

RESEARCH-IN-BRIEF

## Changing the focus in multimedia story production: Experiences from high budget and low budget production settings

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### Abstract

Complex multimedia stories have initially emerged as prestige projects from high budget newsrooms such as *The New York Times* or the *Washington Post*; over time, both the practical experiences with the format as well as the developed technological affordances made it possible for smaller, more inexperienced newsrooms to produce complex multimedia stories, too. Within two different studies, we analyzed the production processes in both high budget and low budget settings. In this paper, we contrast the findings of both studies with the goal of abstracting indicators of change and implications for future productions. Based on the abstraction, we suggest changing the focus in multimedia storytelling productions from a product-oriented process toward a more process-oriented production; from a focus on hard production factors such as numbers and personnel to more soft factors such as distributed responsibilities and internal workflows; and from a focus of rather incidental communication toward a more managed communication within the production team. We conclude by deriving further implications for future research as well as journalistic practice and education.

### Keywords

multimedia journalism, multimedia story, digital journalism, production, budget, longform

### 1 Journalistic storytelling in the digital sphere

When journalism expanded from the analogue to the digital sphere, it stepped into a so far unknown territory which had yet to be discovered by both journalists and its readers, since “the news media ecology is being reconstituted by mobile technology, social media, and other digital platforms” (Robinson, Lewis, & Carlson, 2019, p. 369). Media outlets had to adapt to new technologies, develop a new speed and get to know the new modes of reception. Still today, newspapers are debating whether to go online only and are at risk of losing readership and developing a “post-print obscurity” (Thurman & Fletcher, 2018).

In print journalism, decades of history and experience have resulted in an elaborate and compartmentalized profession, in which different display formats for different interests, readers and

topics have established. A “more defined set of procedures and norms to produce content” was present (Waisbord, 2019, p. 355): If a journalist published a feature in a newspaper, both the journalist and the reader knew what to expect, for example, when contrasted with a news report or an opinion piece. In the “immersive, interconnected, individualized, iterative and instantaneous” digital journalism (Singer, 2018, p. 215), however, these processes needed and still need to be adjusted – both on the producing and on the receiving end of digital journalism. Hence, digital journalism “lacks similarly well-defined and agreed-upon principles” (Waisbord, 2019, p. 355).

Hence, when entering the then new world of online journalism, the media outlets first took their well-established practices from the offline world and applied them to the online sphere – the so-called media inertia principle, according



to which new media resort to forms, contents, and routines of the already known and established traditional media (Bucher & Schumacher, 2008, p. 477; Wolf, 2014, p. 61). In order to slowly and carefully explore the new platforms and eventually mastering a new technology, it was safest to do so with the already known practices. Websites have been published that resembled a newspaper's print version, with partly even the same articles and photos.

Over time, however, several main differences to the offline world became apparent and advanced toward big chances for innovation for the media outlets; “unprecedented developments have broadened the essential elements of journalism – the who, what, where, when, why, and how news are reported” (Waisbord, 2019, p. 351). This paper mainly focuses on the *how*, and thereby especially on one of the main differences to the offline world, which lies in the multitude of media elements that can be implemented into a digital story. Multimedia journalism (Menke, 2019, p. 1) emerged as “a variety of phenomena that are related to the three dimensions of production, presentation, and consumption of news and longform stories that include multiple media platforms and / or media formats.” Concerning the presentation, the *how* of digital journalism, articles cannot only be equipped with photos anymore, but also with videos, interactive graphics, photo slide shows, audio commentaries, and many more interactive and innovative features. Consequently, scholars established a minimum definition for multimedia stories as stories with at least three different media elements (Matzen, 2011), since this is only possible in digital – and not possible in analogue – journalism. Media outlets began experimenting with these multimedia stories, and soon started to make use of the potentials of the Internet, instead of replicating the offline world.

Publishing extensive, complex multimedia stories on the Internet which combine “text, photographs, looping videos, dynamic maps and data visualizations into a unified whole” (Hiippala, 2017, p. 420) became a possibility for news out-

lets to showcase their technological capabilities to stand out against their competitors on the market, with multimedia stories as “signature product” (Dowling & Vogan, 2015, p. 210). It was a sign of having invested a high number of resources, a possibility for both practitioners and readers to talk about a story. Hence, it was also a possibility to raise awareness for specific topics: They “represent an outstanding value for their users who can be immersed and engaged in a way that can create sustainable knowledge and stimulate public discourse” (Planer, Godulla, & Wolf, 2020, p. 101). With different chapters and numerous possibilities for the users to explore the content individually, these stories often times circled around topics such as climate and the environment, politics, war, or history. One story that is representative for this time period is the often-cited *New York Times*' Snow Fall-story from 2012 (Branch, 2012), which resulted in news outlets trying to “snow fall” their stories, too, hence equipping them with several chapters, looping videos, interviews, interactive graphics, parallax scrolling, and more (Dowling & Vogan, 2015).

Nowadays, ten years later, such extensive stories are still being produced frequently, but the formats have changed and diversified with media outlets adjusting to the readers' preferences while trying to generate profit and remain competitive on the market. While the topic yields multiple areas worth investigating, we stick to the *how* and focus on the production processes of said multimedia stories within this paper.

When newsrooms began publishing complex multimedia stories, several new competencies had to be bundled, new resources had to be unleashed, and overall new production processes had to be worked out. In order to shed light on these processes, we first conducted ten interviews with producers of award-winning German and American multimedia stories, generating insights into the production phases, the resources as well as potential problems of production (Planer & Godulla, 2021). While these insights help understanding the dynamics and flows of

such productions in big newsrooms with high budgets, the applicability of these findings to smaller newsrooms is not given. Nowadays, however, not only the high budget newsrooms publish complex multimedia stories anymore: A change in the field has occurred, with easily operable software and cheaper tools entering the market, thus democratizing the production of complex multimedia stories for smaller newsrooms, too. In consequence, complex multimedia stories moved away from their first impression of being a prestigious format that only bigger newsrooms could operate, toward a format suitable for wider use. This change, however, needs to be investigated further, since it is supposed that production processes in smaller versus bigger newsrooms differ anyway, and they might come across both similar and different problems.

Hence, in a second step, we explored the possibility of producing and publishing multimedia stories in low-budget newsrooms (Planer, Wolf, & Godulla, 2020). Therefore, seven teams of early-career journalists with a low amount of work experience, little to no resources, and standardized free software programs have produced multimedia stories in a simulated small newsroom. Afterwards, they have been interviewed about these production processes, again referring to phases, resources and potential problems.

Both studies give insights into the two different production settings, but they have not yet been brought together and compared in depth, which is the aim of this paper: Comparing the production processes closely makes it possible to identify strengths and weaknesses, as well as gaps and potentials for multimedia storytelling production in newsrooms of various sizes. Assuming an intersection of the best of both worlds, conclusions are drawn for digital journalism and future production of multimedia stories. While the production of multimedia stories is a constantly changing field in which new technologies are applied and tested as soon as they come up, both the changes that took place when comparing the different settings, as

well as the changes that might lie ahead are addressed.

## 2 Analyzing multimedia story production in different settings

When investigating the production of multimedia stories, we focused especially on digital longforms (Dowling, 2019; Hiippala, 2017; Godulla & Wolf, 2017; Jacobson, Marino, & Gutsche, 2018; Planer & Godulla, 2021; Tulloch & Ramon, 2017), which are “understood as complex journalistic projects rich in text and multimedia elements [...] and are seen as a counter-development to the current trend of quick, bite-size news” (Planer & Godulla, 2021, p. 566).

For the analysis of award-winning stories, the sample was generated through digital storytelling awards in order to ensure the success and high quality of a multimedia story. Here, we contacted German and US-American producers of nominated or awarded stories that fulfilled the criteria of a digital longform, hence, containing at least three different multimedia elements and telling one complete, non-fiction story displayed on one website. The final sample consisted of each five German and American producers of award-winning stories; for the German market, journalists from the *Berliner Morgenpost*, *Hessischer Rundfunk*, *Frankfurter Allgemeine Zeitung*, *Deutschlandradio Kultur*, and *Spiegel Online* were interviewed; from the US-American market, each two journalists from the *New York Times* and the *Washington Post*, and one journalist from *CNN* were interviewed (Planer & Godulla, 2021, p. 574). The interviewees fulfilled different roles at their respective institutions, in which they either managed the story production or had a leading role in it.

For the low-budget setting, 41 early-career journalists worked together in seven teams. The teams each simulated a production unit, and each produced a multimedia story within a given time frame and without special financial or software-related resources (Planer, Wolf et al., 2020, p. 6). Thereby, they followed the team-based learning approach which

is well-suited for acquiring multimedia skills and experiences (Pain, Chen, & Campbell, 2016, p. 403). Given their low degree of professional experience, they were instructed in the task, the format of a multimedia story and the different media elements, but organized and realized their project by themselves in order to guarantee as much freedom as possible. After having produced their stories, one member of each production team has been interviewed concerning the process of the production. Additionally, all 41 early-career journalists have answered a questionnaire (Planer, Wolf et al., 2020, p. 7).

For both settings, the same interview guide was used; it was divided into three parts, focusing on (1) the phases of production, (2) the producers’ strategic and narrative objectives as well as on (3) the potential problems of production (Planer & Godulla, 2021, p. 573).

### 3 Comparing high-budget and low-budget story production settings

In Table 1, the responses of the interviewees to each of the three parts are summarized and opposed for both settings. Based on the perceptions of the interviewees, the information is not to be understood as general rules, and rather as qualitative insights into production processes:

Taking a look at the phases story productions run through, they can broadly be clustered into idea pitch, conceptualization, field work, and editing in both settings (Planer & Godulla, 2021, p. 574). In the expert setting (high budget), however, the idea pitch originated from one of the team members who did some research on the idea in advance and then suggested the project to the team. In the early-career journalist setting (low budget), the students tried to find a topic together in their team. This step took a lot of time and was

Table 1: Comparison of high-budget with low-budget story production setting

	High budget, experienced journalists	Low budget, early career journalists
<b>Phases</b>		
Name	1. Idea: pitch by one team member 2. Conceptualization 3. Field work 4. Implementation and editing	1. Idea: shared brainstorming 2. Conceptualization 3. Field work 4. Implementation and editing
Process	– Linear production process with parallel tasks	– Either linear OR parallel production
Approach	– Either explorative, innovative OR via well-known paths	– Completely explorative approach
<b>Resources</b>		
Personnel	– Collaboration according to skills – Crosschecking and multiskilling – Flat hierarchies; 4–20 people	– Collaboration according to skills OR preferences – No multiskilling – Hierarchies present; 5–6 people
Time	– Partly lacking	Highly lacking
Budget	– Partly lacking	Not lacking
<b>Problems</b>		
	1. Working conditions: big team sizes, high communication effort 2. Difficult technology and lacking budget 3. Lacking appreciation in newsroom	1. High communication effort 2. Lacking experience
<b>Success factors</b>		
	– Openness – Multimedia mindset – Adaptability, flexibility	– Strong group dynamic – Multimedia mindset – Accountability, flexibility
<b>Implications of studies</b>		
	1. No best practices yet 2. High importance of multimedia mindset for overall production 3. Smaller teams for easier communication, guidelines for communication needed	1. Routines, rules, and guidelines needed 2. Hierarchies for overview and interpersonal difficulties needed 3. Smaller teams for more efficiency and better communication needed

overall evaluated as hindrance (Planer, Wolf et al., 2020, p. 9). Furthermore, the experienced journalists reflected their story production as a rather linear process that implied some parallel working phases, too, while the young journalists either tried to “check one phase after another off the list” (Planer, Wolf et al., 2020, p. 9), or did all the tasks in parallel. This somewhat explorative nature of production was also applied on a broader scheme, since the young students were lacking routine and work experience. The same was true for some of the experts who did such a story for the first time and regarded it as explorative in nature. Some of them, however, also approached the newness of the format by trying to apply the well-known and established routines to it without exploring new options, software, or technologies first, which ties back to the mentioned inertia principle of journalism (Bucher & Schumacher, 2008; Wolf, 2014).

The experts usually distributed their tasks according to their skills and stayed in their skill-based lanes (Planer & Godulla, 2021, p. 575), but mixed it with cross-checking and multiskilling and generally worked in rather flat hierarchies. Some of the young students also scattered the tasks according to skills, while some spread them according to individual preferences (Planer, Wolf et al., 2020, p. 11). Especially when working according to what they are already proficient in, they said “it was not a question of learning new skills, rather a question of efficiency” (Planer, Wolf et al., 2020, p. 11), while the experts mentioned the acquisition of new skills as one main driver for future productions (Planer & Godulla, 2021, p. 579). The early-career journalists did not apply multiskilling but strictly stuck to their tasks; some reflected afterwards that due to imbalanced workloads, they had wished for stronger hierarchies or for one person overseeing everything (Planer, Wolf et al., 2020, p. 12).

Interestingly enough, the young students in the low-budget setting said they were not lacking financial resources (since the seminar setting provided them with the essentials for production), but timely

resources, while the experts partly lacked both budgetary and timely resources. This lack of financial resources in the expert group shows that the fact that a newsroom is large and has a big reputation does not necessarily implicate guaranteed finances for big projects; the finances were also one of the mentioned problems, next to working conditions, getting used to new technologies, and lacking appreciation within the newsroom. For the young students, the working conditions in terms of the high communication effort were the biggest problem.

#### 4 Changing the focus

Having contrasted the results of both studies (Planer & Godulla 2021; Planer, Godulla et al. 2020) and outlined the major differences, a handful of striking aspects stand out which will be abstracted in the following. They refer to productions’ focus points, intangible aspects of production, as well as the communication processes guiding the productions.

##### 4.1 From goal-oriented toward process-oriented productions

First, both studied groups (experts and journalists-to-be) stated that there were no best practices yet from which they could have learned, hence, they had to explore the nature of the story productions themselves. By doing that, the experts seemed to have followed a more efficient and promising approach, which can be explained by their higher degree of experience in the work context. They were given a new challenge, but with the help of their prior practical knowledge and experience in journalistic productions, they were confident in building up their own best practices, while the young journalists rather fought their ways through it. Consequently, it is important to increase work experience in story production, include it into journalism school curricula and foster the necessary multimedia mindset, hence, the mindset to decide which content might be suited best with which media element. Since the studies have been

conducted two, respectively one year(s) ago, one can assume that more routines have been established by now and story productions are a certain part of working in a newsroom nowadays. That said, the importance of teaching *multimedia mindsets* increases even more.

Second, both studied groups worked according to their skills, while the students partly also opened up the opportunity to work according to individual preferences. The fact that the early career journalists said they did not acquire new skills but mostly focused on getting the story done as fast as possible stands in contrast to the experts stating they did acquire new skills, even though they also worked according to their already established skills. The difference might lie in the multiskilling and cross-checking as applied by the experts, which opens up the possibility to glance into other areas of journalistic work and gain some experiences there, too. Hence, the early career journalists rather applied single-skilling and were focused on the outcome and how they could best contribute to it with their skills, while the experts also applied multiskilling, focusing on the *value of the process*, too. Nowadays, multiskilling is clearly a part of a journalist's everyday work life. For journalism schools, this implies the necessity and chance to have students focus on the value of the production process itself – rather than on the outcome only. This also applies to the distribution of tasks or internal coordination which might, at first sight, only be seen as a means to an end, but is actually crucial to the overall learning and growth process and in the end also suits the outcome of the project. Hence, multimedia story productions would benefit from the cultivation of a personal *process-oriented mindset* which – from the start – asks what the production team players can and want to learn while producing the story.

#### 4.2 From hard factors to soft factors

Third, and adding to the point just raised, different approaches to hierarchies existed, with a trend of rather flat hierarchies in both scenarios. What stands out is the need to communicate responsibilities and

roles, despite how hierarchical the structure of the production team is made up. The young journalists worked democratically but would have wished for stronger hierarchies or an objective observer distributing the tasks and assuring equality. Consequently, the most important aspect here seems to be the given fairness and the clear communication of responsibilities. The fact that the young students would have wished for stricter hierarchies might also be reasoned in their lower degree of experience, hence they would have liked to have more security and validation. In the same way, they were lacking time in their productions, which the experts – in spite of their doubtless busy work life – did not state; here, too, more experiences but also more efficiency in the work processes would be helpful. In order to raise efficiency but still being able to focus on the process and the outcome (and not only on how to reach the outcome as fast as possible), clearer rules and guidelines concerning for example the due dates and again responsibilities seem promising. On a broader level, different ways to collaborate could be taken into consideration as well, such as in dedicated ad-hoc teams, agile project teams, or expert teams for specific topics or technologies. In the end, however, the time pressure is also a good preparation for the work life of a journalist, which the experts may be more used to already and hence perceived it differently.

Fourth, the young journalists in the simulated newsroom did not complain about lacking financial resources, while the experts did. This can be explained by the fact that the time experts as part of the newsroom staff invest in their work is capital to the newsroom, which was not so much the case in the simulated newsroom. Hence, the multimedia story needs to become a capital, too. Complex multimedia stories as signature products of a newsroom might become part of the answers to that question. The fact that no special financial resources – despite the journalists, their skills and the basic technologies and software – are needed shows that in theory, multimedia story productions can be done in newsrooms of any size. Thus, again, a

greater focus on the question of *how* to approach such a production could reduce costs for the newsroom.

#### 4.3 From incidental communication to managed communication

Fifth, both studied groups mentioned the high communication efforts as the biggest hindrance and obstacle throughout the whole production process, which is remarkable. When asked how much time the young journalists spent on each phase and how much time this would equal in an ideal setting, they spent the second most time on communication, which they would have spent the least time on in an ideal setting. The experts reported similar experiences, with frustrating email exchanges and longer production periods just because the communication process was so lengthy and difficult. In projects like these, communication needs to happen anyway, so this is not a step that can be eradicated. Quite the contrary: When mastering the communication process, many of the other challenges could be positively impacted, too. From the start, communication in such production projects in which several different people are involved needs to be managed; regulations concerning communication channels, times of meetings, group accountability, mutual expectations, who to report to, et cetera have to be agreed upon. This complies with the group dynamics, adaptability and flexibility mentioned by both groups. While being a required and desired modus, this also bears its challenges in the form of potential chaos and thus has to be balanced with fixed parameters. It would furthermore lay the ground for a focus on the *how*, next to the focus on the final *what*. As it is so often the case, *how* a project is started has an impact on how it proceeds and how it ends. Hence, changing the focus from the outcome to the starting phase and the process itself first will help these productions to become more efficient, helps distribute responsibilities, fostering a multimedia and also a process-oriented mindset.

#### 5 Conclusion and looking ahead: What (changes) next?

Looking ahead, different questions arise from these findings and potential changes. By now, multimedia stories have been established as a journalistic display format in digital journalism. Even though there might not be a newsroom-overarching definition of what a multimedia story contains, how it should be built up or which topics are best covered by it, many newsrooms are finding their very own ways of approaching and implementing this format in line with their editorial lines and branding ambitions (Dowling & Vogan, 2015, p. 210). The results showed different areas of conflict, such as flexibility versus rules or the need for improved communication. Thereby, the findings add insights into the complex productions in digital journalism, which certainly lie in the interstices between reducing complexity and uncertainty on the one hand, and specialization and economization on the other hand (Wilczek, 2019, p. 88).

Therefore, it would be interesting for journalism research to a) see how the production processes have changed compared to two years ago when they were at an early stage and when there were no best practices yet, and b) how the producing newsrooms have professionalized the productions in the meantime, focusing on the organizational level. Some newsrooms might have established own multimedia production departments, while others might work in a more agile manner or even outsource some of the technological parts of story production.

The identified aspects of change – the focus on the process, on soft factors of task distribution, and managing internal communication – can be subject to further analysis. Specifically, the communication processes within these story productions could be investigated further with the goal of identifying the gaps for optimization. In the same vein, the multimedia mindset and the process-oriented mindset could be analyzed in recent production teams. Furthermore, journalism research could address the question of which stories are

successful today and how this has changed over time.

For early-career journalists, the relevance of multimedia stories and the respective mindset, as well as the importance of all the points raised should be included into the education. Multimedia stories have developed from singular, outstanding, extensive projects toward an easier doable, commonly used and even necessary format of digital journalism. This development needs to be understood by both scholars and practitioners, with the latter being well advised to focus not only on the outcome, but also on the nature of the production process itself.

### Conflict of Interest

The authors declare no conflicts of interest.

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