

**Managing the digital
transformation of the
broadcasting industry
with big data**

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BIG DATA'S IMPACT ON CONTENT IN THE DUTCH BROADCAST- ING INDUSTRY

**Executive Summary of Master Thesis
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The Erasmus University logo, featuring the word "Erasmus" in a stylized, cursive script font, is positioned in the bottom right corner of the cover. The background of the entire cover is a teal color, with a white diagonal line separating the text area from a photograph of the Erasmus Bridge in Rotterdam, which is visible in the lower right portion of the image.

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[PREFACE]

I remember this slightly panicky feeling during the course 'Media and Business Transformations' held by Dr. Payal Arora when I realized the whole dimension of the dominance of the tech giants. If data are the means by which our world is controlled today, it's those companies that sit in the control rooms.

This realization combined with my previous experience at Pinterest, a company that is driven by activating people to become creative and try out new things with the means of data-driven content discovery, made me interested in the implications of the dominance of technology companies and the hype around data for content providers.

With Media Perspectives and Frank Visser, I found a strong partner for the exploration of this topic in the course of my master thesis. My thank goes to Frank for not only providing me with insights into the current challenges of the Dutch broadcasting industry in this regard but also for introducing me to a variety of experts in the field and giving me the opportunity to speak about my topic at the Cross Media Café in Hilversum. The interviews I conducted were rich in insights and very inspirational. Therefore, I would not only like to thank my interview partners for making time to talk to me, but also for doing so in a very open and honest manner and convincing me of the potential that the industry has to offer. And, of course, a big thank you also goes to my supervisor Dr. Erik Hitters, who offered his perspective on the topic at a variety of occasions and guided me through the process of writing this paper.

BIG DATA AND THE DIGITIZATION OF THE BROADCASTING INDUSTRY

Today, broadcasters are seriously challenged in their core practices: Audiences move into the digital space, threatening long-established players to become less relevant for them. To reach the audiences they depend on, broadcasters shifted their efforts from content scheduling to content providing (Evens, 2010). They expanded their portfolio, created new online platforms and communication channels, and entered a battle for audience impressions. With new technologies offering the possibility to track consumers' behavior and collect their data throughout various channels, but also the need to develop "long-tail based business models" (Evens, 2010. p. 49), big data recently arose the interest of the broadcasting industry. The reason for this new approach might be that it "promises more stability, perhaps even predictability, for an industry typically characterized by risk and uncertainty" (Kelly, 2017, p. 3).

They are advocated because of their capability to facilitate content distribution and to monitor content consumption. Since a lot of media distribution processes are becoming more data-driven, firms are also enabled to deliver personalized and customized content (Carah, 2017). This content is assessed to have the potential to be highly relevant for its target group (Evans, 2017) and therefore helps companies to reach their consumers in a purposive way.

That is why researchers and practitioners see big data analysis as a promising practice, if not the holy grail (van Dijk, 2014) for companies to gain behavioral knowledge about their customers that helps them to differentiate themselves from their competition (Morris, 2015). However, it is not clear yet whether broadcasting companies focus on this trend due to "a fear of being left behind" or due to "a genuine belief that big data can have a positive creative and cultural impact" (Kelly, 2017, p. 3).

Within the production processes of creative content, it is not sure yet what role big data are going to or should play. After all, this development brings along a shift of power, where the role of humans in the creation of media content develops to be an indirect one (Napoli, 2014). Cases such as House of Cards are critically assessed and have sparked a debate about consequences for creative quality and diversity. The notion about the importance of big data and the discourse around products such as House of Cards stands in strong contrast to the actual implementation of big data practices in many traditional media firms. A look at the current use of big data in the media industry reveals that companies often fail to or are very slow at adopting the technology that would make real insights possible (García-Arista, 2016).

This study's aim is to generate insights about how media professionals are currently using and planning to integrate big data for their creative and managerial decision-making processes. In collaboration with Media Perspectives, an innovation-driver within the cross-media industry of the Netherlands, it researches how the opportunities and challenges of big data for content production are met by professionals in the broadcasting industry. The focus is hereby put on the Dutch TV broadcasting market.

How do companies in the Dutch TV broadcasting industry use data and what are their intentions regarding its possible application for content?

With this research question at hand, the current situations in which professionals work with and are influenced by big data were explored. The research question has also been used to analyze how broadcasting companies plan to use big data for decisions about content in the future. Relevant data was collected through expert interviews with professionals in the TV broadcasting sector. The focus was put on how big data are perceived to change the habits and routines of content production within TV broadcasting organizations and how certain professionals think about the integration of big data for the creation process of content. Since this work followed an interpretative approach, a latent thematic analysis was carried out by the researcher after the phase of data collection.

THE CURRENT ACADEMIC DISCOURSE

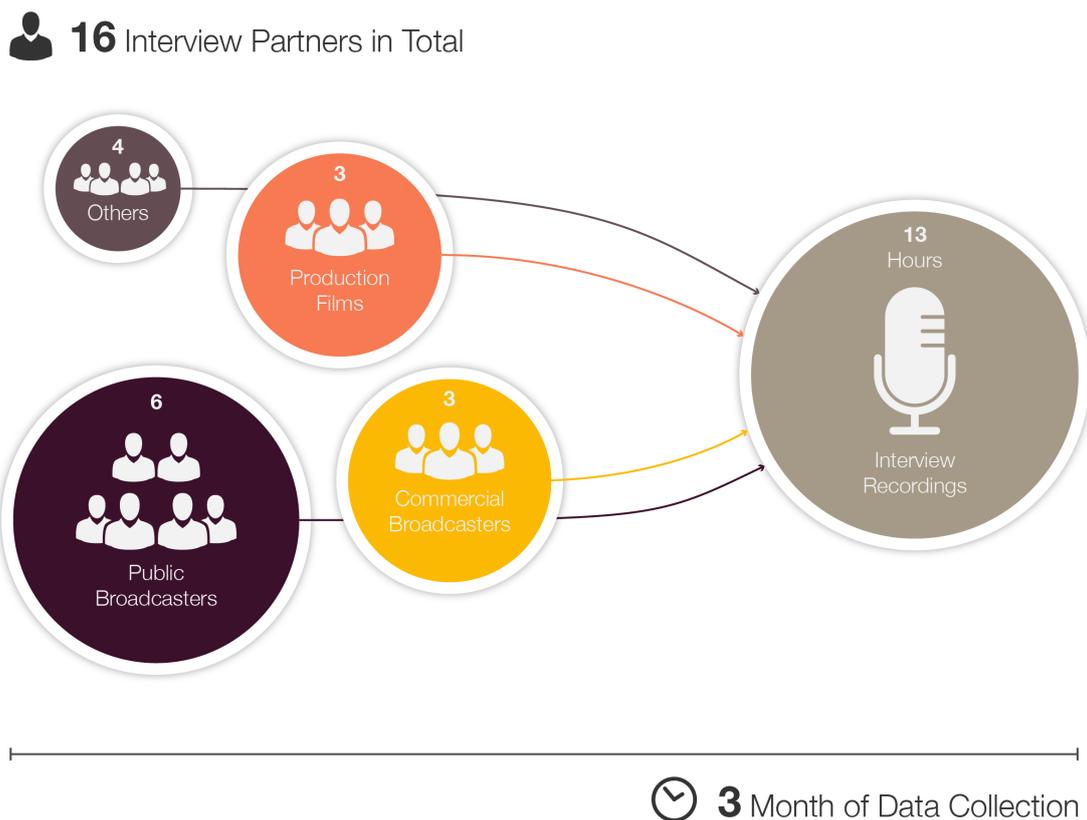
So far, academia has argued that algorithms “are not entirely autonomous systems” (Morris, 2015, p. 452) but are instead generated by humans, their judgments, and sense-making (Carah, 2017) and that this is often overlooked by practitioners. While everyone agrees that data mining leads to an “explosion of information”, businesses often understand it as generating “a near limitless pool of data from which numerous correlation can be drawn and converted into potential economic gains” (Kelly, 2017, p. 13) and forget that with more information does not automatically imply that the sense-making of this information becomes easier in any way.

Researchers increasingly understand algorithms as institutions (Lowrey, 2011) that constitute normative rules with regulatory mechanisms. Attention has also been given to the concept of institutional isomorphism: “the tendency for organizations in a particular field to resemble one another across a variety of dimensions” (Napoli, 2014, p. 351). In uncertain environments that are troubled by disruption and instability, companies tend to align their activities and strategies to the ones observed to be carried out by the market leaders in order to meet their success.

The traditional players within the broadcasting industry have proven to be rather reactive than innovative when it comes to big technological changes. The industry seems to be lagging behind in digital transformation processes and orientate itself towards the big tech players dominating the market. With the application of big data analytics in the broadcasting industry, potential benefits of these practices are not being discussed for an optimization of the distribution of content and high relevance of advertisements, but also content creation. The high production costs that characterize the industry create the need to “know and anticipate audience tastes“ in order to predict the return on investment (Havens, 2014, p. 6) and make big data therefore so attractive for them. Since big data are enabling real-time analysis, it is anticipated that this will lead to more content being produced that facilitates this type of data, namely live or event formats (Kelly, 2017). Creatives thus expressed worry that the obtained knowledge about the audiences weakens their creative freedom and pressures them to beholden „to the demands of the algorithm“ (Havens, 2014, p. 5).

RESEARCH DESIGN

As outlined above, data-driven media content is a rather novel topic that research lacks knowledge of. Thus, the knowledge-creating process especially implied insights into professionals' notion about big data and their understanding of big data's possible impact on their professional field. In-depth expert interviews were identified as the right data-gathering method to derive rich and detailed insights about the interviewees' perspectives and meanings. In order to address the tension between algorithms and decisions about content creation that became evident in the section above, data engineers, analysts, content creators, and strategical and managerial decision-makers were identified as fitting professional roles for the study. The sample was designed to cover the whole range from public as well as commercial broadcasting companies to different production firms.



Between March and May 2018, 16 interviews were conducted, whereby most of the interview partners hold a background in technology. An overview of the interviewees is included in the appendix (see page 18). With a thematic analysis, key themes were identified, defined and named by the researcher. The interpretation of the results intends to highlight key findings and answer questions about how the notions of big data shift, how professional behavior changes, and how these actions affect or influence TV content.

RESULTS

THE NEW MEDIA LANDSCAPE AND ITS IMPLICATIONS FOR DUTCH BROADCASTING

While the industry's architecture as a whole is being "transformed by digitization and convergence" (Evens, 2010, p. 41), there exist two different kinds of narratives for the development of traditional players in the Dutch market. While interviewees working for broadcasters describe their new practices as an online-first approach, professionals with an external view on the industry criticize an inconsequent transformation process of most broadcasters. The traditional broadcasting industry is attested a lack of entrepreneurial spirit that lets its players react under duress, but not proactively to the innovations of new market entrants.

The development from TV as a mass medium to a direct medium leads to a new importance of understanding audiences and lets companies become more user-centric. The design of the interfaces, in other words, a successful customer experience, becomes a decisive element – if not the requirement to lead the field. With the new logic of user participation, as emerged from mobile and social media applications, responsive algorithms and a media structure that takes users into account are noted as becoming the new norm (Carah, 2017). This development is even described as a "war between the best customer journey, the nicest interface" (Nicolette Nol, KRO-NRCV, May 17, 2018) that the Dutch service providers are slowly losing.

Interviewees emphasize how younger audiences do not think in channels anymore, but in programs. In the digital ecosystem, the link "between 'medium' and 'type of content' has been broken" (Evens, 2010, p. 42), leading to media companies thinking in content instead of mediums. To succeed in treating stories agnostically, Erik van Heeswijk states that companies need a "holistic data approach" (Erik van Heeswijk, Clever Lions, March 13, 2018). Data can be used to identify the right channels for content brands and offer a basis for the modification of content for these channels.

A recurring topic in terms of reactions to the industry's digital transformation is the difference between public and commercial broadcasters. The entrance of players such as Netflix as the biggest video-on-demand platform in the Netherlands apparently changed a system that was in balance before and is now discussed anew. The change of business models leads to the need to ensure the quality of customer relationships. In shifting focus away from advertisers to consumers, commercial broadcasters are perceived as struggling. Because of high financial pressure that is further enhanced by the need for high investments in the new business the way of producing content for commercial broadcasters is currently highly dependent on advertisers "because that's where more money is" (Daniel Hendrikse, Fremantle-Media, April 20, 2018).

As a "key cultural institution in Europe" (Bardoel & d'Haenens, 2008, p. 357), the public broadcasters are perceived as in a somewhat safer position than their commercial counterparts. When it comes to a modernization of the system, many interviewees argue that the public broadcasters are staying behind and finding protection in their special status. Nicolette Nol, who works for KRO-NRCV, sees this missing commercial aspect of the public broadcasting system as the reason for the lack of willingness and urgency to change. Tom van den Broek from the public broadcaster NOS leads this back to the financial security that he describes as somewhat luxurious.

This shows the dilemma that the public broadcasters are situated in: Without the financial incentive, they are moving slowly. But most importantly, they are risking to become irrelevant for the newer generations:

“If we don't pay attention, we will get overtaken by services and people won't notice us anymore. And then we have a really big problem.”
(Tom van den Broek, NOS, March 9, 2018).

PERCEIVED CHARACTERISTICS AND BENEFITS OF BIG DATA

The phenomenon of interviewees discussing data as a competitive advantage that can be translated into monetary value derives from the belief that data are the industry's future core business. Data are expressed as a necessity for the industry and something that should be used as “a core tool” (Erik van Heeswijk, Clever Lions, March 13, 2018). Big data insights are perceived as more granular and richer compared to traditional measurement methods and therefore believed to offer more focused advice. Furthermore, they are seen as helping to make more fundamental and more informed decisions. The overall trend to data mythology and dataism, as identified by boyd & Crawford (2012), is clearly apparent in the industry. While big data are discussed as superior to human analytical skills, the awareness of potential pitfalls remains recognizably low under the participants and shows “the television industry's seemingly uncritical acceptance” (Kelly, 2017, p. 4) of the new paradigm.

CURRENT APPLICATION OF BIG DATA FOR CONTENT

Even though data are seen as the industries future business, data insights are not commonly affecting content processes yet. Within the Dutch broadcasting industry, so far, many big data initiatives are project-based and are still tested on a small scale. Even though the majority of interviewees states that data insights are not part of their daily practices, they unexceptionally describe big data analytics for content as an untapped opportunity that offers great benefits because of its potential to make content more relevant for its audiences.

The willingness to incorporate a more data-driven approach to content might be present within the industry, but relates back to “institutional stasis” (Lowrey, 2011, p. 75)) and isomorphic tendencies. An indicator for this insight are the periods of time that interviewees were either holding their position within the company or working on projects that they reported on during the interviews. Leon Backbier from Endemol started a data-driven content project in October 2017. Dorine van Mullem from Talpa works on a data strategy for the broadcasting network since November the same year. Kasimir Landheer and Daniel Hendrikse had their new positions created in January 2018, after FremantleMedia restructured their linear and digital teams. Others report on projects that are being tested in the upcoming months.

BIG DATA INVADING THE CREATIVE WORLD

Different stages of how consequently big data analytics are applied to content became apparent. It can be assumed that this is linked to the differences in companies' mindsets. This is showcased by Erik van Heeswijk who explains the difference between raw data and actual insights, which he refers to as tips:

“Numbers are patient, while tips are very intrusive. They tell you what to do... These tips... are perceived as a software breaking into their creative world. It depends on where you are on the maturity scale if you accept that sort of solution.” (Erik van Heeswijk, Clever Lions, March 13, 2018)

In many cases, the incomprehensibility of big data is perceived as invasive and restricts an enhanced use of data throughout the company. Therefore, there exists the necessity to break big data insights down and humanize analytical tools (Lippel, 2016) for employees without the required technological background.

Additionally, interview partners counteract the invasiveness of big data by narrating big data in a specific way: It is stressed by the interviewees that technology lacks the element of surprise and the ability to create emotions. This is, in their eyes, why creativity and therefore humans and their gut feelings are still needed. Consequently, it very much seems like data are narrated as an empowering tool for creative processes while the decision-making authority still belongs to the media professionals.

THE CONTENT PROCESS

In general, the content process can be described as “topic detection, production, distribution, analysis, results” (Erik van Heeswijk, Clever Lions, March 13, 2018), and traditionally involves a variety of different companies. In this work, it is even argued that the step-by-step-process as described by van Heeswijk can be seen as a loop, whereby data theoretically offer the possibility to let results affect the first step, the decisions about what content to produce. The analysis, however, has shown that big data are not used to create this loop yet and are deployed in varying degrees to the existing stages.



BIG DATA FOR TOPIC DETECTION

When decisions are made about what type of content to produce or buy, one field of application of big data insights is the possibility for customer segmentation on digital platforms. Content is then produced and licensed according to the needs of these customer segments. Hendrikse (FremantleMedia) sees a difficulty in this form of content strategy, as mostly applied by commercial broadcasters to their online platforms:

“What they are doing right now is building up on that momentum. Eventually, probably, the momentum is going down. This is how RTL is determining their long-time strategy. Which, in my opinion, is short-sighted.”
(Daniel Hendrikse, FremantleMedia, April 20, 2018)

Another possibility to facilitate topic detection is offered by social media insights. Erik van Heeswijk describes social media analytics as “non-intrusive tools” and criticizes their use by media professionals who might not really embrace data-driven decision-making about content yet:

“It’s quite light, fluffy, and nobody gets scared of topic detection. And they can tell their bosses: ‘We are very data-driven. Look, we have a data tool.’”
(Erik van Heeswijk, Clever Lions, March 13, 2018)

BIG DATA FOR CONTENT PRODUCTION

The analysis of the data indeed verified that there exist different levels of big data application for different forms of content. It became apparent that big data analytics already play a substantial role in online news. Different tools are used to track clicks, but also to detect the scroll depth or test headlines. In the case of online articles, big data analytics help content creators to perform the balancing act of deciding what content is ‘newsworthy’ and adapting it in real-time to the readers’ needs. Video content, however, is characterized by a longer and more complex production process and is therefore not as easily ‘tweaked and fixed’ after its completion as text. Consequently, the inflexibility to react to possible audience feedback leads to interviewees reporting that linear content is not affected by big data insights yet. Nicolette Nol, however, explains how today’s oversupply of content makes interaction more important because it helps content creators to find blind spots in their thinking:

“We live in different times now... Before, there wasn’t any interaction. So I think with the enormous amount of content that you can consume during a day, it’s better to create content with people that are going to listen to it or watch it.” (Nicolette Nol, KRO-NRCV, May 17, 2018)

This, however, can only be achieved by an all-encompassing reorganization of production habits and chains which would, in turn, lead to a change of tasks for content producers and would entail more effort for them. The results of this research indicate that the industry is still far away from achieving this turn for TV productions in the near future. Producing content in intervals and testing different aspects of a story that are traditionally decided upon by media professionals is only thought about but not put into practice yet.

BIG DATA FOR CONTENT DISTRIBUTION & DISCOVERY

Big data for content discovery was one of the most dominant topics within the data. However, many of these efforts were only introduced recently: NPO started their recommendation engine for their website in the middle of 2017 and Talpa is relaunching their digital platform with personalized recommendations in September of 2018. It is, therefore, safe to say that the Dutch broadcasters are currently focusing on personalized recommendations that “create a routine flow of data” (Carah, 2017, p. 386) because they perceive data to be highly useful for a personalized environment. The focus on the trend of personalization of content discovery is related to the shift of broadcasting “from a mass media to a direct media perspective” (Dorine van Mullem, Talpa, May 3, 2018). In other words, it is used to enhance the customer experience with the aim of increased customer loyalty. However, since recommender systems are “currently ubiquitous” (Constantiou & Kallinikos, 2015, p. 51), it also indicates an isomorphic tendency of the industry whereby the Dutch broadcasters feel the need to adapt to new standards:

“We have to get this personalization in place. I don’t think personalization is the silver bullet. I don’t think [pause] it will make us the biggest and best for all time, but I do see with all this competition – not only on news but also on other products – people are getting used to products shaping around their interest.” (Tom van den Broek, NOS, March 9, 2018)

The importance to fulfill consumer expectations lets personalized recommendations seem as a way to lead the consumer through the overwhelming mass of content. Overall, personalized recommendations are narrated as bringing ‘the right content to the right people’.

BARRIERS FOR EXTENSIVE USE OF BIG DATA FOR CONTENT PROCESSES

Multiple challenges became apparent that prevent a stronger application of big data insights for content. The identified barriers are mainly to be found within the companies and are primarily connected to resources of different kinds, namely time, money and especially talent. There furthermore exists high consistency within the interview data about the need for more content intelligence. Media professionals have the ability to collect sufficient user data, but miss the possibility to analyze the metadata of their own content and combine it with user insights. This perceived need seems to be especially high for video content, since text tools, like analytical tools for articles, are already better established. An important factor for the lack of ability to conduct analysis such as sentiment analysis for subtitles, topic distraction, or image recognition, is the diversity of content. Media professionals obviously struggle to find or build the right tools for their website content, digital videos, shows, movies, series, and soaps. Next to the difficulty of diverse content, the interviewees also report to struggle with content not being “labeled well enough to do this kind of analyses” (Nicole Engels, NPO, March 21, 2018). Making video searchable is another ambition of the industry. This is seen as a potential opportunity to improve manual workflows, for example by creating searchable video timelines with the help of data visualizations.

DATA SPARCITY AND DATA SILOS

In many cases, the lack of data was named as one of the biggest hurdles for a successful adaption of big data analytics. While data volume might actually be insufficient in some cases, another reason for the perceived data sparsity could be the widespread existence of data silos between different departments or stages of the content process, but also within the whole industry. These data silos partly explain the superficial application of big data analytics: Within companies, various roles and tools are involved in the content process and the combination of insights from the different datasets, tools, and teams is absent in the majority of cases. When working with isolated data, media companies risk arriving at the wrong conclusions. While Erik van Heeswijk believes the ‘data fetish’ to be omnipresent, other participants report different approaches to data by different departments. Therefore, the merge of data silos in one data approach that gets rid of the strategic mismatch is demanded. Visions for a data strategy already exist, but do not seem applicable yet.

MANAGING A SUCCESSFUL ADAPTION

In order to manage the technological and cultural change, the broadcasting industry needs to go through a comprehensive transformation. In fact, interviewees speak about a required change of company DNA. This entails not only the strive for a “culture of improvement” (Erik van Heeswijk, Clever Lions, March 13, 2018), but also the need to overthink current habits. Broadcasters eventually have to change their core business and develop into IT companies to stay competitive. While the interviewees agree that existing employees will start to see the benefits of big data with an increased use of it and start to learn “that it’s normal that things are changing” (Gerard de Kloet, NOS, April 4, 2018), some especially emphasize the need of new skill sets:

“The skill set to really perform well on a digital platform as a company is a completely different skill set than performing well just by producing and broadcasting content.” (Hans Bouwknecht, Daysm, March 22, 2018)

In order to achieve a new skillset and mindset, broadcasting companies do not only need young talent with a different problem-solving approach, but also a visionary management. Many interviewees, directly and latently, talk about the importance of top management in regard to those transformational processes and share the opinion that without the involvement of the management level, big data implications stay on a superficial level. So far, however, data adaption and innovation within the companies that were object to this study is driven by individuals, not management. CEOs and other managers on or below C-level are reported to lack the technological background “to have an idea on big data and what to do with it” (Erik van Heeswijk, Clever Lions, March 13, 2018). For them as much as for every other non-data-expert, data remains opaque – which in some cases even leads to dismissiveness of the whole issue. They either do not know what questions to ask, or a lot of knowledge gets lost in ‘translation’. Therefore, a new management skill is required:

“Even if you hire the smartest data scientist, it’s very hard to understand them, to have them function on the mission of the organization. Managing big data organizations or big data departments is a skill in itself, which is not very present at media companies.”
(Erik van Heeswijk, Clever Lions, March 13, 2018)

Acquiring data literacy and being critical about data insights, therefore, are believed to be decisive managerial characteristics for the future success of these media companies.

Having followed the principle of data harvesting, as exemplified by their main competitors, broadcasting companies now lack a clearness of how to derive value out of the data. But how can a rather habitual data usage be promoted? The dominating strategy to overcome these challenges seems to be data visualizations for the editorial and creative teams in the form of dashboards. Interviewees explain how they conceal the size of data sets and make data “presentable” or “digestible” with user interfaces. This form of minimization and humanization of data aims at making big data insights independent from expertise or professional background and is perceived as becoming increasingly valuable (LaValle, Lesser, Shockley, Hopkins & Kruschwitz, 2011). Researchers indeed verify that data are “frequently consumed in aesthetic and symbolic form” (Kennedy, 2015, p. 1) – especially in industries related to Internet and media (McCosker & Wilken, 2014).

Because of the complexity of big data, some participants are of the opinion that big data analytic tools should not only visualize data but also give recommendations. The lack of clarity can be counteracted by a translational process that turns data into action items. Decisions about relevance are made by the tool and only relevant information is surfaced. Furthermore, the continuous adjustment and improvement of data tools to the daily routines of media professionals is used as a strategy to overcome mistrust in data tools and arrive at a more data-driven mindset. Participants explain that they are working on creating a feedback loop with the editors and creative staff about the perceived usefulness of tools.

THE NEED FOR A STRATEGIC CHANGE OF DIRECTION

The findings suggest that in most cases, traditional players of the Dutch broadcasting market operate without a clear strategy at hand. Especially, interview partners that work as external advisors mention a lack of clear vision of their customers and describe efforts that entail big data collection and analysis as unaligned and not connected to a bigger aim. Instead of accepting that big data “challenge many of the canons of standard, prescriptive approaches to management and strategy” (Constantiou & Kallinikos, 2015, p. 45) the observed media companies in this study stick to a ‘strategy-as-practice’ and continue to work with a deductive approach that has been prevalent in the industry since decades: creating content and distributing it top-down. While keeping up appearance, they miss the fact that in the new dynamic environment, big data can deliver short-term insights and have the potential to identify changes quickly – especially in user needs and demand – and choices cannot solely be based on experiences of past solutions anymore (Constantiou & Kallinikos, 2015). Apparently, broadcasting companies have not found a way to incorporate these insights into their long-term strategies in a flexible and adaptive way yet.

To use data effectively, companies have to reconsider their approach to strategy-making and become proactive in approaching changes. The transformational developments within the global broadcasting market ask for an integration of insights that resembles a bottom-up approach. Apart from budget reallocation and a modification or replacement of existing tools and models (Constantiou & Kallinikos, 2015), this also entails a change of working culture and management practices – aspects that all companies within this study struggle with the most. Erik van Heeswijk is sure that “the winners of this are going to be the people that make their own strategy” (Erik van Heeswijk, Clever Lions, March 13, 2018). This view is also expressed by Spillane (2012), who argues that “data do not objectively guide decisions on their own—people do” (p. 114).

HOW TO STAY COMPETITIVE

When talking about future plans, the majority of respondents raises the topic of the market lead of Netflix. They see the company as the benchmark that they need to compare themselves with. One aspect that is mentioned frequently when talking about possible advantages of Dutch broadcasters is local content.

JOINING FORCES

Because of the internationalization of the broadcasting market, as agreed upon by the interviewees, a certain scale is needed to successfully innovate and meet the competition. In many cases, cooperation between different parties is described as a must to reach the required impact. Their assessment coincides with other studies that identified the need for a collaborative ecosystem (Lippel, 2016). The assessments that interviewees give about the willingness to cooperate differ remarkably, though. Interviewees discuss intragroup collaboration across the production flow, but also collaboration between different broadcasters. Niels Baas, for example, argues that broadcasters could benefit from quitting their local rivalry. When combining their digital services into one local platform, they could reach each other's target groups:

“What you need to do as local broadcasters is to at least create one not-to-miss local subscription. Because in the long run, if you have this dominant position, everybody will profit from it, because everybody has this subscription... I always say to NPO, for instance, or to RTL: “This girl or boy, or man or woman, who wants to watch Temptation Island will not logically have a subscription to the NPO, because it’s not their basic preference. If you combine it all together, then this person is at least within your reach.”

(Niels Bas, NLZIET, April 11, 2018)

Government bodies also recommend a centralization of efforts for the whole industry. However, public broadcasters are noticed to resist cooperation due to the firms’ different main objectives. Especially opportunities of cooperation in terms of data insights are not yet recognized and none of them seems to be willing to do the first step. The case of NLZIET serves as a good example of the overall problem of the industry: While innovating, broadcasters automatically cannibalize their existing business models. Therefore, they see possible co-initiatives as a threat.

CONCLUSION

A SUPERFICIAL TRANSFORMATIONAL PROCESS

As this research revealed, the Dutch broadcasting industry has not yet changed its core business. Big data’s possible benefits for the industry are acknowledged, but not used exhaustively. Data are narrated as gold, the new currency, and data tools serve as a “gold mine for understanding customers’ needs and identifying new business opportunities” (Chen, Chiang & Storey, 2012, p. 1167). The institutional nature of the traditional players requires “accord with norms and practices that have been widely accepted across the field” and therefore leads to efforts that are “fleeting, skin deep, merely ceremonial” (Lowrey, 2011, p. 67) and not truly transformational. A strong indicator for this is that content, the core of the industry, is rarely touched upon by data insights even though business models, distribution strategies, and user touchpoints have been identified and created that circulate around big data.

THE EMBRYONIC STATE OF DATA-DRIVEN CONTENT

While data are used to match user tastes with content, they are not commonly used to “make creative decisions about how [emphasis added] to produce content” (Smith & Telang, 2018, p. 3). Theoretically, big data insights can be used to test multiple story lines for several metrics or tweak existing story lines to become more appealing for audiences. In practice, however, this is rarely done within the Dutch broadcasting industry. While many express the belief of big data benefiting content production by creating a feedback loop, there only exist a few projects where this belief is actually acted upon. One of the few exceptions of the norm are newsrooms, where the length or the headlines of articles are already tested in real-time. Here, feedback seems to be appreciated because the effect can be tracked and becomes apparent almost immediately.

Creativity is believed to be the core of the broadcasting business and while some see the possibility to pair creativity with big data to enhance the outcome, it is nevertheless insisted that big data only create value when combined with expertise and gut feeling. Overall, the importance of the 'human' factor for content is stressed and the "fear that entertainment will increasingly be shaped by analysts crunching numbers rather than creatives following their artistic vision" (Smith & Telang, 2018, p. 3) seems unjustified when looking at the current stage of the Dutch broadcasting industry. The high degree of movement in the industry, however, shows possibilities for a more exhaustive shift into data-driven content in the coming years.

THE UNCERTAIN FUTURE OF BROADCASTERS

In the end, the communicated ambitions of media professionals to analyze their content more thoroughly with the help of algorithms indicate that data will soon shape content production to a higher degree than it is the case now. In the process of separation from new players, the players of the Dutch broadcasting industry focus on the core of their business, that is, content. With the multiplication of distribution channels, content is experiencing its golden ages and creativity its sidereal hour. The combination of big data insights and content processes can therefore be expected to change the core of the broadcasting industry.

But if the Dutch players do not speed up their transformational process and start to execute the needed changes, they risk losing their expertise to their greatest competitors. The demanded change of company DNA therefore signifies a rigorous reconfiguration of their core business. Because of that, "it is more important than ever that businesses have confidence that they understand what they want from big data" (Lippel, 2016, p. 258) instead of solely following industry trends. Since "big data is linked to the context of organizational intelligence and strategy" (Ducange, Pecori & Mezzina, 2018, p. 45), aspects that have proven important by this study are non-technical factors like mindsets of employees and managers as well as regulations that help create a level playing field between international and local players. This study believes that "a culture that encourages and rewards data-driven decision-making, collaboration, and entrepreneurship" (Batten Briefings, 2016, p. 11) is the key factors of survival for the traditional broadcasting players.

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APPENDIX - INTERVIEW PARTNERS

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Bouwknegt, Hans; Dasym, Advisor Digital Strategy

De Kloet, Gerard; NOS, Head of Digital

Engels, Nicole; NPO, Head of Public Research and Marketing Intelligence

Hendrikse, Daniel; FremantleMedia, Content Director

Hoeswijk, Erik; Cleverlions, CEO

Landheer, Kasimir; Fremantle Media, Data and Strategy Director

Nol, Nicolette; KRO-NCRV, Concept Developer/Creative Producer

Van den Broek, Tom; NOS, Head of Product

Van der Goes, Maurits; RTL, Data Engineer and Data Scientist

Van Mullem, Dorine; Talpa TV, Director Business Intelligence and Strategy

Vervaart, Just; NPO, Manager of Business Intelligence (now: Omroep Gelderland, Projectmanager Regiolab)

Voermans, Bram; Ministry of Education, Culture and Science/Directorate Media and Creative Industries, Senior Policy Officer

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