists that worked together on a regional newspaper decided to leave and launch their own project, even if only three went forward. Designed as an online only media – since they knew that print has high fixed costs of production and distribution and that potential audiences online were much bigger – it is being redesigned to mobile consumption first, since 65% of readers access through smartphone. Their audiences are quite stable, on around 28.500 pageviews per day (or 850.000 per month), but due to the regional focus, on special occasions or events it can double or triple (a tornado in the region made it spike to 105.000/ day).

The main goal of the project is to publish information collected on spot (not from agencies or press releases), go where others do not and do it with independence, credibility, and seriousness (trust). “People from Algarve and South Alentejo got used to us, to go to our website for news and to contact us when something happens, so we can report it”, explain Elisabete Rodrigues, one of the founders and editor-in-chief of Sul Informação.

The team of four journalists hire an external photographer and a video team (2 people) when needed, and an external IT team assures development and maintenance of the website. In the early days there was no newsroom (they met once a week in one's home). Afterwards, they started using Algarve University radio office, and now they have their own space at the Algarve University incubator. Funding comes mainly from advertising (“we are not going to be rich but is enough to pay all the expenses and wages” (Rodrigues, 2019), but also from national Government funds for regional and local media development.

²⁰ <https://poligrafo.sapo.pt/institucional/artigos/o-nosso-metodo>

²¹ Pimenta na Língua, in Portuguese, is an idiomatic expression meaning “too spicy” or “too hot”

²² <https://api.whatsapp.com/send?phone=351968213823>

²³ <https://telegram.me/PoligrafoTelegram>

²⁴ <https://www.sulinformacao.pt/>

4.1.4. QiNews

QiNews²⁵ has a strong social focus, addressing social issues such as poverty, immigration, ethnic-racial issues, etc. The project has one full-time employee and two part-time employees. One of these part-time employees is also a journalist at O Observador online newspaper and the other works for Público daily newspaper. The full-time employee is not trained in journalism, since he is a biologist with experience in video documentaries.

Work is organized in a relatively informal way, with workers exploring topics to their liking, with the focus they prefer. This relatively free exploration is constrained only by the final typology of the presentation of the pieces, which is video.

The project is seen by the interviewee (full-time worker) as a hobby, and there is no prospect (or need) of profitability or financial sustainability. It should be noted that in financial terms the startup is dependent on a parent company, owned by the interviewee, which supports QiNews.

When questioned about the constraints of this situation, the interviewee reveals an innovative mentality in the way he sees the business, not revealing discouragement with the startup situation and stating that the impetus with the project is more emotional, related to the will to produce content freely, and based on the relevance and preference of employees.

4.1.5. Shifter

Shifter²⁶, a “digital generation” magazine, produce 4 articles per day, except on weekends, when there are no new content. Audiences range between 250.000 to 300.000 pageviews per month. There have been more, up to 1 million, but with the change in social media algorithms they have decreased.

Shifter started as a personal blog of one of the founders, when they were still at university. It was inspired by projects such as The Verge²⁷, Quartz²⁸ or The Next Web²⁹, which were taking their first steps at the time. The project was just a hobby that accumulated with the classes and work they already had at the time (between 2013 and 2015). While they were advertising and marketing students, they thought, from a certain point on, that it would be better to create a brand and not just write in their own name as was the case with the blog. Thus, the idea of creating a brand came up and they moved on to registration, and the name Shifter was the second choice, after verifying that the first option was already registered and asking them for a large amount of money to keep that registration. Neither of the two founders is a journalist, they are currently in the process of applying for a press card.

With the move to Shifter, a third person joined the project, being a journalist, which helped to change the focus of the project, making it more solid. According to João Ribeiro, legitimacy as a product of journalistic information came, initially from outside, with the recognition of some peers. In 2015, they advanced to a new phase of the project and got into StartUp Lisboa (a city hall startup incubator). João Ribeiro adds that they got into the startup culture and at the time thought it would be interesting for sustainability and business reasons. However, they ended up realizing that the environment “was not very prepared for media startups” and ended up leaving the incubator.

²⁵ <https://qinews.pt/>

²⁶ <https://shifter.sapo.pt/>

²⁷ <https://www.theverge.com>

²⁸ <https://qz.com/>

²⁹ <https://thenextweb.com/>

Initially the main theme of Shifter was technology, but they have been growing and now approach more general themes as well, and characterize their focus as being to make information so that it is the reflection of the digital generation - "we talk about what is said on the Internet". (Ribeiro, 2019)

The most common type of production is the adaptation of foreign media articles and interviews (they are looking to increase the number of interviews and not so much reporting). The articles are based on the premise that "from our computer we can get a lot of information and do more in-depth and different work than what we find in other media". (Ribeiro, 2019)

Even if they still focus on text, (mainly due to financial issues, as video production is more expensive), they want to invest on programming and through it present content in a different way, for example, interactive content, betting on different formats designed for the Internet.

Shifter have two full-time employees, and some (not disclosed) unpaid employees. The two workers work in Made of Lisbon (the editorial office is the result of a partnership with the Lisbon City Hall) and the rest work outside and send in their work.

4.1.6. A first approach

On a primary approach to the subjects, we can take some insights on the journalistic startups in Portugal. All of them involve journalists, but they have quite different genesis: some started because journalists felt the need to do things differently (Polígrafo, Sul Informação, partially Fumaça), others because someone wanted to focus in some kind of media that didn't exist (QiNews and Shifter).

Teams are small in all instances, but the ones with a more journalistic approach and logic are larger (Polígrafo, Sul Informação, Fumaça), goal oriented and have a more audience driven approach (except Fumaça) while also having a clearer business model.

All projects try to fit into a niche and not compete with legacy media, and the search for alternative financing sources is common and widespread, even if traditional advertising is still the main revenue stream.

4.2. Editorial analysis

One way to characterize media projects is to analyze produced content, so we coded the main five headlines on the homepage of each of the five subjects for three days (Monday, Wednesday and Friday) on the week from 8 to 12 April, 2019. We coded the articles genre, subject, media topic, media, and priority to try to understand the coherence of the projects, and main trends for each.

4.2.1. Fumaça

Fumaça has no regular publishing schedule and does not produce news, only features, from long form reporting to documentary, and interviews. On the three observed days (see Appendix I, a), two of the reports were in the homepage headlines all days, and another two appeared two times. So, there was only nine different headlines from Monday to Friday. Ignoring the repetitions, we can observe that, according to genre, 2/3 are long features and the remaining 1/3 interviews. Regarding media topic, 60% are about international topics, 27% on society and the rest environment. In terms of media use, Fumaça uses mainly audio (podcast) + text transcription (more than 50%), but also video + text (with an audio only version of the video) and just text. During the observation period, the main headline was a feature 2/3 times, always on an international subject and always audio (podcast) + text transcription.



Figure 3 - Fumaça homepage (8th of April 2019)

4.2.2. Polígrafo

Polígrafo publishes four fact-checks a day on average. From the analysis of the 5 major headlines (see Appendix I, b) on three days in the same week, we can observe that, according to genre, 60% can be considered news and the other 40% are longer features. Regarding media topic, 60% are about politics, 27% on international topics and the rest Arts, culture and entertainment, and Society. In terms of media use, Polígrafo uses mainly text (even if with photos) and video (40% each), but also mixes both media (text + video) in 20% of the content that made the headlines. On observed days, the main headline was always a feature, in 2/3 on politics and mixing text and video.



Figure 4 - Polígrafo homepage (8th of April 2019)

4.2.3. Sul Informação

Sul Informação publishes an average 30 articles a day (less on weekends). Analysis of the 5 major headlines (see Appendix I, c) on three days in the same week, we observed that, according to genre, 60% can be considered news and the other 40% were longer features. Regarding media topic, 66% were about Society, 20% on Arts, culture and entertainment topics and the rest on Politics and Economy. In terms of media use, Sul Informação uses mainly text (even if with photos) with just one video feature in 15 headlines. During observation, the main headline was always breaking news, 2/3 on society and all in text.



Figure 5 - Sul Informação homepage (8th of April 2019)

4.2.4. QiNews

QiNews has no regular publishing schedule, so on the three days in the same week the 5 major headlines (see Appendix I, d) were always the same (no updating), and one of the headlines was duplicate (1st and 3rd in priority). In genre, half are interviews and the other are long form reporting. The media topic is always society/ national, and all in video.

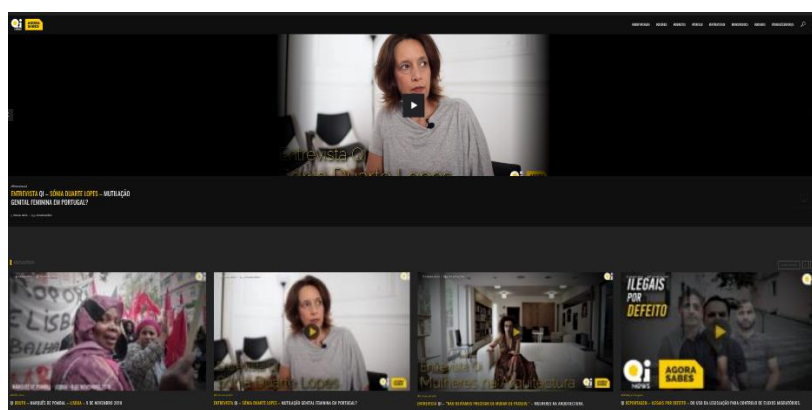


Figure 6 - QiNews homepage (8th of April 2019)

4.2.5. Shifter

Shifter publishes an average of four articles a day (just on weekdays). From the analysis of the 5 major headlines (see Appendix I, e) on three days in the same week, we observed that, according to genre, almost half were long features, with big space for opinion (1/3) and 20% were news. Regarding media topic, a little more than half concerned politics, 27% science and technology and the rest society and arts, culture and entertainment. In terms of media use, Shifter uses mainly text (even if with photos) in 80% of the headlines content, but the remaining 20% are multimedia. On the observed days, the main headline was always a long form feature, 2/3 on politics, and also 2/3 in text.

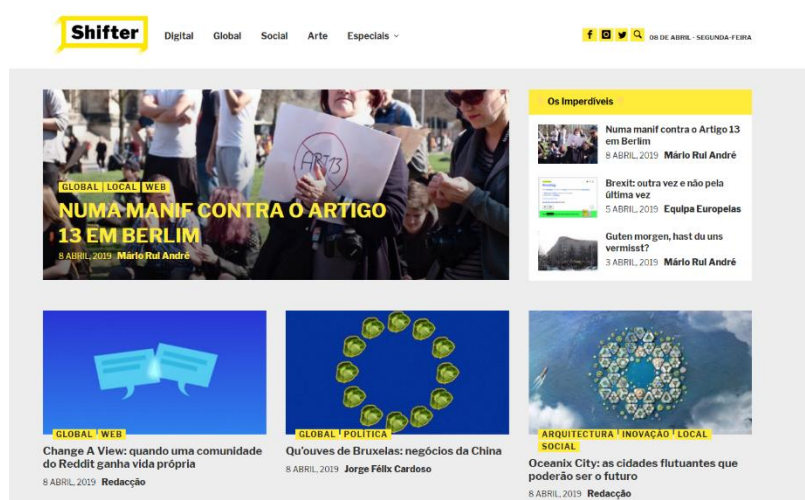


Figure 7 - Shifter homepage (8th of April 2019)

4.2.6. A second approach

Regarding editorial analysis, results point out that, in terms of publishing schedule, there are two opposite practices: Fumaça and QiNews do not have a schedule, even if Fumaça publishes regularly. The other three projects have very strict schedules, even if they are quite different (from 4 articles to 30).

In all, even if breaking news (Sul Informação) or short articles may exist (Polígrafo), the trend on genre is to bet on long form reporting and interviews to be different from traditional media. The subject of the articles is quite different between each media and even inside each one.

On media topic we conclude that politics and society are the most important, followed by international themes. The most used media is still text, but video tends to be more and more relevant. On the main headline, the trend is to prioritize longer features on politics.

4.3. The Business Model Canvas analysis

The use of the Business Model Canvas as a conceptual tool help us to identify the four main areas of a business: offer, infrastructure, customers, and financial viability. It also underlines the values and goals related to organizational mission, which tend to be very relevant to characterize a project and, in our case, these journalistic startups. (see 4.3.1. to 4.3.5).

4.3.1. Fumaça

The analysis of the Business Model Canvas of Fumaça (see Appendix II, a), an engaged journalism website/podcast, confirms the alternative editorial positioning of the project. The Value Proposition makes clear that Fumaça is, above all, an independent, progressive, and dissident media, with very clear goals of transparency and counter-power positioning by telling stories that other media do not, using different perspectives and voices. These goals are fulfilled by defending and promoting social progress and human rights and by questioning and scrutinizing democracy's process and structures.

Through features, interviews and theme oriented serials published through various channels (Website, Podcasts, YouTube, Facebook, Twitter and Instagram), the team delivers the content to the general public (readers and listeners) and Patrons, establishing three relationship levels: direct - producer to consumers (readers/listeners), Interactive - with publics (via social media), and Personal - with patrons.

To support the project, the key partners are the Open Society Foundation and the Calouste Gulbenkian Foundation, which assure most of the funding through grants. The only other source of revenue is donations via Patreon, a continuative crowdfunding system, consolidating in Portugal, thus positioning Fumaça as one of the successful national early adopters. Fumaça has a traditional cost structure newsroom, team wages, and travels and research expenses.

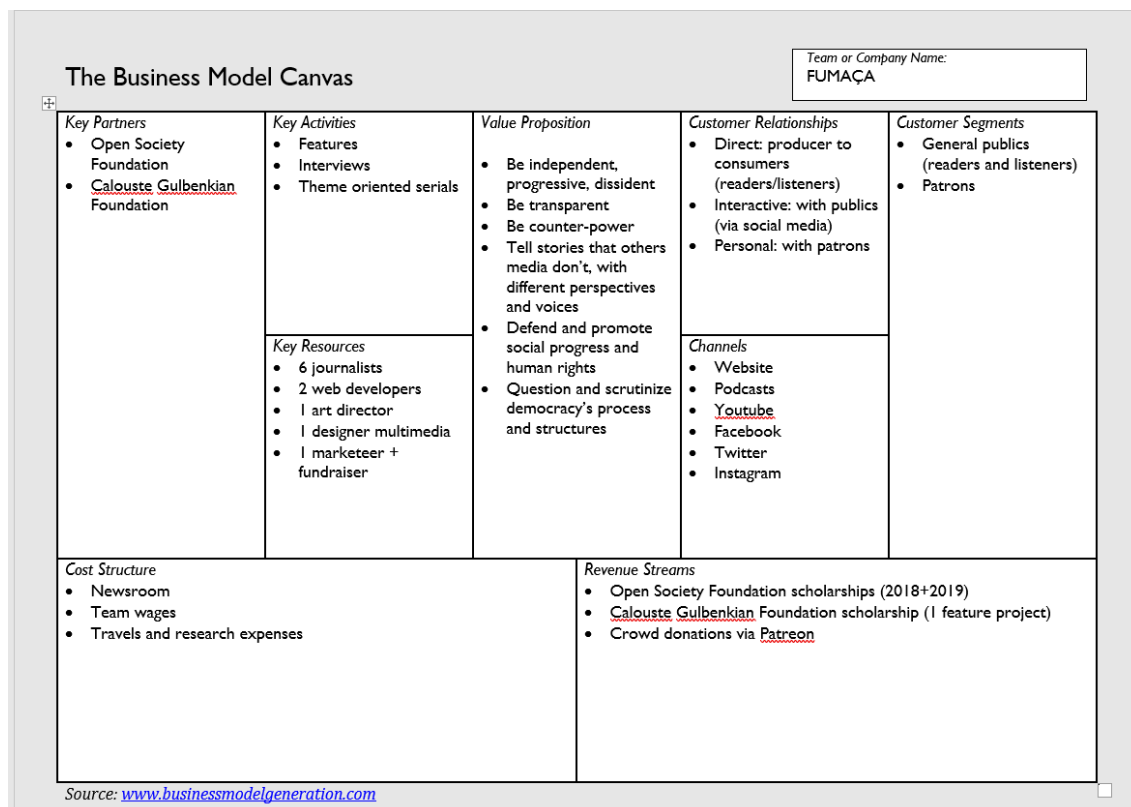


Figure 8 - The Business Model Canvas, by Osterwalder & Pigneur, applied to Fumaça

4.3.2. Polígrafo

Polígrafo, as a fact-checking platform, confirms its mission in the value proposition (see Appendix II, b), with goals such as: being the watchdog of democracy and its institutions; return to essential journalism principles; verify the main issues of democracy; screen the protagonists, not the journalists or the media; be transparent about sources and methods; creation of viral contents.

Key activities are news reporting (fact-checking), media literacy courses, social media management courses, branded content (second half of 2019) and sponsored conferences (soon). The resources are mainly human (8 employees and BCreative Media agency – produces video content and social media management), since the partners assure other basic needs: SAPO web portal platform provides IT development, hosting and ADV sales and, due to its brand recognition, reach and audience; SIC free-to-air TV network broadcast the TV content (paying for it), Lupa Agency (Brazilian fact-check platform) provides know-how and external contributors (15 in total, only some regular?) extra contents.

The customers are three major groups: the general public (readers + viewers), politicians (specialized niche readers) and companies (literacy seminars and social media management courses). To reach customers, two kind of relations are developed (direct - producer to consumer; and interactive - via private messaging systems) though several channels: Webpage, SIC TV network, Facebook, Twitter, Instagram, Sapo Vídeos, Whatsapp and Telegram.

Revenue comes from online advertising on website (revenue share 50/50), SIC TV fixed fee (per week/edition), branded contents (2019), paywall and paid subscription model (premium contents planned for 2020) and sponsored conferences (soon). Costs are the usual for a media project: team wages, video and social media content, external contributors' fees, and newsroom (office headquarter).

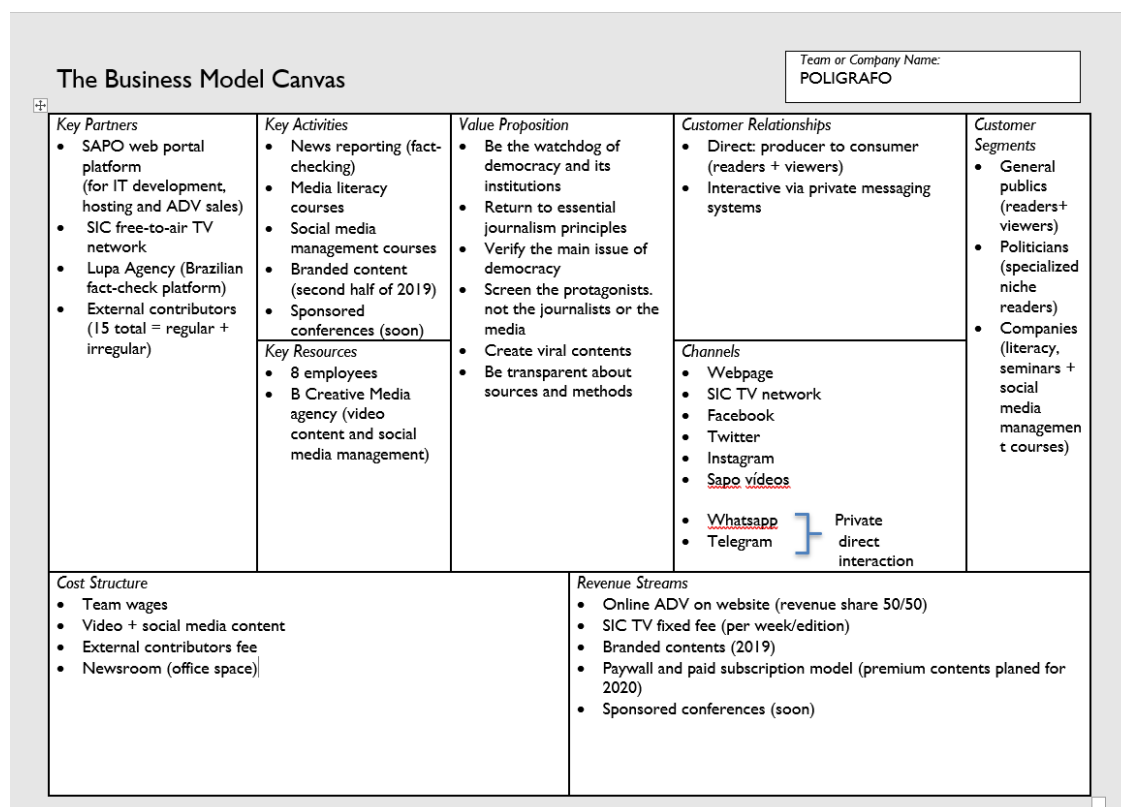


Figure 9 - The Business Model Canvas, by Osterwalder & Pigneur, applied to Polígrafo

4.3.3. Sul Informação

Sul Informação, the regional news website, has very clear values, according to its goals (see Appendix II, c): to provide unique regional content from and for Algarve and South Alentejo. They achieve it with long form reporting (40%), breaking news (50%), interviews and opinion (by external collaborators).

With just 4 journalists and a website as main resources, Sul Informação rely on several key partners: Algarve University Radio, Jornal de Notícias national daily newspaper, video team (2 persons), 1 photographer, IT company (for web development), Algarve University incubator (newsroom space), opinion writers (professionals + academics) and local business and enterprises (advertisers).

The target of the project is the regional population (readers), local business (as advertisers) and institutions and civil society organizations (as agent of their info dissemination), and they are reached through several channels: Website, Facebook, YouTube, Instagram and Twitter, establishing the following relationships: direct: producer to consumer (readers), dissemination agent (for local institutions and civil society organizations) and interactive (via comments on the website and social media).

The revenue streams for Sul Informação are online advertising on website, the network partnership (with Jornal de Notícias) and the national funds for regional and local media development. The costs are common for media projects: team wages, office space, external editorial services (photo and video), IT services (website) and travel expenses (which are considerable, since the outlet has a huge geographical area to cover).

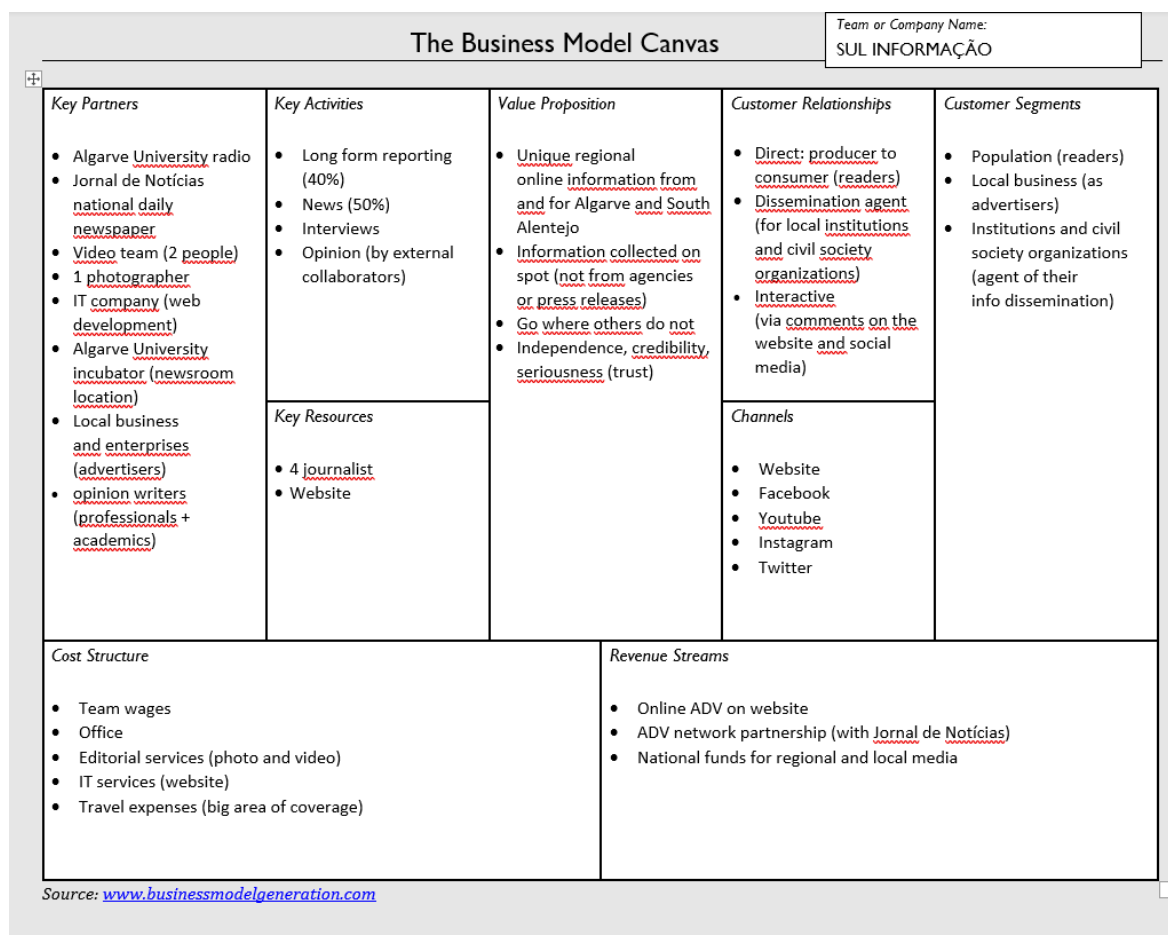


Figure 10 - The Business Model Canvas, by Osterwalder & Pigneur, applied to Sul Informação

4.3.4. QiNews

QiNews is an engaged journalism website which have as value propositions (see Appendix II, d) to provide video contents about social stories for the interconnected generation, give voice to the daily struggles of Portuguese and foreigners citizens that are not covered by other outlets, questioning the status quo and be independent, make video news to inspire social participation into more equal and human society and “work for passion, not for money” (they define themselves as a “not for profit startup”).

To create the video content, the sole resources are 1 full-time video maker (not journalist) and 2 part-time journalists (collaborators of other national newspapers). The only partner is the founder company, that assures the only revenue stream to assure de costs for the team, office, and website.

Customers are, firstly, the interconnected generations (X and millennials), and then the general public, that relate with the project through a multimedia and emotional relationship, established through the website, YouTube, Facebook, Twitter, Instagram end e-mail.

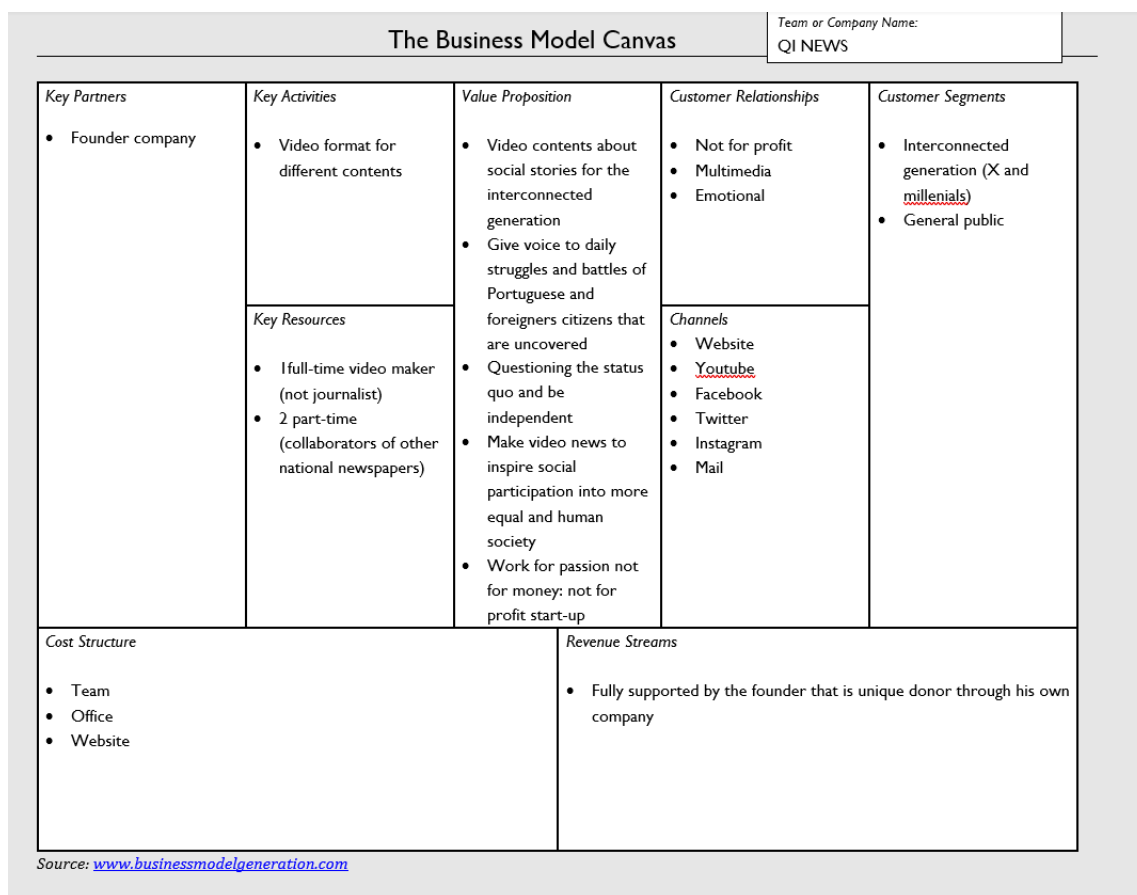


Figure 11 - The Business Model Canvas, by Osterwalder & Pigneur, applied to QiNews

4.3.5. Shifter

Shifter assumes itself as an online magazine for a “digital generation”, so it’s value proposition (see Appendix II, e) is to offer differentiated and more in-depth content about the subjects that are trending on the internet; provide news, inspiration, reflection and entertainment; tell the news and not talk about events; and be specialized in technology, brands, web, creativity, science, entertainment and culture. These goals are achieved by producing news and other articles, sporadically organizing debates, (looking to invest more on this activity) and producing content for the Made of Lisbon Newsletter. To do so, key resources are 2 full-time employees and a web platform developed internally and based on free software.

Several key partners are fundamental to the project: SAPO portal (revenue sharing and, due to its brand recognition, reach and audience), a network of partners who produce content for free, WebHs (hosting platform), Swonkie (provides software that allows automatic publishing and with scheduling in social media), other media outlets that offer cross-content, and Made of Lisbon (offers office space).

Main customers for Shifter are the general public (readers), agencies and brands, especially technologies related (branded content) and Made of Lisbon (B2B). They are reached through the website, Facebook, Twitter, LinkedIn, Reddit, Instagram and Telegram, establishing the following relations: Direct - producer to consumer (readers), community creation (FB group), interactive (via messaging and comments), and personal (SAPO and other advertisers).

Revenue comes from online advertising on website (revenue share), branded content, crowdfunding (single experience in 2018 to meet some urgent needs) and sponsorship: they are thinking of

implementing a sponsorship/donation logic, maybe through platforms like Patreon. Costs consist mainly of the team and the collaborators network (is not a cost now, but they are planning to give some money to collaborators, rewarding the most read articles), since other kind of costs are ensured through partnerships.

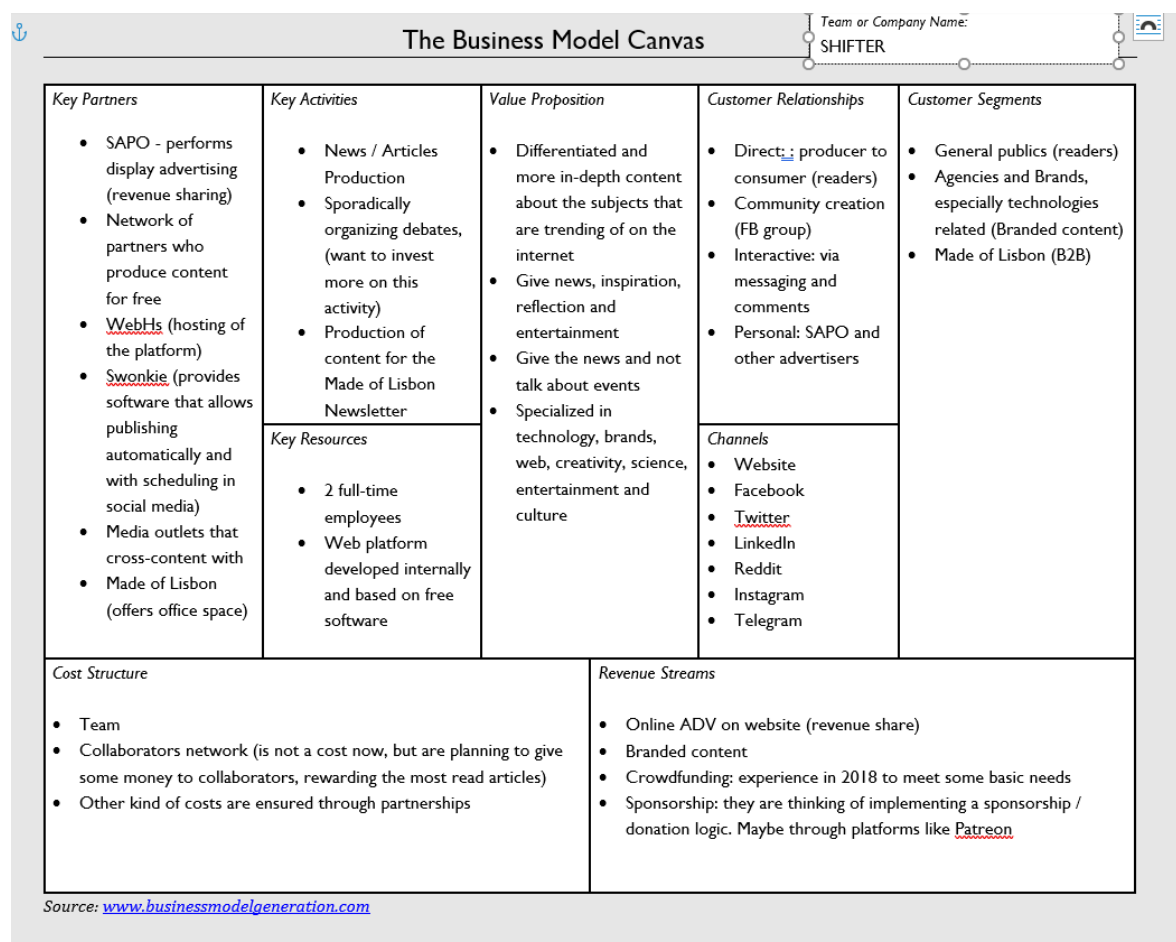


Figure 12 - The Business Model Canvas, by Osterwalder & Pigneur, applied to Shifter

4.3.6. A third approach

Analysis of the Business Model Canvas for the five subjects reveals many similarities. The value proposition shows us that all the projects try to find an alternative approach to information and journalism, according to personal needs or problems, in the search for identity and niche – no one is trying to do the same or replicating strategies from other brands, a key aspect of innovative ecosystems.

Key activities are quite similar, with the main trend to be the production of long form features/ interviews, in an attempt to escape the breaking news dominance on many of the traditional media.

Key resources are always scarce and mainly focused on human resources, especially journalists. Key partners can be very relevant to most of these projects, in particular regarding funding, office space, contents partnership, IT development and support and reach.

Customer segments are very diverse, but audiences organize mostly niche – by location (Sul Informação) or interests (Fumaça, Shifter, Polígrafo & QiNews), and advertisers are also relevant customers (which relates to the fact that they are the main revenue source for the most (Polígrafo, Sul Informação, Shifter)).

Customer relationships are quite similar, with direct relations (producer to consumer) and interactive (via social media) to be the standard. The same happens with channels: all have its core activity through a website and then use the main social media platforms to dissemination and interaction.

Revenue streams are mostly based on website advertising, but sponsorship and donations (via Patreon) tend to be more relevant, and other activities (training, events, conferences) can become important revenue streams. The cost structure of each project, even with great diversity between them, is very light and is focused in the team (including external collaborators), office space, IT developing, and research and production costs (especially traveling and accommodation).

5. Discussion

With this research, we intended to create a structured map of the diversity of the journalistic startup scene in Portugal, but also to give a broader view regarding innovative strategies (on product, dissemination and monetization) that can help the development of further research, or to replicate the methodology in other regional or global contexts. For news media outlets, we are looking into starting an internal discussion on new paths to explore, to innovate, to reshape their products, dissemination strategies or business models.

Despite not being extensive, case study diversity can help to deliver clues on the ways journalistic startups can develop and become a sustainable business. How does one idea become a project? Even these cases have quite different genesis, they all started through the identification of a problem or a need for something that did not exist before, in most of the cases within a small group of friends or colleagues. As stated before, the projects found a niche, not competing with legacy media, and search for alternative financing sources to complement the traditional advertising revenue stream.

Portuguese case studies line up with other European cases, as “digital-born news outlets in Europe constitute a diverse and growing sector of the news media, despite the challenges of building sustainable funding models in a difficult online environment” (Nicholls et al., 2018: 21).

Through these first insights on the journalistic startups in Portugal, we discovered that all of them involve journalists, but not only. Teams tend to be small, but the ones with a more journalist approach and genesis have more clear goals, a more audience driven approach and a clearer business model.

In terms of production and dissemination, we have almost opposite practices: some do not have a schedule (nor audiences concerns) while others follow structured publishing schedules. Even if breaking news exist in some, the trend on genre is to invest on long form reporting and interviews. Regarding the subject, there is no clear path, and diversity appears to be the rule. Politics and society are the most relevant media topic, followed by international themes. The most common media is still text, but video appears to be gaining relevance. On the main headline in the website, the trend is to prioritize longer features, on politics.

As far as the proposed methodology goes, the use of the Business Model Canvas is effective in the identification of the four main areas of a business: offer, infrastructure, costumers, and financial viability. It also underlines the values and goals, which tend to be very relevant to characterize a project and, in our case, even in the news media sector.

The analysis of the Business Model Canvas for the five case studies allowed us to find many similarities. By analyzing the value proposition, we can conclude that all the projects try to find an alternative approach to information and journalism, according to personal needs or problems, in the

search for identity and a niche. The key activities are quite similar, with the main trend to be the production of long form features/ interviews. Key resources tend to be scarce and mainly focused on human resources, especially journalists. Also, key partners can be very relevant to all these projects, for funding, office space, contents and IT development and support.

Customer segments are very diverse, but audiences are mostly niche – by location or interests, and advertisers are also relevant customers (which relates to the fact that they are still the main revenue source for the most). Customer relationships are quite similar, with direct relations (producer to consumer) and interactive (via social media) to be the standard. The same happens with channels: all have its core activity through a website and then use the main social media platforms to dissemination and interaction.

Revenue streams are mostly based on website advertising, but sponsorship and donations (via Patreon) may become relevant revenue streams, a tendency on par with the conclusions of Nicholls et al.: “news organizations are increasingly focused on establishing lean, sustainable funding models based on diverse revenue sources” (Nicholls et al., 2018: 5). The cost structure of each Portuguese project is focused on the team (including external collaborators), office space, IT development and research and production costs (especially traveling and accommodation).

Finally, we can also agree with other authors views on journalistic startups, stating that the ambitions of the digital-born media do not end with building sustainable online news businesses. “A strong sense of mission has been prevalent from the start” (Nicholls et al., 2016).

Further research is needed, not only in terms of subject diversity in rapidly evolving markets but also in terms of methodological approaches. Other propositions such as the layout suggested by Salamzadeh, Kawamorita Kesim & Karami (2019) may yield different and more diverse results, as well as new comparison and correlation structures, not only for industry and academy, but also for policy and regulation of the media sector (Salamzadeh, Kawamorita Kesim & Karami, 2019). As projects become more diverse and audiences more fragmented, business model studies must offer convergence models that allow experts from all fields to gather knowledge and experience, providing tools to the exploration of niche-journalism (Salamzadeh, Markovic & Masjed, 2019: 71) as there are smaller players out there who have been developing business models that allow them to reach previously untapped markets and consumers, a well-documented advantage of journalistic startups (Horst & Hitters, 2020).

So, in the fast-pace changing media environment, we believe this study of innovation and startups development can help to better understand the ways the news media business is evolving, and identify trends by giving structured information on the products, dissemination channels and monetization strategies that are revealing to be successful.

Of course, this research, being the first in Portugal with focus on news media startups, and using a methodological approach crossing media theme analysis with a business development tool, has limitations. In future researches it would be useful to have a broader group of subjects, but also to do a longer (in time) and deeper thematic analysis (including content analysis). It will be, obviously, very interesting to do a comparative study between projects from different countries, in Europe and worldwide, using the same methods, to allow a transnational comparison and deliver a more global view on news media startups. In the business research components, other conceptual tools can be used to allow researchers to go deeper in the understanding of the news media startups characterization. One area that is not present in the present research, but might be relevant in future researches, is an IT oriented view over the projects. Since all of them use the internet and social media as platforms for distribution and dissemination, the study of IT solutions and options could also give some insights on how technology influences the development of a new media project.

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Appendix A: Major headlines on the subject's homepage

a) Fumaça (www.fumaca.pt)



Fumaça homepage: 8, 10 and 12 of April 2019

5 major headlines on the homepage

8, 10 and 12 of April 2019

Coded using an adapted version of the IPTC codes

(<https://iptc.org/standards/newscodes/groups/>)

(Note: The aggregate results are found in the green columns of the figure)

Genre (Género)	Subject description (Descrição do tema)	Media topic (Assunto)	Media	Priority (Prioridade)
- Feature (Reportagem) - News (Notícias) - Interview (Entrevista) - Opinion (Opinião)	- Title (Título do artigo)	- Politics (Política) - Society/national – general (Sociedade/nacional – geral) - International (Internacional) - Economics (Economia) - Arts, culture and entertainment (Artes, cultura e entretenimento) - Justice (justiça) - Education (Educação) - Environment (Ambiente) - Health (Saúde) - Lifestyle and leisure (Estilo de vida e lazer) - Science and technology (Ciência e tecnologia) - Sports (Desporto)	- Text – even with some photos (Texto – mesmo que tenha algumas fotos) - Video (Vídeo) - Audio (Áudio) - Photo – gallery (Foto – tipo fotogaleria) - Multimedia (Multimédia)	1 – Higher (mais alto) 5 – Lower (mais baixo)
Reportagem	Brasil: Bolsonaro: um mito em crise permanente (1/2)	internacional	Áudio (podcast) + transcrição em texto	1 (08-04-2019)
reportagem	Palestina: Le Trio Joubran: o oud é uma arma	internacional	Áudio (podcast) + transcrição em texto	2 (08-04-2019)

entrevista	Violência policial na Cova da Moura: Celso Lopes: “Os PSP disseram: ‘temos de extinguir a vossa raça’”	sociedade	Vídeo (também disponível só em áudio) + texto (complemento)	3 (08-04-2019)
entrevista	Precariedade na ciência: Janine da Silva: “Não há qualquer proteção social para um bolseiro”	sociedade	Vídeo (também disponível só em áudio) + texto (complemento)	4 (08-04-2019)
entrevista	Direito LGBTI+: Anna Klobucka: “António Botto fez o primeiro coming out público em Portugal”	sociedade	Vídeo (também disponível só em áudio) + texto (complemento)	5 (08-04-2019)
entrevista	Claude Moraes: “o conceito de ‘fortaleza europeia’ sempre existiu”	internacional	Áudio (podcast) + texto	1 (10-04-2019)
Reportagem (trailer - série de 4)	Dá-lhe gás	ambiente	texto	2 (10-04-2019)
reportagem	Palestina: Le Trio Joubran: o oud é uma arma	internacional	Áudio (podcast) + transcrição em texto	3 (10-04-2019)
entrevista	Direito LGBTI+: Anna Klobucka: “António Botto fez o primeiro coming out público em Portugal”	sociedade	Vídeo (também disponível só em áudio) + texto (complemento)	4 (10-04-2019)
Reportagem,	Brasil: Bolsonaro: um mito em crise permanente (1/2)	internacional	Áudio (podcast) + transcrição em texto	5 (10-04-2019)
Reportagem,	Brasil: Bolsonaro: um mito em crise permanente (2/2)	internacional	Áudio (podcast) + transcrição em texto	1 (12-04-2019)
Reportagem (trailer - série de 4)	Dá-lhe gás	ambiente	texto	2 (12-04-2019)
reportagem	Palestina: Le Trio Joubran: o oud é uma arma	internacional	Áudio (podcast) + transcrição em texto	3 (10-04-2019)

reportagem	Juan Branco: “julian assange não é um whistleblower”	internacional	Vídeo (também disponível só em áudio) + texto (complemento)	4 (12-04-2019)
Reportagem,	Brasil: Bolsonaro: um mito em crise permanente (1/2)	internacional	Áudio (podcast) + transcrição em texto	5 (12-04-2019)
Reportagem 10 Entrevista 5		Internacional 9 Sociedade 4 Ambiente 2	Áudio (podcast) + transcrição em texto 8 Vídeo (também disponível só em áudio) + texto (complemento) 5 Texto 2	MAIN HEADLINE Reportagem 2 Internacional 3 Áudio (podcast) + transcrição em texto 3

b) Polígrafo (www.poligrafo.sapo.pt)



Polígrafo homepage: 8, 10 and 12 of April 2019

5 major headlines on the homepage

8, 10 and 12 of April 2019

Coded using an adapted version of the IPTC codes

(<https://iptc.org/standards/newscodes/groups/>)

(Note: The aggregate results are found in the green columns of the figure)

Genre (Género)	Subject description (Descrição do tema)	Media topic (Assunto)	Media	Priority (Prioridade)
- Feature (Reportagem)	- Title (Título do artigo)	- Politics (Política)	- Text – even with some photos (Texto – mesmo que tenha algumas fotos)	1 – Higher (mais alto)
- News (Notícias)		- Society/national – general (Sociedade/nacional – geral)	- Video (Vídeo)	
- Interview (Entrevista)		- International (Internacional)	- Audio (Áudio)	5 – Lower (mais baixo)
- Opinion (Opinião)		- Economics (Economia)	- Photo – gallery (Foto – tipo fotogaleria)	
		- Arts, culture and entertainment (Artes, cultura e entretenimento)		
		- Justice (justiça)		
		- Education (Educação)		

		- Environment (Ambiente) - Health (Saúde) - Lifestyle and leisure (Estilo de vida e lazer) - Science and technology (Ciência e tecnologia) - Sports (Desporto)	- Multimedia (Multimédia)	
reportagem	Os deputados-advogados votaram em causa própria no Parlamento?	política	texto	1 (08-04-2019)
reportagem	"Familygate": Governo de Cavaco Silva nomeou 11 mulheres de ministros e secretários de Estado e mais 4 familiares diretos (COM VÍDEO)	política	Texto + vídeo	2 (08-04-2019)
reportagem	Brasil: Fernando Haddad disse que as crianças pertencem ao Estado e "cabe a nós decidir se menino será menina e vice-versa"?	internacional	texto	3 (08-04-2019)
notícia	PNR utiliza perfis falsos de apoiantes negros do BE para atizar ódio racial	sociedade	vídeo	4 (08-04-2019)
notícia	"Familygate": Governo de Cavaco Silva nomeou 11 mulheres de governantes	política	vídeo	5 (08-04-2019)
reportagem	Novo secretário de Estado do Ambiente "deu emprego à irmã e ao sobrinho" na Câmara da Figueira da Foz? (COM VÍDEO)	política	Texto + vídeo	1 (10-04-2019)
notícia	Deputadas foram fotografadas em público a consumir cocaína?	internacional	texto	2 (10-04-2019)
notícia	Francisco Louçã na TSF sobre Cavaco: "Quem atirou lama ficou enlameado." Verdadeiro ou falso?	política	texto	3 (10-04-2019)

notícia	Novo secretário de Estado do Ambiente "deu emprego à irmã e ao sobrinho"?	política	vídeo	4 (10-04-2019)
notícia	Os deputados-advogados votaram em causa própria no Parlamento?	política	vídeo	5 (10-04-2019)
reportagem	Entrevista ao homem que deu asilo a Assange: "Prisão é vingança pessoal do presidente Lenin Moreno" (COM VÍDEO)	internacional	Texto + vídeo	1 (12-04-2019)
notícia	Rafael Correa diz que prisão de Assange é vingança pessoal de Moreno	internacional	vídeo	2 (12-04-2019)
notícia	Vídeo íntimo da estrela da música brasileira, Anitta, com o bicampeão mundial de surf, Gabriel Medina, foi divulgado na net?	arte, cultura e entretenimento	texto	3 (12-04-2019)
Notícia	Ex-candidato do PNR saltou para a direção do Chega, de André Ventura?	política	vídeo	4 (12-04-2019)
reportagem	PS: "Portugal destaca-se entre os países da OCDE que mais cortou carga fiscal sobre o trabalho." Será verdade?	política	texto	5 (12-04-2019)
Reportagem 6 Notícia 9		Política 9 Internacional 4 Sociedade 1 Arte, cultura e entretenimento 1	Texto 6 Vídeo 6 Texto + vídeo 3	Main headline Reportagem 3 Política 2 Texto + vídeo 2

c) Sul Informação (www.sulinformacao.pt)

Sul Informação homepage: 8, 10 and 12 of April 2019

5 major headlines on the homepage

8, 10 and 12 of April 2019

Coded using an adapted version of the IPTC codes

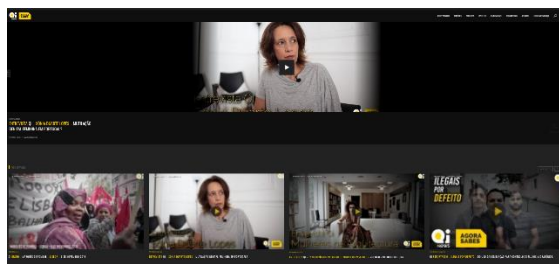
(<https://iptc.org/standards/newscodes/groups/>)

(Note: The aggregate results are found in the green columns of the figure)

Genre (Género)	Subject description (Descrição do tema)	Media topic (Assunto)	Media	Priority (Prioridade)
- Feature (Reportagem) - News (Notícias) - Interview (Entrevista) - Opinion (Opinião)	- Title (Título do artigo)	- Politics (Política) - Society/national – general (Sociedade/nacional – geral) - International (Internacional) - Economics (Economia) - Arts, culture and entertainment (Artes, cultura e entretenimento) - Justice (justiça) - Education (Educação) - Environment (Ambiente) - Health (Saúde) - Lifestyle and leisure (Estilo de vida e lazer) - Science and technology (Ciência e tecnologia) - Sports (Desporto)	- Text – even with some photos (Texto – mesmo que tenha algumas fotos) - Video (Vídeo) - Audio (Áudio) - Photo – gallery (Foto – tipo fotogaleria) - Multimedia (Multimédia)	1 – Higher (mais alto) 5 – Lower (mais baixo)
notícia	Jovem morre soterrado numa obra no Montenegro	Sociedade/nacional (geral)	texto	1 (08-04-2019)
reportagem	Seminário Lugares de Globalização destaca Cabo Verde para lançar Semana Cultural	arte, cultura e entretenimento	Texto + vídeo	2 (08-04-2019)

Reportagem	Rede apoia vítimas de violência doméstica em todo o Algarve	Sociedade/nacional (geral)	texto	3 (08-04-2019)
notícia	Rudimental, Plutónio, Toy, Blaya e DeeJay Têlio vão à Semana Académica	arte, cultura e entretenimento	texto	4 (08-04-2019)
notícia	Cinema e literatura andam à solta em Olhão	arte, cultura e entretenimento	texto	5 (08-04-2019)
notícia	Obras da nova ponte de Tavira já foram adjudicadas	Sociedade/nacional (geral)	texto	1 (10-04-2019)
notícia	Jovem morre soterrado numa obra no Montenegro	Sociedade/nacional (geral)	texto	2 (10-04-2019)
reportagem	Estudantes de agronomia “bombaram” durante 24 horas	Sociedade/nacional (geral)	texto	3 (10-04-2019)
reportagem	Remoção de ninhos de andorinha no Mercado de Loulé feita dentro da lei	Sociedade/nacional (geral)	texto	4 (10-04-2019)
notícia	Acidente no IC1 faz dois feridos graves e dois ligeiros	Sociedade/nacional (geral)	texto	5 (10-04-2019)
notícia	«Em princípio, será possível» ter passes a 40 euros no Algarve	Política	texto	1 (12-04-2019)
notícia	Câmara de Portimão tem meio milhão para pôr videovigilância na Rocha	Sociedade/nacional (geral)	texto	2 (12-04-2019)
reportagem	300 estudantes rumam a Faro para ver a Biologia de perto	Sociedade/nacional (geral)	texto	3 (12-04-2019)
reportagem	Grupo AP abre novo hotel em Cabanas e não fica por aí	economia	texto	4 (12-04-2019)
notícia	ETAR de Grândolos já está a ser construída	Sociedade/nacional (geral)	texto	5 (12-04-2019)
Notícia 9 Reportagem 6		Sociedade/nacional (geral) 10 Arte, cultura e entretenimento 3 Política 1 Economia 1	Texto 14 Texto + vídeo 1	Main headline Notícia 3 Sociedade 2 Texto 3

d) QiNews (www.qinews.pt)



QiNews homepage: 10th of april 2019 (NOTE: during this week there was no updating on the homepage)

5 major headlines on the homepage

8, 10 and 12 of april 2019

Coded using an adapted version of the IPTC codes

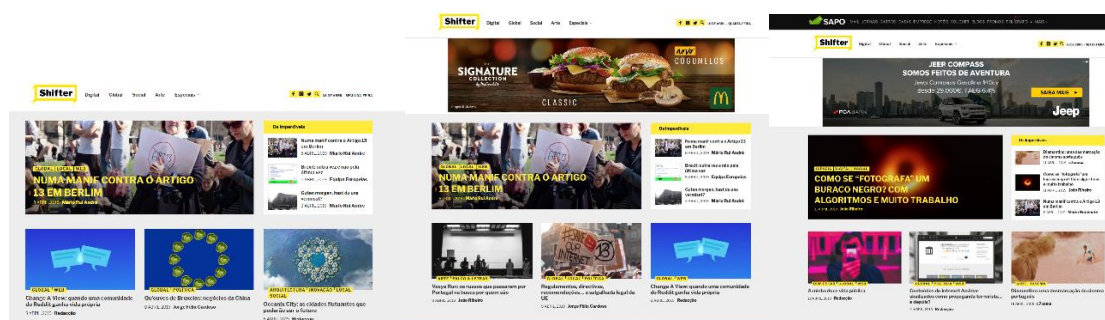
(<https://iptc.org/standards/newscodes/groups/>)

(Note: The aggregate results are found in the green columns of the figure)

Genre (Género)	Subject description (Descrição do tema)	Media topic (Assunto)	Media	Priority (Prioridade)
- Feature (Reportagem) - News (Notícias) - Interview (Entrevista) - Opinion (Opinião)	- Title (Título do artigo)	- Politics (Política) - Society/national – general (Sociedade/nacional – geral) - International (Internacional) - Economics (Economia) - Arts, culture and entertainment (Artes, cultura e entretenimento) - Justice (justiça) - Education (Educação) - Environment (Ambiente) - Health (Saúde) - Lifestyle and leisure (Estilo de vida e lazer) - Science and technology (Ciência e tecnologia) - Sports (Desporto)	- Text – even with some photos (Texto – mesmo que tenha algumas fotos) - Video (Vídeo) - Audio (Áudio) - Photo – gallery (Foto – tipo fotogaleria) - Multimedia (Multimédia)	1 – Higher (mais alto) 5 – Lower (mais baixo)
Entrevista	Mutilação genital feminina em Portugal?	Sociedade / nacional	vídeo	1 (10-04-2019)

Reportagem	Marquês de Pombal	Sociedade / Nacional	Vídeo	2 (10-04-2019)
Entrevista	Mutilação genital feminina em Portugal?	Sociedade / nacional	vídeo	3 (10-04-2019) NOTA: Este é o mesmo conteúdo que aparece em primeiro lugar nos destaques.
entrevista	Mulheres na arquitetura	Sociedade / nacional	Vídeo	4 (10-04-2019)
Reportagem	Ilegais por defeito – Do uso da legislação para controlo de fluxos migratórios	Sociedade / nacional	Vídeo	5 (10-04-2019)
Entrevista 3 Reportagem 2		Sociedade / nacional 5	Vídeo 5	

e) Shifter (www.shifter.sapo.pt)



Shifter homepage: 8, 10 and 12 of April 2019

5 major headlines on the homepage

8, 10 and 12 of April 2019

Coded using an adapted version of the IPTC codes

(<https://iptc.org/standards/newscodes/groups/>)

(Note: The aggregate results are found in the green columns of the figure)

Genre (Género)	Subject description (Descrição do tema)	Media topic (Assunto)	Media	Priority (Prioridade)
- Feature (Reportagem)	- Title (Título do artigo)	- Politics (Política)	- Text – even with some photos (Texto – mesmo que tenha algumas fotos)	1 – Higher (mais alto)
- News (Notícias)		- Society/national – general (Sociedade/nacional – geral)		
- Interview (Entrevista)		- International (Internacional)		
		- Economics (Economia)	- Video (Vídeo)	5 – Lower (mais baixo)

- Opinion (Opinião)		- Arts, culture and entertainment (Artes, cultura e entretenimento) - Justice (justiça) - Education (Educação) - Environment (Ambiente) - Health (Saúde) - Lifestyle and leisure (Estilo de vida e lazer) - Science and technology (Ciência e tecnologia) - Sports (Desporto)	- Audio (Áudio) - Photo – gallery (Foto – tipo fotogaleria) - Multimedia (Multimédia)	
Reportagem	Numa manif contra o Artigo 13 em Berlim	Política	Texto	1 (08-04-2019)
Reportagem	Change A View: quando uma comunidade do Reddit ganha vida própria	Ciência e Tecnologia	Texto	2 (08-04-2019)
Opinião	Qu’ouves de Bruxelas: negócios da China	Política	Texto	3 (08-04-2019)
Notícias	Oceanix City: as cidades flutuantes que poderão ser o futuro	Ciência e Tecnologia	Multimédia	4 (08-04-2019)
Notícias	Brexit: outra vez e não pela última vez	Política	Texto	5 (08-04-2019)
Reportagem	Numa Manif contra o artigo 13 em Berlim	Política	Texto	1 (10-04-2019)
Reportagem	Vasya Run: os russos que passaram por Portugal na busca de quem são	Sociedade	Multimédia	2 (10-04-2019)
Opinião	Regulamentos, directivas, recomendações...a salgalhada legal da UE	Política	Texto	3 (10-04-2019)
Reportagem	Change A View: quando uma comunidade da Reddit ganha vida própria	Ciência e Tecnologia	Texto	4 (10-04-2019)
Notícia	Brexit outra vez e não pela última vez	Política	Texto	5 (10-04-2019)

Reportagem	Como se “fotografa” um buraco negro? Com algoritmo e muito trabalho	Ciência e Tecnologia	Multimédia	1 (12-04-2019)
Opinião	A minha doce vida Pública	Sociedade	Texto	2 (12-04-2019)
Opinião	Conteúdos do Internet Archive sinalizados como propaganda terrorista e depois?	Política	Texto	3 (12-04-2019)
Opinião (escrito por C7nema, este é fruto da parceria com outros OCS)	Diamantino: uma desmarcação do cinema português	Arte, cultura e entretenimento	Texto	4 (12-04-2019)
Reportagem	Numa manif contra o Artigo 13 em Berlim	Política	Texto	5 (12-04-2019)
Reportagem 7 Opinião 5 Notícia 3		Política 8 Ciência e Tecnologia 4 Sociedade 2 Arte, cultura e entretenimento 1	Texto 12 Multimedia 3	Main headline Reportagem 3 Política 2 Texto 2



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Miguel Crespo is a researcher at OberCom - Observatório da Comunicação and CIES - University Institute of Lisbon, and teaches Media, New Media and Journalism related subjects at ISCTE-IUL, Cenjor- The Portuguese journalists training center, IPAM/ European University Lisbon, and ETIC-creative school. He also coordinates the master's degree in New Media Management at ISCTE-IUL. Has a master's degree in Communication, Culture and Information Technologies, and is a PhD candidate on Communication Sciences at ISCTE-IUL He is a journalist for more than 30 years, an editorial consultant and digital communication teacher and trainer.

Ana Pinto-Martinho is the online publisher of the European Journalism Observatory, Portuguese, she is a member of ISCTE-IUL Media-Lab and CIES-IUL investigation centre, also at ISCTE-IUL, where she teaches data journalism, media and journalism, storytelling, visual communication and social media related areas, and is currently the executive coordinator of the post-graduation programme in Journalism. She contributes for the Digital News Report, issued by the Reuters Institute for The Study of Journalism, on the Portuguese analysis. She is currently working on her PhD, has a master's degree in Communication, Culture and Information Technologies and a bachelor's degree in Communication Sciences.

Caterina Foá is Assistant Professor at ISCTE-IUL, and integrated researcher at OPAC (Portuguese Observatory on Cultural Activities) and OberCom (Communication Observatory). Her researches on Cultural and Creative Industries Management, Production and Marketing focus on crowdfunding and digital strategies.

Miguel Paisana is a Researcher at OberCom - Observatório da Comunicação / CIES-IUL and PhD candidate on Communication Sciences at ISCTE-IUL, develops research on key media sectors - TV, Radio, Press and Internet, with particular focus on the news and journalism sphere in the context of the Reuters Digital News Report team for Portugal.

Pedro Caldeira Pais is a portuguese sociologist. He was a researcher at OberCom - Observatório da Comunicação from 2016 to 2020, where he worked on topics such as Radio, Journalism or Fake News, and was an editorial assistant on the academic journal (OBS *) Observatório, from 2017 to 2019. He is currently a PhD student in Communication Sciences at the ISCTE University, in Portugal.

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