

12 Engagement on the basis of data

Tracing users' behaviors to optimize journalistic offers

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At the beginning of the early 2010s, newsrooms viewed more critically various journalistic approaches of attention-grabbing, such as click-baiting, which were still intended to frequently bring the audience to their own pages. In the meantime, journalists have recognized the necessity for their editorial survival and have developed strategies that are no longer based solely on “popularization and sensationalism” (Costera Meijer 2020, 1). Nevertheless, news outlets still struggle to attract and retain users while competing not only with other news companies but also with video-on-demand (VoD) platforms, social networks, and countless digital and analogue services. Even the number of news outlets has increased markedly due to a lowering of the entry barriers to the publishing business (Küng 2017). Thus, these companies must often draw on a range of strategies to provide their audiences with nonsubstitutable content that makes the organization gain a competitive advantage. In other words, newshouses are making efforts to anticipate what kinds of content users prefer, how much value they put on it, and even in what contexts they are willing to pay for content in organizations with reader revenue strategies (Green and Jenkins 2011, 121).

User data analysis is, therefore, a paramount task within media houses, as it aims to increase audience engagement by adapting the media offer to the public's demands in terms of content and the establishment of a media community (Broersma 2019). Digital technologies allow companies to access and analyze large amounts of user data via participation, interaction, and monitored navigation (Steensen et al. 2020). While third-party cookies have been employed for years to segment advertisements, first-party data is gaining importance now for news media organizations. According to a study conducted by the Reuters Institute for the Study of Journalism, first-party data can help news organizations adapt their content, gain deeper insights into their audience's preferences, and thus increase their engagement rates (Newman and Fletcher 2017).

Despite the recognition of data-driven evaluations as an innovative and valuable approach to adapting journalistic content, there are still reservations about fully embracing data-driven processes in news organizations. For instance, Ekström et al. (2022) argue that the embracement of metrics

radicalizes the focus on presentation, packaging, and timing in the valuing of professional practices, while efforts in research and truth seeking are seldom explicitly valued. In addition, the thoughtless employment of data to guide journalistic decisions can devolve into inequity, misrecognition, and misrepresentation of minorities (Schaetz 2023). Thus, the development of data-informed processes also incorporates human knowledge to enrich navigation and user data.

Case studies

During the investigation done by the Journalism Innovations in Democratic Societies (JoIn-DemoS) project, engagement on the basis of data was identified as one of the most important innovations in journalism from 2010 to 2020 in all of the five countries studied (see Chapter 2 on methodology). To obtain more information about the innovation area “engagement on the basis of data,” the following media companies were selected as case studies for the study.

- Austria: The case study *Ländlepunkte* was launched in 2018 by *Vorarlberger Nachrichten (Russmedia)*, funded by the *Google News Initiative*. Since then, it has undergone a series of further expansions. It aims at increasing interaction with users on *vol.at*, the website of the *Vorarlberger Nachrichten*, and thus being able to collect more data and adjust the offer, via gamification. The company rewards users’ loyalty by awarding points when they log in and surf *vol.at*, read articles, comment, share, or solve various quizzes. These can be converted into benefits and gifts in real life, like participation in sporting events and concerts, fund-raising activities, and other noncash prizes. When the interview was conducted, six people were working for *Ländlepunkte*. The interviewee was Dominic Depaoli, CTO and CEO for the management of the website at *Russmedia*.
- Germany: The editorial house *Ippen. Media* was selected due to its general approach to data analysis and content adaptation. Their online editors tended to be more analytically oriented to collect measurable figures on user behavior. In recent years, *Ippen. Media* has introduced a central portal where it is easier to gather all usage data for its many newspapers all over Germany, with between 50 and 60 individuals working on data collection. We interviewed Christoph Seidl, who is head of format development at *Ippen.Media*.
- Spain: *El Español* was created in 2015 as the result of a crowdfunding campaign with unprecedented success in the Spanish market (3.6 million euros). *El Español* enrolled in personalized content initiatives back in 2020 when it decided to update its so-called *Zona Ñ*, which is a space where paying subscribers can configure and arrange content according to their preferences. Since the beginning, all the changes related to

personalization have aimed at registered users and subscribers being a medium to increase reader revenue and retention. The selected expert for this case was the chief innovation manager at *El Español*, Mario Vidal.

- Switzerland: *Star*, which was created in 2015, is the biggest innovation currently underway at *Ringier*. It is a self-developed digital platform that aggregates various components and techniques that interact with each other, such as tracking and natural language processing. The main products in *Star* aim for monetization, optimizing the match between products and user profiles; recommendation, delivering content or ads to specific users or user segments; and semantic, analyzing article content in a granular way. At the time of the interview, six persons were working full-time on the project, such as product owners, data scientists, or engineers. The interviewed practitioner was the chief product officer and head of data platforms at *Ringier*.¹
- United Kingdom: The *Financial Times* has a big data department, which is separate from the editorial one. This team has data analysts in the newsroom who maintain contact with editors to discover new opportunities and work on data democratization by making sure that the audience data is as accessible as possible for journalists. In this respect, an in-house analytical tool, *Lantern*, was created to transmit data to journalists without requiring them to have any special data analysis knowledge. Over the years, the instrument has been redesigned to include ever more analysis filters. The head of audience engagement and executive editor at the *Financial Times*, Hannah Sarney, was interviewed.

Aims of the innovation

Clear similarities between individual projects can be identified in terms of their aims when implementing these types of initiatives and philosophies. In brief, the projects that comprise the sample exploit audience data to attract users' attention mostly by adapting content according to the results of data evaluations. This devolves into a more fluent and boundless user-journalist relationship, the development of a consumption habit, and better brand awareness. Thus, the basic goal is to collect the proper data they need to reach more ambitious objectives, such as an increase in loyalty and engagement.

In the Austrian case, the initiative was focused on the essential goal of gathering users' data and monitoring how they behaved. Depaoli stressed that the project *Ländlepunkte* would make it feasible to "log every interaction of every user, so it's anonymized but we actually know that certain activities are taking place and can evaluate them on a data basis." This data orientation helped "extremely with the entire project design and that is a major driver for us to develop the project further." In addition, Depaoli pointed out that this project also pursues loyalty through gamification.

The German interviewee Seidl explained that using traffic and navigation monitoring tools helps *Ippen. Media* to "understand a user coming to the

website much better.” Seidl said this strategy allowed them to cluster various types of users and to tailor news offers to their needs and the features of each distinct entry source (e.g., direct traffic, organic traffic, and social traffic).

In Spain, too, the data collection intended to respond more precisely to the audience’s needs. In the case of *Zona Ñ*, content was delivered in a personalized manner, although the displayed content selections depended more on the explicit choices made by the user than on pure data analysis. As Vidal explained, the target group was clearly the registered users and subscribers, as the idea was to offer them a special experience on the site and subscriber benefits. The aim was to bind the users to the brand.

In Switzerland, *Star* states that its main aim is to have “as much data as possible about the content we distribute and, on the other hand, having as much data as possible about our user segments.” That would have helped them to understand the users’ behavior.

Finally, in the same line, the *Financial Times* uses data to “join the dots to see where the opportunities are, rather than being reactive,” as Sarney explained. Nevertheless, as data culture was quite extended among product profiles in the organization, the main goal of the company was to make it sufficiently widespread within the editorial team to democratize it.

Supportive conditions

The underlying objectives were similar across all five projects. However, external conditions, such as technical assistance from other companies, for example, as well as funding from private and corporate donors, which promoted or hindered innovation, remain diverse and strongly depend on the respective media house. Internal factors within the media houses also drove the development of the innovation.

In Austria, Depaoli mentioned that a “test and learn” strategy was what supported the development of the innovation. The idea of repeatedly testing the project in practice and thus developing a kind of trial-and-error mentality has strengthened the development of the *Ländlepunkte*. Another important supporting factor was the involvement of experts, their input, and the scientific knowledge that they would not have had within the editorial team. This helped to equip them with additional knowledge and to make good decisions in developing the project further. For example, one of those decisions was to use a gamification approach. Although the *Vorarlberger Nachrichten* was already a well-known brand before the launch of *Ländlepunkte*, the employees knew too little about the users, which the editorial team wanted to change. As Depaoli explained, “Of course, one eye-opener for us was then looking at the PlayStore or the iTunes Store. There we looked at the apps: what are the top downloads? And that’s just all games.” Moreover, Depaoli stated that an important point was additional monetary support. For *Ländlepunkte*, the *Vorarlberger Nachrichten* had cooperated with the *Google News Initiative*.

In Germany, a few internal factors pushed the development of the collection and utilization of user data. Seidl said an editorial concept was created that would unite online and print. In his opinion, however, it was a good thing that this concept failed “because the online editorial team has remained independent and self-sufficient.” In Seidl’s opinion, that was the reason that *Ippen. Media* “has been able to grow as a brand and, to a certain extent, has also broken away from the print titles.” Consequently, the online editorial team simply had significantly more power and remained an independent store. Another milestone was the establishment of various central editorial offices, which were rolled out throughout Germany. This was an important step for the publishing house. Here, sites were merged and, as a result of this and the influence of the COVID-19 pandemic, networking was intensified – for example, regular weekly meetings were held and editorial managers from all local websites around Germany participated: “You kind of get the feeling I’m working with people I’ve never seen in person before in my life, who I’ve never shared a desk with, and with whom I’ve already set up some really great stuff.”

For Spain, Vidal pointed out that the main supportive condition within their project was an innovative culture in the company, which encouraged the development of the initiatives. The work teams subordinated a lot to the project: “Even if the objective of a section is to reach an audience, it is willing to do other things for the sake of having a good product.” He also emphasizes that the teams do not necessarily have to be young. All that is needed is an open mentality to accept and try out new ideas. He adds that the cooperation of the people from all sorts of areas, who were all involved in the project, worked together wonderfully and that this was also a positive moment for the development of the section *Zona Ñ*.

In the case of *Star* (CH), the interviewee mentions that they had used experts in technology who were significantly involved in the development of the projects. They hired a global data and technology unit, which dealt with technology issues to move the development forward.

In the United Kingdom, however, this kind of technological support was not yet available. Nevertheless, the executive management of the *Financial Times* was most interested in implementing an audience or data department. This support from within the media house and the high-level executives, with a strong desire to promote both user interaction and understanding, helped the project to develop quickly and to have the high status it has today within the company.

Obstructive conditions

In contrast to other categories, such as the aims or the supporting factors, hardly any parallels could be found between the cases regarding the obstructive framework conditions. Here, the answers were project-specific, which made it difficult to find a common thread.

In Austria, for example, Depaoli states that the funding and the possibility to really take the time and to assign a team to launch this project were unusual in the industry in that they had not only been positive but also became obstructive. The initial mistakes after a quicker launch, which was by industry standards overly long, would have provided more information about possible obstacles. Depaoli said that it helped but also decelerated the process, as it hindered initial experiences “that would have helped us in accelerating the project, and might have allowed certain marketing needs to be identified earlier.”

In Spain, on the other hand, money and time were exactly the aspects that were missing. The *Zona Ñ* project had many small subprojects with their own teams, but time was short, and the workload was excessive. It was difficult to bring consistency into the projects if you worked on individual projects, and the teams’ personnel changed frequently. Even though *Zona Ñ* was a medium-sized newspaper, Vidal explained that “resources are limited in many things and it is difficult to keep up the pace in the innovation part and the direction in the same project because we can move to another one.”

At *Star* in Switzerland, the employees had to deal with other obstructive conditions. The expert confirms in their interview that there was not much acceptance for data collection tools in Switzerland, which was why the project hardly developed noticeably in the first few years. The narrative in Switzerland was that personalized advertising was negative because the user was constantly being tracked. Almost no one, including the Swiss legal system, saw a positive side. Jurisprudence regarding the idea of collecting data from users was obstructive for the project. Special Swiss data protection laws made it difficult to get creative when it came to merging data.

Societal impact

Fostering engagement based on user data was understood by the interviewees more as a technical innovation from which it was difficult to derive a social function for journalism. Nevertheless, some social and professional outcomes of gathering users’ data, relying on it, and personalizing content did arise, which had both positive and negative connotations.

In Austria, Depaoli from the *Vorarlberger Nachrichten* said that *Ländlepunkte* had contributed to increasing the quality of social debate in public forums, but this was more related to other features of the project, such as only allowing comments by registered users rather than data collection.

Seidl said that *Ippen. Media*, with their personalized content, could provide users with knowledge, and this contributed to improving the social discourse. Nevertheless, he was equally critical of the data-driven approach, as many media companies that analyzed data in order to adapt their content relied too much on it, which could devalue their journalistic offers. For example, they changed headlines so that they received more clicks and

generated greater reach. Thus, in those cases, this kind of optimization did not improve the social value of journalism, but it pursued other, rather economic goals that could have been prejudicial for the quality.

In Spain, Vidal explained that from his point of view, media consumption had a positive impact in the majority of the cases, as more people were informed and had knowledge about the issues that were important to them. However, in line with Seidl from Germany, Vidal believed that personalization could also have had a bad counterpart if it went too far. From a business point of view, he argued that the content selection made by editors was also an added value for audiences:

If we allow a user to erase all that hierarchy that our team of writers, editors and directors have decided, why read *El Español* and not enter a content feed? That is why I believe that the final product has to be controlled by the editorial staff and have an editorial criterion, even if we allow that flexibility to exist.

(Vidal, *El Español*, Spain)

The interviewee from *Ringier* saw the innovation as being positive overall but also noted a point worthy of criticism. In part, there may have been a fear that people who were only shown personalized content would not see a variety of opinions or topics in their time lines, and thus one part of the social discourse would be missing.

In the *Financial Times*, as Sarney said, there were more positive aspects, such as content personalization was seen as a good way to improve its reach and thus “push the information out so that people are getting reliable, trustworthy information.”

Conclusion

Journalism needs to become increasingly adapted to reach the audience. Whereas a few years ago, it was assumed that the medium was the transmitter – i.e., the exclusive provider of information – today, there are strong feedback mechanisms and interactions between news organizations and users. To play out optimal content for their own users, editorial organizations collect user data, which helps journalists understand what the audience does and how they behave to offer a better user experience. In conclusion, this means that the editorial houses should use synergies between themselves and the users and recognize the new possibilities in terms of content.

This chapter compared the use of data to promote engagement in five international cases with great differences between them. While the British and the German cases allude to the implementation of various strategies to promote data-informed decisions in a legacy company and a national editorial house, respectively, the other examples point to concrete initiatives. The Spanish case refers to a personalized section implemented within a digital

news outlet; the Austrian case is a gamification program adopted by a regional newspaper; the Swiss case is an innovative platform created by a legacy media conglomerate.

Nevertheless, despite these contrasts, common patterns can be identified between the aims of the publishers and editors in each case when implementing a combined user data analysis and content adaptation system. The main aims of this innovation are to attract and retain users' attention in an ecosystem that features fragmentation and overexposure to various media stimuli. To do so, it is crucial to increase brand recognition and position the organization as a source of relevant, interesting, and timesaving content – i.e., content that provides news to the point. In this process, the crucial step, which is common to all the case studies, is to collect data to reach better knowledge about what users demand. Then, data is analyzed differently in each country to offer a more personalized news consumption experience, ranging from wholly automatized to more hands-on processes.

In terms of the factors that affect their success, some similarities could be found related to the conditions that support the innovations, while the obstructive factors are usually more case-specific. For the former, the availability of teams and professional profiles with highly developed technical expertise was crucial, especially in Austria and Switzerland. The commitment of editors and publishers and the support from a widespread innovative organizational culture were key in the United Kingdom, Spain, Austria, and Germany. The obstructive conditions were mostly related to an overabundance or a shortage of resources, such as time and funding. While in Austria funds from *Google* discouraged the quick launch of test products, in Spain, the high workload hindered the development of the initiative. Legal concerns also arose, especially in Switzerland, where data gathering is not well viewed and thus limited by law.

Finally, from a societal point of view, these sorts of initiatives remain ambivalent. Editors have difficulty identifying the societal benefits of increasing engagement beyond the awareness that news consumption also grows. This redounds in a more informed citizenship. But, on the other hand, they are also conscious that selective exposure to an individualized type of content can create echo chambers (Nguyen 2020) and that the collection and evaluation of data can overly influence the way media does its journalism, conceding too much importance at the expense of quality. This leads to a more general conclusion on innovation that, despite all the benefits these opportunities bring, media houses need to be sensitive to the newfound technology and evaluate carefully to what extent and in what specific forms it may help to pursue their business and social goals.

Note

- 1 The Swiss interviewee was guaranteed anonymity.

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