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PASTS, PRESENTS AND FUTURES OF PUBLIC SERVICE MEDIA: THE CHALLENGES OF ADAPTATION AND CHANGE IN THE AGE OF DATA

Michał GŁOWACKI

ABSTRACT:

Public service media have been slow to adapt to the digital age typified by the growing role of high technologies and communications services driven by databases and fed by data. Public service media corporations established in the pre-Internet era have found it difficult to approach adaptation and change both from the dynamics of the media markets and organisational perspectives. This study argues that current challenges faced by public service media are an ongoing interplay between the futures and legacy of 20th century success. Through 150 semi-structured interviews conducted in 10 cities – 6 in Europe, 3 in the USA and 1 in Canada – the study aims to investigate key path-dependencies and potential models to move public service media forwards. The struggle between the old and the new is examined through the lenses of media change, regulation and organisational cultures.

KEY WORDS:

adaptation, data-driven age, high technologies, organisational structures, path-dependencies, public service media

Introduction

Public service media (PSM) have throughout a history of over ninety years undergone several societal and technological transformations when adapting their organisational systems to changes in media markets. Focusing on PSM's main roles, which are to serve democracy, social cohesion and the well-being of communities on national and local levels, they have progressed a long way in adjusting their old broadcasting structures and processes to fit the digital and network era. However, the era of the Fourth Industrial Revolution, a phrase coined

by Klaus Schwab,¹ is marked by transmedia projects, machine-mediated communications and meta-data tools – calls for radical shifts in staff as data analysts become critical players in contemporary media production.²

Research and policy-making documents related to PSM have already revealed their adaptation to digital society via extension to online platforms, such as video-on-demand, social media and other participatory practices.³ However, only a few scholars have looked at potential models for extending PSM in the data age.⁴ Moreover, existing studies emphasise the technological dimension and changing users' relations without considering adaptation and changes in the regulatory framework, organisational systems and related management. With the exceptions of research by Christian S. Nissen⁵ and Päivi Maijanen,⁶ changes in the internal structures and cultures of PSM have not become the subject of systemic research to date.

This study argues that to fully understand the challenges of adaptation to data-driven delivery and new organisational forms found in high technology (High-Tech) industries it is necessary to consider both concepts from the dynamics of fast-changing media markets and the organisational setting perspective.⁷ The industrial strategy found in broadcasting institutions created in the pre-Internet era limits the potential of adaptation to high technologies for transmitting online both traditional radio and television broadcasts. Furthermore, rigid corporate structures organised in line with the Fordist principles of mass production, bureaucracy and standardisation might not fully support inter-operability between management and production cultures. Therefore, the goal is to examine the current stage of the PSM transformation in line with additional factors, such as organisational cultures and mentality.

In this scholarly article, we look at case studies of PSM from ten cities in Europe and North America to evidence that adaptation and change is an ongoing interplay between PSM's presents, futures and pasts. The study uses semi-structured interviews (n=150) conducted in ten major urban metropolises in the USA and Europe (see Table 1) as part of a broader international study. The goal is to provide evidence of the ways in which PSMs deliver their remit in the data-driven environment. First, by referencing the concepts related to the dynamics of media change in the data-driven age⁸ and the organisational response to adaptation,⁹ this study highlights the understanding of change and the speed of PSM's evolution, as understood by the industry's professionals and representatives from innovation and cultural hubs operating in close proximity to national PSMs. Secondly, the findings from the qualitative study are used to map key path-dependencies, which limit the potential of the PSM's adaptation. In line with this, the text also offers a typology of three highly interwoven areas of the legacy response to adaptation and change. Finally, based on the urgency of media reform and the current state of adaptation, the study presents three potential scenarios for the future of the universal PSM project.

The salient research questions are: 'How do the PSM organisations approach adaptation and change?', 'What are the key historical barriers that limit the potential to evolve?', 'What are the potential scenarios for future PSMs?', 'What are the differences in path-dependencies dynamics, and how can they be explained?'.

Public Service Media between the Old and the New

Calls for media adaptation and change have been highlighted in management literature for years. In the context of a fast-changing data-driven society, constant adaptation goes in line with adjusting media operations to turbulent times with a high level of uncertainty and also *"making continuous fundamental changes in the internal structures of the company"*.¹⁰ The PSM audience is ageing and younger audience members expect more agile and personal responses from media sources across a wider range of platforms.¹¹

A universal theoretical approach to PSM adaptation and change does not exist. On the one hand, scholars have often referred to transformations of media economics and an extension beyond traditional broadcasting.¹² Bearing in mind changes in internal structures culture, Michał Głowacki and Lizzie Jackson have recently proven that PSM has lower levels of entrepreneurialism, agility and partnership systems than successful firms from the high technology industries.¹³ In the same vein, Christian S. Nissen acknowledges the existence of two separate PSM cultures: management and production cultures. He further argues that: *"The corporate top management will also have to adapt to the new environment (...) as the characteristic feature of content production gradually becomes more workshops in a network than the classic assembly line of the huge factory.* ^{*14}

The PSM's organisational renewal, redesign or progression in line with adaptation and organisational change has naturally been challenged by path-dependencies, since "today's and tomorrow's choices are shaped by the past. And the past can only be made intelligible as a story of institutional evolution".¹⁵ Through research on change management processes in PSM in Finland, Päivi Maijanen concludes that "managers have to simultaneously deal with the old and new paradigm. In this challenging situation, the managers are confronted by path-dependent organizational rigidities typical to incumbent organizations with long traditions".¹⁶ Also, Gregory Ferrell Lowe, Hilde van den Bulck and Karen Donders highlight that in the age of the network society "PSM is rooted in the broadcasting heritage of PSB [public service broadcasting – remark by author] and steeped in a mass media mentality".¹⁷

Drawing from existing theories, the adaptive organisation is understood here as sensitive to its environment, conservative in financing with a strong sense of identity and the ability to learn.¹⁸ Theoretical

See: SCHWAB, K .: The Fourth Industrial Revolution. New York : Crown Business, 2016.

² Compare to: FLORIDI, L.: *The Fourth Revolution. How the Infosphere Is Reshaping Human Reality*. Oxford : Oxford University Press, 2004; MORGANTI, L., RANAIVOSON, H.: *Future and Emerging Technologies for the Media Sector. MediaRoad Vision Paper*. [online]. [2020-05-30]. Available at: https://www.mediaroad.cu/wp-content/uploads/2019/10/Vision-Paper-2_Future-and-emerging-technologies-for-the-European-Media-Sector.pdf>.

³ See: COUNCIL OF EUROPE: Recommendation CM/Rec(2012)1 of the Committee of Ministers to Member States on Public Service Media Governance (Adopted by the Committee of Ministers on 15 February 2012 at the 1134th Meeting of the Ministers' Deputies), from 15th February 2012; BREVINI, B.: Public Service Broadcasting Online. A Comparative European Policy Study of PSB 2.0. Basingstoke : Palgrave Macmillan, 2013.

⁴ See also: HUTCHINSON, J.: Intermediaries Exercising Influence through Algorithms within Public Service Media. In GŁOWACKI, M., JASKIERNIA, A. (eds.): *Public Service Media Renewal. Adaptation to Digital Network Challenges*. Frankfurt am Main : Peter Lang Publishing, 2017, p. 117-134; JACKSON, L.: The Potential of Machine Mediation in the Maintenance of Public Service Media. In GŁOWACKI, M., JASKIERNIA, A. (eds.): *Public Service Media Renewal. Adaptation to Digital Network Challenges*. Frankfurt am Main : Peter Lang Publishing, 2017, p. 135-154.

⁵ NISSEN, C. S.: Managing Public Service Media. In Search of a Third Generation Model. Keynote speech presented at the conference of the European Media Management Association "Media Management in the Age of Big Data and High Tech". Warsaw, presented on 14th June 2018.

⁶ MAIJANEN, P.: The Blessing and Curse of Being Public: Managing Change in Public Service Media in Finland. In GŁOWACKI, M., JASKIERNIA, A. (eds.): *Public Service Media Renewal. Adaptation to Digital Network Challenges.* Frankfurt am Main : Peter Lang Publishing, 2017, p. 193-212.

⁷ See: RIES, E.: The Startup Way: How Modern Companies Use Entrepreneurial Management to Transform Culture and Drove Long-Term Growth. New York : Currency, 2017.

See also: MANOVICH, L.: Software Takes Command. New York, London, Oxford, New Delhi, Sydney: Bloomsbury Academic, 2013.
Compare to: DE GEUS, A.: The Living Company. Habits for Survival in a Turbulent Business Environment. Boston, Massachusetts: Harvard Business Press Review Press, 2002.

¹⁰ DE CEUS, A.: *The Living Company: Habits for Survival in a Turbulent Business Environment.* Boston, Massachusetts : Harvard Business Press Review Press, 2002, p. 27.

¹¹ See: SCHULZ, A., LEVY, D., NELSEN, R. K.: *Old, Educated and Politically Diverse: The Audience of Public Service News.* Oxford: Reuters Institute for the Study of Journalism at the University of Oxford, 2019.

¹² Compare to: JAKUBOWICZ, K.: PSB 3.0: Reinventing European PSB. In IOSIFIDIS, P. (ed.): *Reinventing Public Service Communications. European Broadcasters and Beyond*. Basingstoke : Palgrave Macmillan, 2010, p. 9-22; GULYÁS, A., HAMMER, F. (eds.): *Public Service Media in the Digital Age: International Perspectives.* Cambridge : Cambridge Scholars Publishing, 2013.

¹³ GŁOWACKI, M., JACKSON, L.: Organisational Culture of Public Service Media: People, Values and Processes. Warsaw, London : Research Report, 2019. [online]. [2020-06-12]. Available at: https://www.creativemediaclusters.com/findings.

¹⁴ NISSEN, C. S.: Organizational Culture and Structures in Public Media Management – In Search for a Model for the Digital Era? In GŁOWACKI, M., JACKSON, L. (eds.): *Public Media Management for the Twenty-First Century: Creativity, Innovation, and Interaction.* London, New York : Routledge, 2014, p. 98.

NORTH, D.: Institutions, Institutional Change and Economic Performance. Cambridge : Cambridge University Press, 1990, p. VII.
MAIJANEN, P.: The Blessing and Curse of Being Public: Managing Change in Public Service Media in Finland.
In GLOWACKI, M., JASKIERNIA, A. (eds.): Public Service Media Renewal. Adaptation to Digital Network Challenges. Frankfurt am Main
Peter Lang Publishing, 2017, p. 194.

¹⁷ VAN DEN BULCK, H., DONDERS, K., LOWE, G. F.: Public Service Media in the Networked Society. What Society? What Network? What Role? In LOWE, G. F., VAN DEN BULCK, H., DONDERS, K. (eds): *Public Service Media in the Networked Society*. Gothenborg: Nordicom, 2018, p. 11.

¹⁸ DE GEUS, A.: *The Living Company: Habits for Survival in a Turbulent Business Environment.* Boston, Massachusetts : Harvard Business Press Review Press, 2002, p. 6.

approaches juxtaposed with findings from Michał Głowacki and Lizzie Jackson's study also help to operationalise potential barriers, including media change and regulation. The emphasis is on selected variables of organisational cultures and structures, which help to extend the analysis of working conditions, attitudes and mentality.¹⁹

Methodology

The ideas presented in this study are informed by findings from a larger international study, entitled "Organisational Culture of Public Service Media: People, Values, and Processes". From 2015 to 2019 we, in collaboration with Lizzie Jackson of London's South Bank University (UK) investigated the internal organisational cultures of ten highly successful High-Tech clusters in North America and Europe to identify strategies to support the evolution of PSM. We conducted 150 interviews between October 2015 and September 2017. The interview data was internally validated through cross-referencing 500 photographs from city 'walkabouts' to build a holistic picture of the PSM workplace and its close urban surroundings. The analysis of ten case studies included pertinent media regulations, city strategies and company reports.

Ten High-Tech cities with extant PSM operations were selected in line with the North-Atlantic and European approach (see Table 1). Bearing in mind societal, cultural, political and economic variations, as well as differences in media regulation and the dynamics of media market development, the overall goal of this study was not to conduct comparative research but to examine the PSM's organisational structures and cultures via the lenses of models found in their urban locality. Therefore, interviews were conducted with City Hall strategists, policy makers, entrepreneurs from the cultural hubs, innovation centres, and small and medium sized enterprises (SMEs). Furthermore, in each PSM the study approached managers, relationship managers, producers, former employees and staff members dealing with research and development (R&D).

Interviews – conducted in line with the European Research Council's ethical guidelines on protection of anonymity – included questions on the work environment, company location, organisational cultures, afterwork events, collaboration between the PSM and High-Tech industries as well as innovation and change. Each interview was recorded, transcribed and coded via the MAXQDA platform. Qualitative data presented in this research was analysed in line with three related coding frames of history and path-dependencies, organisational restructuring and the PSM's attitudes to be change-ready. This, in turn helped to develop the study's structure and further group potential similarities and differences between the ten selected PSMs.

Table 1: The 10 case studies: Europe and North America

City (Country)	Public Service Media (identifier – full name)	
Austin (USA)	KUT - Austin's National Public Radio Station	
Cambridge (USA)	PRX – Public Radio Exchange	
Brussels (Belgium, Flanders)	VRT – Vlaamse Radio- en Televisieomroeporganisatie	
Copenhagen (Denmark)	DR – Danmarks Radio	
Detroit (USA)	WDET - Detroit Public Radio; and Detroit Public TV	
London (UK)	BBC - British Broadcasting Corporation	
Tallinn (Estonia)	ERR – Eesti Rahvusringhääling	
Toronto (Canada)	CBC – Canadian Broadcasting Corporation	
Vienna (Austria)	ORF – Österreichischer Rundfunk	
Warsaw (Poland)	PR – Polskie Radio; and TVP – Telewizja Polska	

Source: Own processing

Today: A Challenge of Adaptation and Change

There is consensus about the importance for PSM to adapt and change. Adjusting PSM is a natural and ongoing consequence of the changing media environment and also as a way to move forward. In all instances, the need for PSM evolution is a challenge, both from the PSM's role in society and the organisational setting. For instance, the importance of change in PSM reflects the changing patterns of media consumption across users' generations, which creates a challenge for more advanced structures. Fostering change in newsrooms has been more challenging and difficult than in the media's innovation and production units, which invariably requires support in the form of change of programmes and individuals and groups who are willing to lead the change. In Denmark, one of the interviewees argued for the critical role of managers who are tasked to engage staff at all levels of the change processes: *"You could see that those who have been involved in the planning – journalists, architects and engineers – were much more positive towards change."* (DR, Copenhagen, 2017). A call for active leaders has also occurred in other countries, where successful adaptation and change depends on open-minded managers.

The (Un)Finished Transformations

The ten case studies from Europe and North America evidence that PSM evolution is variable. Despite there being a strong transition from analogue broadcasting to digital in the last two decades by commercial enterprises, the same move by PSM has revealed their old habits and a survival mentality. Indeed, in some countries, PSM are still in the stage of transformation to digital technologies.

Only a few PSM in the study have experimented with data-driven technologies, such as virtual reality (VR), artificial intelligence (AI), integrated production (IP) and Big Data. Besides, with the exception of the PSM in Austria, Belgium, Canada and the United Kingdom, only a few engage in practices such as crowdsourcing, open innovation and partnerships with high-tech industries. In line with this, the Canadian Broadcasting Corporation has successfully implemented the 'mobile-first' strategy in newsrooms. According to one interviewee: *"mobile is now the centre of gravity, and television, radio and desktop will orbit around the mobile.*" (CBC, Toronto, 2016). In the UK, Austria and Belgium, PSM adaptation to the Fourth Industrial Age is fostered via acceleration programmes and media hubs supporting collaboration with entrepreneurs, startups and high-tech SMEs. For example, the EU funded the project MediaRoad, which supported the creation of 'Sandbox' initiatives.²⁰

Overall, PSM management have not fully recognised the complexity and competition of the data-driven age. In terms of high technologies and new forms of partnership systems, PSM management only see – as one of the interviewees mentioned – 'the tip of the iceberg' (Cultural Hub, Vienna, 2016). The crisis of PSM identity has been revealed by old methods of audience measurements and an ongoing struggle to go beyond the sender/receiver relationships. A distorted relationship to the reality of media consumption is one of the biggest weaknesses of the current PSM structures.

Organisational Restructuring

The challenge of presvious transformations of PSM has been to change the organisations, which broadcast programmes to another organisation which produced content to supply it across different platforms; *"it is more or less the same work, but it means two very different types of organisations"*. (DR, Copenhagen, 2017).

¹⁹ See: SCHEIN, E.: Organizational Culture and Leadership. 4th Edition. San Francisco : John Wiley & Sons, 2010.

²⁰ MEDIAROAD: About Sandbox Hub. [online]. [2020-06-16]. Available at: https://www.mediaroad.eu/about-sandbox-hub>.

On a global scale, every PSM is at its own stage of multimedia integration. Several European case studies, including Austria, Belgium, Denmark and the United Kingdom have successfully merged previously separated radio and TV newsrooms and departments. However, multimedia integration is regarded as an ongoing process, and – in some cases, such as Austria it resulted in the creation of semi-integrated newsrooms. In Denmark, the goal is to transform silo-based organisations towards a structure which allows collaborative work across different platforms. The so-called 'News X' initiative, organised in line with Silicon Valley's model of product development, has aimed to create multimedia teams, involving coders, designers, journalists, editors and photographers at all the levels of news production. According to one of the Danish interviewees, moving experts from a range of units and departments and gathering them into one department enriches staff motivation and maintains a high level of knowledge exchange and learning: *"So now, instead of seven people working with the same story and not talking to each other, we have three people working on the same story together."* (DR, Copenhagen, 2017). In Canada, the processes of newsrooms integration have connected radio and television to experiment with different back ends. The creation of cross-media organisations in National Public Radio and Public Broadcasting Service stations in the USA is fostered via experimentation with project-based integration.

Innovation activities at different stages of PSM's evolution are also the responsibility of the organizations' departments. The most advanced in experimenting are small agile departments, which deal with both content and technology innovation, because their work is less formalised. These 'R&D minded islands' are formed by young people who are more open and collaborative (VRT, Brussels, 2016). This has been the case of the VRT, BBC and TVP teams working with content for the young public. In the case of American PSMs – which are smaller and pluckier – innovation activities are more widespread across different roles and units. For instance, Public Radio Exchange (PRX), a non-profit web-based platform for digital distribution in Cambridge, Massachusetts, USA, has embraced smaller teams possessing the leverage of innovative technology. Agile thinking has been revealed when speaking about the PRX approach for research and development: "We don't put innovation in a box and say this is the innovation department. We say innovation is a value, and we tell everybody you need to be thinking this way." (PRX, Cambridge, 2016).

In several case studies, organisational restructuring is part of the wider process of change management via adjusting architecture and the workplace. Moving previously separated radio and television units to one location and creating central newsrooms have been the case of DR and the BBC. In Brussels, there is an ongoing initiative to relocate PSM to the Media Park – a creative district project to promote collaboration between media and creative industries and also to contribute to urban regeneration in the Boulevard Reyers area.²¹ Attempts to adjust and reorganise the PSM headquarters in Tallinn have been regarded as a natural direction for future adaptation: *"If you want to merge radio and TV you must create one room to work together. This gives synergy and economic effect.*" (ERR, Tallinn, 2016).

The Speed of Evolution

The evolution of PSM is slower than in other sectors of media. Adaptation is more likely to happen in online digital platforms and production companies than in the PSM. The slow adaptation to a data-driven environment and related organisational structures adjustments are counter to the historical role of the PSM to be the leader in innovation processes. Interviewees in Austria, Denmark, Estonia, Poland and the United States concur that PSM are no longer 'innovation locomotives' (DR, Copenhagen, 2017), especially in terms of high technologies. As argued by one of the interviewees PSM *"have this enormous machine, but they don't have a steering wheel. They don't know where they're heading. They only know that they have challenges and problems*". (Innovation Centre, Copenhagen, 2017).

Legacy Response to the Data-driven Age

The slow adaptation to the data-driven era is explained via the lenses of the PSM's pasts and pathdependencies. In all the case studies, the legacies inherited from analogue broadcasting and the pre-digital era has put adaptation processes on hold. For instance, according to interviewees in Poland, both TVP and PR are stuck in 20th century schemes and processes, which holds them back. The traditional ethos of the PSM is a barrier against reacting quickly to the changing media environment in other countries, including Austria, Canada, Denmark and Estonia.

Media Change and Regulation

Regulation over PSM dates back to the analogue broadcasting era. In the ten case studies existing regulatory framework was updated in the early years of digital transformation. The policy goals laid down in the broadcasting acts, corporate documentation or legal agreements between the PSM and the State define the public service remit in terms of serving society, societal cohesion and the high quality of programming. However, in terms of technology and extension of PSM activities beyond the broadcasting, interviewees in Austria, Estonia and Poland directly revealed that media regulation does not fully respond to the dynamics of the data-driven media. In a similar vein, an interviewee argued that *"there's no evidence that new media or digital media or the internet are accomplishing the PSM goals"*. (CBC, Toronto, 2016). The same staff member also stated that the CBC still needed to meet formal radio and television requirements as laid down in media law.

Highly regulated markets are used to explain slow PSM adaptation and low innovation capacity in comparison to private competitors. Interviewees also highlighted differences among the countries with more progressive examples of media regulation updates in Flanders (Belgium) and the UK. For instance, regulation over the BBC is more advanced in fostering adaptation than regulations in Austria, Estonia and Poland. Amendment of media regulation is a critical and necessary step, but not always the primary goal. For instance, staff from ORF (Austria) argued for a more progressive law, but also emphasised that introducing changes in the legal framework of ORF should be followed by organisational renewal.

Regardless of the state of adaptation of media regulation and a dominant funding model (licence fee, donation, state budget and so on), funding schemes of the PSM are also regarded as old-fashioned. For instance, an interviewee said that "the licence fee is clumsy and possibly not fit for the purpose for a sort of mixed, multi-media and multi-distribution environment". (BBC, London, 2017). In line with this, there are limited opportunities to engage with crowdfunding, subscription fees or extending PSM commercial activities via social media, where allowed. There is agreement that the nature of providing a public service – understood as ownership, governance and funding – makes room for political debates on how to make the PSM less expensive, with the examples of budget cuts in Denmark and the USA's Corporation for Public Broadcasting (CPB). The existing funding systems have restricted PSM adaptation in the majority of the case studies, including Austria, Poland and Estonia where "Internet media are underfinanced in compared to radio and TV". (ERR, Tallinn, 2016). On the other hand, reliance on solutions from the broadcasting era, such as grants and stable funding, has contributed to the PSM's 'playing a safe game of innovation' (ORF, Vienna, 2016).

The evolution of PSM is not supported by long-term and holistic strategies to change the old systems and regulations. The interplay between PSM and politics triggers political power struggles, which result in the lack of adaptation continuity. 'Political earthquakes' after political elections have challenged the stability of PSM reform in every one of the case studies. In addition to this, battles by political parties over control of PSM in Austria, Denmark, Estonia and Poland focus more on governance processes and the appointments of Director-Generals, rather than on pushing the norms beyond broadcasting and the digital era. An employee of ERR said that *"the dialogue on PSM future has been missing because the state feels that broadcast is actually filling the role that was delegated to national broadcasting*". (ERR, Tallinn, 2016).

Except the emerging 'mobile-first' strategy in the CBC news departments and advanced participatory online platforms for kids in the VRT and BBC, the majority of other case studies still focus on traditional

²¹ MEDIA PARK BRUSSELS: A New Creative and Vibrant District. [online]. [2020-06-16]. Available at: http://www.mediapark.brussels/en.

radio and television broadcasting. The 'broadcast first' model, which is tightly connected to PSM funding and regulation, has become the norm in Austria, Denmark, Estonia, Poland and the USA. For instance, one of the interviewees mentioned that there are still people who *"truly believe that television will have a great future"*. (ORF, Vienna, 2016). In Austin, Texas one interviewee said that *"this station's management very much believes that we are a broadcast station and that broadcast is our number one priority"*. (KUT, Austin, 2017). Problems with moving the centre of gravity from traditional broadcasts (radio and television) to Internet Technologies (IT) are explained by the power of the former in Canada, where television and radio dominate people's thinking. A similar environment also exists in Poland, where radio broadcasting comes first *"because we are called Polish Radio, not the Polish Radio website"*. (PR, Warsaw, 2017). Also, in Belgium, staff acknowledge that the core is *"to focus on radio, TV and good programming and everything else is extra"*. (VRT, Brussels, 2016). In London a staff member argued that *"the big channel comes first and then everything else has to kind of fit in around it"*. (BBC, London, 2017). At the same time, PSM programming is regarded as 'vintage' or 'retro' media with the examples of programming back-dates revealed in Austria, Denmark, Poland and Belgium. Another interviewee from the BBC argued that the PSM content reflects the struggle between the old and the new.

Organisations and Cultures

The public nature and long broadcasting traditions have impacted PSM's organisational structures and cultures. In Europe, where the PSM were created in the early 20th century, organisational structures are regarded as legacy corporations with a certain working culture founded and further developed around the idea of linear broadcasting. Organisational characteristics, such as the age and the size of PSM companies, make adaptation and change difficult, and – in some cases – even impossible to achieve. Younger and smaller PSM organisations in the United States are more agile and flexible, following the ideas by one entrepreneur from Austin, Texas: *"Large corporations have a lot of difficulties because they already took a route that they were going to go in this direction, where the small companies already are."* (*High-Tech Enterprise*, interview in Austin, 2017).

In both Europe and North America, entrepreneurial thinking within the PSM is mostly associated with younger staff. The 'youth-factor' is sufficiently innovative, dynamic and risk-taking to trigger change under the current rigid structures. On the surface, the working habits of the older staff members of ORF are potential barriers for adaptation, as a young interviewee argued: *"Some of them still don't get what the whole digital revolution is about or why they should be on Facebook."* (ORF, Vienna, 2016). In a similar vein, age differences between staff members are critical in thinking about organisational change in Poland's TVP. An interviewee in Warsaw spoke about 'ageing extremes', since *"people who are representing old generations don't see the potential of new technologies, and therefore they don't support a need to adjust to AI, Big Data or predictive analytics"*. (TVP, Warsaw, 2017).

Except for the successful merging of radio and television departments and creation of multimediateams and newsrooms, PSM are organised in line with a "classical broadcast type of organisation" (VRT, Brussels, 2016). Overall, due to a high level of formalisation, top-down management and silo-based internal communications, the corporate nature of the PSM might have become inadequate to react to the data-driven age. Both in Europe and North America, rigid organisational structures based on hierarchy and departmentalisation limit the speed of decision-making processes, experimentation capacity and the usefulness of PSM. One VRT interviewee argued that the organisation is "silo-based for brands" with several small companies within the organisation's structure. In Europe 'the Fordist way' of mass production and related governance is supported by a statutory appointed civil service and strong trade unions which "carefully monitor every move of the PSM". (VRT, Brussels, 2016). Those formal arrangements within the labour unions often result in "people taking care of their interests of television, or the interests of radio". (DR, Copenhagen, 2017). Moreover, the 'organisational relicts' from the past have also become battlefields between dukes/middle managers and emperors/director generals who defend their internal powers and territories and – in some cases – also the status quo of different PSM subcultures (DR, Copenhagen, 2017; ERR, Tallinn, 2016).

Interviewees in Austria, Canada, Denmark, Estonia and Poland revealed the existence of two separated types of PSM cultures: that of management and production. Managing change in a PSM is seen as running *"an enormous complicated machine"* (DR, Copenhagen, 2017), with path-dependencies also related to the physical environment and infrastructure (architecture, room design, cafés/bars for social interaction, computer software, and so on). Especially in Europe, the old architecture of 'fortresses' and large TV towers are among symbols of self-importance, distinctiveness and old power.

Attitudes and Mentality

In Poland, the United Kingdom, Estonia and Canada, interviewees argued that slow PSM adaptation depends not only on the old structures but also on the old mentality. Thinking about PSM via the lenses of the past is an interplay between systemic, organisational and people's response to adaptation and change. The interviewees agreed that one of the most difficult of changes is to encourage positive innovation attitudes, which does not always match with large and historically successful companies. One interviewee argued that *"public service media often look back on their own success and say: we are successful, so why should we change?"*. (Innovation Hub, Copenhagen, 2017).

The legacy of historically strong brands supports the old thinking about the PSM in line with the broadcasting organisation and as a result: "you get the thinking that just takes what we've already done (...) instead of some innovative thinking". (BBC, London, 2017). Doing what the PSM always did is seen as continuity rather than an adaptation at PSM in several cities, including Copenhagen, Toronto, Vienna and Warsaw. The old routines together with the fear of the unknown often go in line with the protectionism of radio, television or – more recently – digital legacy thinking. Protection of the old PSM model "as one of the greatest things" (BBC, London, 2017) together with "the lack of faith in change, limits the forward-look thinking". (DR, Copenhagen, 2017). Moreover, the legacy of success from the broadcasting age contributes to a sense of self-importance and isolation – the lack of openness to new solutions and external partnerships. In Estonia, defence mechanisms have been understood in line with individual thinking that "the content produced by journalists belongs to them. And this is why it is really hard to make the change happen". (ERR, Tallinn, 2016). Consequently, the PSMs are largely internally focused which places them in a 'paralysed position' (DR, Copenhagen, 2017).

PSM are bounded institutions due to risk-averse attitudes. For instance, in Flanders where there are examples of lean approaches to governance, collaboration between the PSM and high-tech SMEs is regarded as something new for staff working at the VRT. In other European countries, but also in Canada and the US there is evidence of different layers of PSM being risk-averse, highlighting reluctance to change towards technology, internal governance and digital storytelling conditions. Risk-averse attitudes have been mostly explained by references to organisational structures, media regulation and people being frightened to take a risk. An interviewee explained that ORF was reluctant to change due to working conditions and old routines: *"I don't blame them, because they are afraid of their jobs. They see that newspapers and television stations are closing down. They are in an atmosphere where fear is omnipresent."* (ORF, Vienna, 2016).

In the majority of the case studies, the lack of experimentation capacity goes back to the "corporate culture where some people may be interested in holding on to something that they know instead of embracing what's new". (DR, Copenhagen, 2017). Legacy-related protectionism and risk-averse attitudes trigger defence mechanisms when adaptation and change approach. The experience of the first transformation – from analogue broadcasting to the digital – resulted in a high level of resistance among staff members, and those who did not support the evolution towards the cross-media structures and related skills decided to leave PSM organisations. For instance, opening-up PSM for new partnership systems in Brussels as a way to move forward has been considered with distrust: "When I introduced the ideas of partnerships and the idea of network broadcaster people were defensive. They immediately translated that as having to abandon the centralised model of PSM and getting more noise inside the organisation." (VRT, Brussels, 2016). An interviewee from the BBC further concluded that PSM is based on: "Well-established systems and processes (...) and so some of the very senior people, no matter how much they rationally and logically understand the arguments of change,

emotionally, they appear to be wedded to some of the old structures, the old ideas of what best looks like." (BBC, London, 2017).

Mapping Future Scenarios

One of the biggest challenges facing PSM is the need to make people aware of the value of PSM and to reconnect them with civil society. Therefore, there is a need for continuous struggle for adaptation and change. This shall go in line with – as one of the PSM interviewees mentioned – a radical re-thinking that could replace old working routines and emotions by that of data-driven and truly converse attitudes. Consequently, changes in organisational cultures and mentality are seen as critical for the PSM to move forward. Interviewees argued for more staff engagement, experimentation and organisational redesign to make PSMs attractive places to work. As argued by one of the DR interviewees, "companies are beginning to be aware of the value of having happy employees and there's a battle for talent. Therefore, shortly we need to find out what makes our employees happy and how can we enforce that in our company". (DR, Copenhagen, 2017).

Overall, the future success of PSM will depend on communication of the sense of urgency of adaptation as well as the willingness of organisations to change. However, there is a high level of uncertainty on how future PSM will look. The ten case studies reveal the existence of three future scenarios:

1) Further reorganisation of PSM,

2) The creation of new PSM structures,

3) The extension of PSM beyond the media.

The first scenario has been found in PSM which have successfully adapted to the requirements of the earlier digital age. Bearing in mind successful integration of newsrooms and moving traditional analogue broadcasting into IT devices, PSM staff in Austria, Denmark and the UK see potential in future evolutions. Also, in Belgium, experimentation with agile teams and collaboration with high-tech SMEs and data scientists is expected to become a standard for the whole VRT organisation. Faith in further reorganisation has also been revealed in the CBC, where a staff member believed that *"data-driven ingredient can truly revolutionise the old broadcasting*". (CBC, Toronto, 2016).

Secondly, the creation of completely new PSM organisations has been widely shown in Estonia and Poland. PSM staff members in the ERR highlighted slow integration with digital and data-driven technologies, as compared to a dynamically developed Estonian digital society. The growing gap between high tech and the PSM calls for new organisational engines, which can stop the PSM 'falling into pieces' (ERR, Tallinn, 2016). The more power struggles there are over the old model of PSM, the more there are suggestions to completely reinvent the PSM project, as highlighted during the interviews in Warsaw: *"The structure [of the PSM - remark by author] is not designed to foster change (...) There might be a need to shut down the current PSMs and replace them with new organisms.* "(Cultural Hub, Warsaw, 2017).

Finally, interviewees from several PSM organisations, cultural and innovation hubs and High-Tech companies argued for additional value and extension of the PSM beyond the media. Embedding in the local communities via more active engagement with SMEs and also with the local neighbourhood population are regarded as potential scenarios for the future of PSM in the United States. For instance, an interviewee working for Detroit's Public Television highlighted the importance of collecting and curating what the community is producing but also serving the community's need of education, training, social innovation and combating climate change. Representatives from the high-tech industries in some European cities, including Copenhagen, Tallinn, Warsaw and Brussels agreed one of biggest challenges that every media company has is to stop seeing itself as a media company: *"A media company has to stand between people, you have to listen to them, you have to make things with them."* (VRT, Brussels, 2016).

Discussion

Findings from semi-structured interviews in the study's ten cities have revealed that PSM current stage of adaptation depends on the highly connected characteristics of media markets and regulation as well as on the organisational-cultural: organisational structures and mentality/attitudes perspective (Table 2). Data from the qualitative study helped to identify key path-dependencies, and also various levels of dynamics of legacy response to adaptation and change.

Table 2: The path-dependencies of public service media

Media Markets and Regulation	Organisational Structures and Cultures	Attitudes and Mentality
Broadcast-first Broadcast-focused regulation Conservative funding schemes The lack of long-term strategy External power struggles	The ageing factor (organisation and people) The corporate nature The old-fashioned physical environment Rigid organisational structures Internal power struggles	Legacy of successful companies Protectionism Self-importance Isolation Risk-averse attitudes Defence mechanisms

Source: Own processing

Bearing in mind that PSM operates in certain traditions, cultures and political/legal systems the case studies varied not only when looking at more or less progressive media regulation but also organisational cultures and structures. For instance, a more risk-averse culture can be found in both Canada's and Europe's PSMs which have a longer tradition than the younger American model, which is seen to be more agile and pluckier. The dynamics of path-dependencies also relate to management change via architecture, since in some cases the latter has helped to adjust organisational culture by creating a space for social integration and experimentation. Although conservatism in financing is seen a successful factor for adaptation, budget cuts and insufficient funds in the PSMs might not fully support internal and external change. The more top-down and politicised (both internally and externally) a PSM becomes, the more defence mechanisms there are inside the organisation and the more external voices want to completely reinvent that PSM's model. Finally, the more advanced adaptation there is to the digital age and the more young adults are employed by R&D departments, the more experimentation and faith there will be in the PSM project.

Overall, the PSM interviewees felt limited by the old structures and systems and – at the same time – they felt they could do more. In some cases, when they spoke about the importance of the PSM in society and institutional resistance to change they became emotional. On the other hand, entrepreneurs from the High-Tech industries were more into radical models and risk-taking to reinvent the PSM. This contrast might be explained by different work cultures, but also because working conditions and patterns are more agile in innovation and cultural hubs. This again reveals that commercially driven businesses might have found it easier to experiment, rather than the formalised companies of a public service nature.

The list of path-dependencies presented here can be used as a foundation for further research involving other case studies, with an in-depth analysis of wider societal and cultural criteria of PSM (e.g. history, traditions, political system, etc.). Additionally, future research can be extended by qualitative studies of cultural artefacts (room design, clothing and symbols), language and rituals, which in turn can reveal an interplay between organisational and cultural conditions. Finally, the data presented here can be extended by an analysis of particular individuals and their emotions. Understanding the skills and attitudes of successful leaders and managers can further assist adaptation and change.

Conclusions

In this study, we have argued that the state of adaptation and change in public service media is an ongoing struggle between pasts, presents and futures. The qualitative study conducted in ten cities in Europe and North America reveal that the current state of adaptation to the data-driven age depends on historical path-dependencies, which can also be used to explain directions for the PSM model to move forward.

Firstly, there is broad agreement across countries (and media cultures) for urgency in the PSM reform. Broadcast-focused regulations combined with budget cuts and external political battles are seen as barriers which limit the PSM's response to the changing environment. The majority of the present research's case studies still see their traditional broadcasting as the core principle of their current activity. This is because in only a few cases, such as Belgium, Denmark, UK and Canada, have PSM successfully completed the previous transformation (multimedia departments, teams and newsrooms), while the organisational restructuring for the digital age is still ongoing in Austria, Estonia, Poland and the United States. The 'broadcast first' strategy runs in parallel not only with old programming but also with unfinished organisational transformations, rigid organisational structures and top-down management, as found in the older nation states of Europe. The public nature of the PSM enterprises contributes to standardisation and work routines by staff of older generations, which in turn creates risk-averse attitudes and defence mechanisms. The legacy of PSM's success from the broadcasting age also results in a high-level sense of self-importance, protectionism and fear when approaching change. Cultural and organisational path-dependencies contribute to the lack of innovation capacity and openness for collaboration with high technologies.

The dynamics of path-dependencies and reinventing the old PSM paradigm varies; only a few PSM organisations are experimenting with Big Data, VR, AI and integrated production. The more there is progressive media regulation, modern infrastructure (software and physical workplace), and an advanced collaboration with high technologies, the more opportunities there are to experiment with having the agile R&D minded teams found in the PSMs in Belgium and the UK. Also, in Canada, where the centre of gravity in newsrooms has recently orbited away from the broadcast tradition towards IT technology and mobile platforms, there is more faith and belief in any further reorganisation of PSM. In Estonia and Poland, where external political battles have become more important than societal and political debates on the future of PSM, there are voices to completely reinvent the PSM project. In the USA, entrepreneurs from creative and high-tech hubs and PSM staff members call for transformations towards social innovation. Extending PSM operations beyond the media with more engagement with local communities is another way to move forward.

Regardless of the scenarios and models concerning which moves forward the PSM will take, there is an urgency for ongoing adaptation and searching for new regulatory and institutional solutions for the age of data. Both policy makers and the PSM institutions will soon need to respond to the current stage of adaptation as well as historical path-dependencies to make sure that PSM still serve contemporary societies. The research approaches offered here might be further tested as tools for adaptation studies of other legacy media. More indepth analyses on the physical work environment, cultural artefacts, people's emotions as well as attitudes of leaders and managers can further contribute to discussions on tomorrow's public service media.

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