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RESEARCH ARTICLE



You Said Digital First! A Five-Dimensional Definition According to Journalists from Three Swiss Newspapers

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ABSTRACT

The term *digital first* is frequently used by newspapers to describe how they go about making digital and print news. Yet the literature does not define the term precisely and has not described implications in terms of making news. Furthermore, we know almost nothing about how journalists themselves understand this jargon and how they view what it entails in terms of the (changes to) underlying practices. This research analyzed the production systems of three different types of French-language Swiss newspapers that label their production systems *digital first*: a local paper, a legacy paper and a metro-style paper. It interviewed 17 of their newswriters, 15 of which described the way their newspaper makes news as *digital first* without being prompted. The full range of properties attributed to *digital first* emerging from the data reflected five dimensions: temporality, content format, workflow, production mindset and business strategy. These five dimensions were conceptualized by building a *digital first* matrix, thereby contributing to definitional clarity, while also serving as a useful tool to analyze newspaper production. In practice, production and editing resources seem to determine a newspaper's success in fully implementing more ambitious visions of *digital first*. *Digital first*, we argue, constitutes an emerging newsmaking paradigm.

KEYWORDS

Digital first; web-first; workflow; newsroom; print; affordances; newspaper; definition

Introduction

- You used the term **digital first** when I asked you to describe how the web and print editions of your newspaper related to one another. How would you define it?
- Well to me it means um, it means journalists who, who – who – who ... [pauses] What **does digital first** mean?

Anyone having spent any amount of time recently in the newsrooms of newspapers will almost certainly have come across the term. Like elsewhere, over the past decade, many Swiss newsrooms have made changes to their newspaper's strategies and/or production processes described as *digital first*.¹ Yet the exact meaning of this term is difficult to pin down, including in the literature.

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Someone unfamiliar with *digital first* might guess (not incorrectly) that it implies that a story appears online before it becomes available in print form. But look closer, and there is more to it. In these newsrooms, a significant number of stories are in fact withheld online, nevertheless appearing in print form first. As we shall demonstrate, temporality does not tell the whole story ... There is indeed much more to *digital first*.

Taking a step back, it appears that the jargon *digital first* also translates much of what is at stake for the future of newspapers, because *digital* and *first* define a relationship between two distribution platforms. Indeed, despite undisputed shrinking readerships and waning dominance of the information landscape, newspapers are widely viewed as key actors in ensuring the vitality of liberal democracies. And much of the debate about newspapers' long-term ability to fulfill this function revolves around digitization. It is interesting to note that while *digital first* does establish a hierarchy, it does not do away with print completely. Indeed, research suggests that hopes of salvation of digital distribution may have been overstated (Thurman et al. 2019; Thurman and Fletcher 2018), while attachment to the printed newspaper has possibly been underestimated (Boczkowski, Mitchelstein, and Suenzo 2020). The death of print, should it occur at all, may be much further away than once believed. In the meantime, newsrooms seem stuck with publishing their stories both in printed and digital forms. How best to do this? For now, the solution for many lies in two words: *digital first*. As we set out on this study, our time spent in newsrooms and in the company of practitioners suggested the term meant something slightly different from one person to the next. Others found it difficult to come up with any kind of definition or felt it was little more than a buzzword glossing over previously identified phenomena (such as increased time pressure within newsrooms, already stretched thin after almost two decades of financial woes and redundancies).

Being aware of a certain polysemy has implications for academia and the industry alike: when trying to describe a given reality or gain insights into a phenomenon, researchers and practitioners alike may make false assumptions because what is meant by *digital first* and what is understood differs. But, from the perspective of journalism studies, definitional work may also fit within broader discursive investigations that shed light on what changing practices truly entail. Discussing definitions in the context of such discursive investigations, Powers (2012, 37–38) argues that:

the introduction of new work forms and their struggles for legitimacy provides fertile grounds upon which to examine some of the central dynamics regarding contemporary journalistic practice and technological change. For scholars, a key task will be to make sense of these discussions, to locate the tensions within them, and give them a more detailed theoretical form.

We believe that focusing a little more closely on this terminology is helpful in view of avoiding misunderstandings, but also gaining further insights into the profound changes to newspaper production practices, including from the perspective of journalists.

From these broad interrogations, the following questions emerged:

- What is the full range of properties pertaining to *digital first* in terms of production processes, discourses and practices? (RQ1)
- Which properties appear most commonly in descriptions and definitions of *digital first*? (RQ2)
- Taken together, do these shared properties constitute a newsmaking paradigm? (RQ3)

To answer these questions, we studied the self-described *digital first* production systems of three different types of daily newspapers in French-speaking Switzerland: a small local newspaper (*La Côte*); a legacy/quality national (*Le Temps*); and a free advertising-based national tabloid (*20 Minutes*). We interviewed a total of 17 newswriters from these newspapers, seeking diversity in newsroom functions.

In the following review we examine uses of *digital first* in the literature. We then briefly introduce the three newspapers and explain our sampling, before presenting the two sets of empirical data used in this study: the production system analysis and newswriters discourse about *digital first*. In the final section, we discuss what these empirical findings may mean once assembled and propose a *digital first matrix*: a tool for describing, conceptualizing and comparing newspapers. We also define an ideal-type of a *digital first* newspaper.

Literature Review: Between Temporality, Strategy and Workflow

There have been traces of *web-first* and *digital first* in research and non-academic texts for almost two decades. Early mentions described print newspapers having developed any kind of specific publication strategy for the web, as well as those working towards a gradual scaling down of their print activities. Usher (2016, 1899) even labels *web-first* two newspapers having abandoned print production entirely. More recently, Cohen (2019, 572) has equated *digital first* to “born-digital companies” such as “*The Huffington Post*, *BuzzFeed*, and *VICE*”.

These cases aside, most occurrences in the literature refer to newspapers that publish news both on paper and digitally, with the inclusion of the word “first” implying that something must come second. According to Buttry (2011):

[D]igital first still involves the printing of newspapers. What is different, however, is where the resources, drive and priorities are focused – online.

In our opinion, Buttry’s description, formulated almost a decade ago in a blog post largely dedicated to *digital first*, has stood the test of time.

In the scientific literature however, definitional fuzziness abounds. Dwyer (2015, 31) tellingly describes it “more as a rhetorical departure point in the debates around the transition to digital platforms, than as a consensually embraced strategy”. Hendrickx (2020, 600) refers to a meaning stemming from “convention but not strict definition”, while Hendrickx and Picone’s (2020) 18-month study of a Flemish newsroom refers to *digital first* as a “buzzword”.

In the literature explicitly mentioning *digital first* there are nevertheless recurring definitional elements, which consistently relate to one or several of the following: temporality, workflow and strategy.² These dimensions interlink, while they also seem to have evolved and reconfigured over time.

Temporality

Temporality was a central feature of digital news early on and has remained so. The first era of online news saw much of newspapers’ print content simply republished online thanks to automated tools referred to as *shovelware* (Deuze 1999). However, during the

first years of the new millenium print and online news began to be differentiated (Boczkowski 2004). Dedicated web-desks, largely separate from print newswriters, began offering breaking news—often generic newswire reports—with an emphasis on immediacy (Karlsson 2011; Usher 2016). Latest news could thus be read on the web, first. And free of charge.

English (2012, 133) provides a simple definition of *web-first*, which involves “publishing content online before it is printed in the newspaper”. Schlesinger and Doyle (2015) argue that *digital first* dismantles the classic print deadline, while Pilmis (2017) describes one newspaper’s switch to *digital first* in terms of the reorganization of the newsroom according to the creation of three distinct desks, with specific temporalities assigned to each.

Workflow

When defining *digital first*, workflow is often cited but seldom described. More often it sits discreetly (and implicitly) between temporality and strategy. Under closely related terms *online first* and *digital to print* García-Avilés et al. (2017, 454) link temporality to strategy via the question of workflow. They describe newswork at *Die Welt*, which consists of stories being written according to digital publication standards, before being repurposed for print:

In December 2013, around 120 journalists moved into a large central newsroom geared to digital production. The motto ‘online first’ gave way to the ‘digital to print’ strategy: The journalists work for digital publishing first, and then produce daily papers out of what they had initially produced for digital channels.

English (2015, 84) ties *digital-first* to *convergence*: a term used to describe the organizational implications of media companies becoming multiplatform. However, convergence studies (e.g., Menke et al. 2018) largely focus on technical issues such as the implementation of tools within the production and publication systems and their underlying processes and technologies. Convergent workflows have indeed rarely been explicitly described as *digital first*.

Workflow—as related to *digital first*—is mentioned more frequently in industry reports and the grey literature than in academic research. This might be because of limited dedicated ethnographic research. As such, there seems to be a missing link. According to Dwyer (2015, 37), workflow is a means by which to implement a *digital first* strategy:

A ‘digital first’ policy involves particular workflow choices, but ultimately competitive survival is the main game: their fully digital business model traffic-based advertisers underpin the revenue stream.

Strategy

The strategic component of *digital first* has gained importance over time. Hyland’s study of digital strategies describes a web editor of *irishtimes.com* who believes *digital first* to be more than just a question of temporality:

– It’s also about that in every meeting that we have, in every daily conference that we have and in every discussion we have about commissioning an article or piece of content, that the first item on the agenda is the digital output, and the reason for that is because our business

model is changing, journalism is changing, and increasingly we need to recognize that digital is the most important channel.– (2014, 66)

The same year, the now famous *New York Times Innovation Report* (2014) used *digital first* no less than 35 times in 97 pages, placing strategy at its core:

Around the [New York Times] newsroom, this phrase often is used to refer to publishing articles on the web before putting them in print. But outside our walls, digital-first is an all-encompassing strategy. (82)

Thurman et al. describe *digital first* as lessening “reliance on print”, by making “digital reporting [...] the top priority” (2019, 173). Chyi and Tenenboim (2019, 157) describe it as “a mantra, a goal, and a path leading to the future”.

The broader configurations within the news industry in the mid-2010s doubtless contributed to a shift towards definitions of *digital first* more centered on strategy and business models. To put things (over)simplly: newspapers shifted from recruiting print subscribers online, to making digital a key source of revenue. Robotham (2021a) has tied this to the spread of mobile devices and the adoption of paywalls, resulting in a reconfiguration of temporalities and related *digital first* workflows. Indeed, paywalls freed newspapers from the difficult question of whether or not to hold back the best, most exclusive and original stories for loyal print subscribers.

Reviewing the available literature, Hendrickx and Picone (2020, 2027) describe a *digital first* strategy “that can be summarized as ‘Newsroom 3.0’-”, which prioritizes online content and uses “editorial analytics and algorithmic systems to optimize stories and capture reader attention”. Neto et al. (2019, 2408) list *online first* as one of several defining features of their *Newsroom 3.0*, itself “a conceptual framework to handle contemporary and future needs of newsrooms”. However, although *digital first* or similar terms are frequently mentioned in relation to successive “newsroom” models (see also Ishikawa, Neto, and Ghinea 2022), they are almost never defined precisely. Such models may help highlight or even anticipate systemic industry-wide technological shifts, but they seldom dive into the realities of daily newswork, paying little attention to the discourses and practices of newswriters. This, of course, is something the present article seeks to redress.

Manifestations of digital first in Terms of Other Practices

One could expect to find descriptions of what *digital first* might look like in terms of concrete practices in accounts similar to those about early online news practices such as Boczkowski’s seminal ethnographies (2004, 2010), which revealed important transformations in terms of journalistic logics and practices as well as their specific temporalities. But here again, the literature remains mostly silent. Few studies have specifically focused on how journalistic practices have evolved to adapt to print/web production, especially those labeled *digital first*. Among the few who have, Vermeulen (2020) has described how content is selected and produced, and articulated between three *digital first* South-African newspapers and their shared digital platform. Robotham (2021b) analyzed work at self-described *digital first* newspaper *Le Temps* in 2018, concluding that workflow and publishing temporalities remained strongly subjugated to the blank pages of the print newspaper.

Method

Sampling and Relevance

Our research sought to study French-language Swiss daily newspapers (self)described as *digital first*. Our selection of newspapers aimed for a wide range of web and print-related production phenomena (in terms of temporality and editorial line) as well as business model, ensuring maximum significance. We included one small local/regional paper (*La Côte*), one legacy paper (*Le Temps*) and one free tabloid/metro style paper with an emphasis on immediacy and breaking news (*20 Minutes*). For each one, we interviewed two reporters (one junior and one senior)³, one web editor, one print editor and one or two members of editorial management (two when there was a top-level member of editorial management specifically assigned to digital). The choice of a wide range of newsroom functions (hierarchically and in terms of position along the production system) aimed to collect data on the widest range of *digital first*-related production systems, practices and discourses⁴, before identifying patterns and commonalities. It also sought to shed light on possible tensions between the strategic positioning of management and the practices of newswriters (including counter-discourses and tactics of resistance). Sample size meant that newspaper types and newsroom functions could not be treated as possible significant variables.

Switzerland makes for a good laboratory for the study of newsroom digitization. Its media ecosystem is notably characterized by a high number of newspaper titles compared to its population, but also a high level of concentration. Many of the trends identified within other western newspaper markets apply to Switzerland. In particular, the fall of print revenue has, like elsewhere, resulted in shrinking workforces in the newsroom (often tightly linked with increasing concentration), while at the same time resulting in strategies seeking to decrease the reliance on print by placing digital activities at the center of business models (Newman et al. 2021). The resulting paradox is the self-identified need to provide better digital content, without having the resources to do so; a situation common to numerous newspaper markets.

In western Switzerland, two publishers—TX Group and ESH Médias (which own *20 Minutes* and *La Côte* respectively; *Le Temps* is owned by a private non-profit foundation)—each publish three titles of the 10 regional or national daily newspapers, catering to a combined population of 2.1 million for the French speaking area. Although digitization and the development of online news occurred at various speeds, the French-language Swiss press counts several pioneers of online news, including *Le Temps*, which offered an online newspaper and introduced a paywall earlier than most papers, whether in Switzerland or elsewhere, in 1998 and 2011 respectively (Willemin 2018). Even by international standards, *20 Minutes* and *Le Temps* were early adopters of self-described *digital first* production, with the transition occurring progressively from 2013 for the former, and more radically in October 2015 for the latter.⁵ *La Côte* joined them in 2018, making the change overnight.

These newspapers share numerous properties. They all print a daily paper on weekdays (*Le Temps* also has a Saturday issue), while also publishing their stories on their websites and mobile applications. News is produced in their integrated newsrooms where journalists create stories indistinctly for print or web, with small dedicated editing teams

assigned to analog and digital respectively. Print editors are tasked with composing the pages and ensuring the overall balance and coherence of the printed newspaper and web editors with preparing and placing content online, defining hierarchies (homepages and thematic sections) as well as promoting stories on other digital platforms such as social networks, further production-related details are provided in the following two sections.

What distinguishes these papers is their target readership and editorial line. The table below provides a comparison of the three newspapers, including newsroom size and story-output.

	20 Minutes	La Côte	Le Temps
URL	https://www.20min.ch/fr	https://www.lacote.ch/	https://www.letemps.ch/
Editorial line	Tabloid	General	Legacy
Geographical area	National	Local	National
Language	French	French	French
Print circulation (2021) ^a	131,000	10,000	35,000
Print newspaper page count	18* (20**)	10° (10 ^{oo})	20–22
Number of web and print stories per day	65* (70**)	15° (40 ^{oo})	70–80
Number of web-only stories published per day (includes newswire content)	30* (45**)	3° (15 ^{oo})	50–60
Total number of persons working in the newsroom (incl. print and web editing teams)	60	12	90
Web editing team	5	1	5
Print editing team	10	2	6
Multimedia and video team	20	<1	6

^aWe do not provide online metrics since there is no central database and we do not believe the figures provided by the publishers to be comparable or reliable

*Produced by the *20 Minutes* newsroom (in-house)

**Total production: includes sports news produced by a dedicated central sports newsroom shared with the publisher's other titles.

°Produced by the *La Côte* newsroom (in-house)

^{oo}Total production: includes national and international news produced by a central newsroom and shared with the publisher's other regional titles.

Semi-Structured Interviews

Interviews enabled us to create descriptions of the three production systems, as well as obtain definitions of *digital first* from newswriters and investigate if/how they equated specific practices to the term. The interview guide was strongly structured while allowing for the exploration of issues arising from respondents' answers. There was no mention of *digital first* during our contact prior to the interviews. We informed them that we were working on a project about digital journalism. Interviews consisted of three parts and lasted on average one hour. In the first, we wanted to know how things were usually done and whether they would use terms such as *digital first*, prior to being prompted. In the second, we asked them to provide their own definitions of the terms they had used in the first section, including *digital first* and discussed dimensions identified in the literature. In the third part, we questioned respondents about how *digital first* translated into their daily individual practices.

In our inductive data analysis, we sorted definitions and descriptions provided by respondents by types, which eventually converged towards the five dimensions we outline below. We were especially careful to clearly distinguish between answers provided with and without prompting.

Describing *digital first*: A Production System

We describe the following aspects of three newspapers' production systems:⁶

- Story selection and planning
- Production tools
- Web and print publication circuits

Story Selection and Planning

As is the norm at daily newspapers, most stories are proposed, decided and scheduled during daily morning budget meetings. Those to be published online over the following 24 hours are discussed and assigned, with the editor-in-chief and the web production manager sharing authority over scheduling.

At *Le Temps* and *La Côte* there is also a weekly meeting to discuss upcoming colder/feature stories and those on the news agenda. Only at *La Côte* are stories assigned to specific pages of the printed newspaper from the outset, thereby already imposing strict story-lengths. At *Le Temps* and *20 Minutes* the composition of the print newspaper is decided by editorial management and the print editing team during an early afternoon meeting. Avoiding discussions about print during the daily budget meeting is designed to enable the production of a better online newspaper, sealing it off from the structural forces of the printed newspaper (i.e., having empty boxes in pages determine the number of stories, their topics and lengths). Instead, initial story-length is defined approximately according to story-centered criteria (importance, available source material etc.) rather than by the size of a placeholder in a destination print page. For print, lengths are decided subsequently, according to available space. Adjustments and additions to story selection continue throughout the day.

Production Tools

In recent years, journalism studies have shown the importance of including tools in the analysis of newswork (Anderson and De Maeyer 2015) and work at *digital first* newspapers cannot be fully understood without paying close attention to the tools used for creating and publishing content.

At all three newspapers, journalists write directly into the CMS, where they edit their stories according to digital requirements: providing a photograph/illustration, tailoring headlines according to SEO logics, writing context-rich leads, as well as adding hyperlinks, recommended further reading and embedded content. All three use a similar tool (or bridge) for exporting and pre-formatting stories from the CMS to the print layout system, which strips them of their digital specific features. Proofreading usually occurs prior to the export/duplication (i.e., on the finalized digital version). Indeed, from that point onwards parallel versions of the same story exist for web and print, thus requiring each edit to be performed twice. At *20 Minutes*, proofreading mostly occurs once stories are already online (but prior to duplication). Stories then undergo print-specific editing once duplicated and exported. At *Le Temps* and *La Côte*, journalists finish working on their stories once the digital version has been finalized and approved. At *20 Minutes*,

where stories often require being shortened by more than 1000 characters, journalists themselves take care of adapting their stories to the allotted space/position within the page, often rewriting them almost entirely.

Web and Print Publication Circuits

There are also many similarities between these newspapers in terms of the processes and sequences of publishing their content. As noted, most of the editing work for the digital version is performed by the journalists themselves. However, after an overall green light by editorial management web editors take over, integrating additional digital-only elements and ensuring stories are edited according to the best practices for online reading (changing headlines, shortening paragraphs, etc.). Proofreaders correct stories for spelling, syntax and style. Again, there are minor differences between newspapers, including the sequences in which these tasks are performed. At *20 Minutes*, web editing is more pronounced. A particularity at *20 Minutes* is the systematic use of liveblogs to publish snippets of breaking news as well their tendency to update stories, inserting any relevant new information, sometimes several times per day.

Web editors place unscheduled articles online when ready. For easier to plan stories, they try to match the scheduled publishing times agreed during budget meetings. Respecting the scheduled times is often a challenge (Robotham 2021a). In any case, most stories go online at some point between the afternoon of the day they were written and lunchtime the day after. Most are published in the print paper of the day following their completion. However, for all three newspapers, the publication sequence implied by the term *digital first* is not absolute. The story's urgency is used to determine the online publishing time. Breaking news goes online immediately (this applies to a larger proportion of stories at *20 Minutes*, which is specialized in breaking news and prides itself on being first). However, less time sensitive stories are often set aside to be placed online the following day (the same day as it appears in the print issue), usually to compensate for the morning's news deficit.

As stated, at *La Côte* the content of the print newspaper is in large part decided during the morning budget meeting: the stories decided on any given day are those required to fill the print edition's empty pages, meaning lengths are calibrated to print requirements from the outset. However, *Le Temps* and *20 Minutes* the print newspaper consists of a selection of stories among those produced for digital. Once the print teams have selected stories and assigned them to pages, articles must be adjusted to the lengths required by the print layout. At *20 Minutes* the standard print article is only 1500 characters long. If journalists have written a 4500 character story for the web, such is the difference in length that they know will have to rework their story significantly, if not rewrite it entirely. To save time, important stories falling later in the day tend to be written from the outset to match length requirements of the print version. At *Le Temps* the print-editors adjust stories lengths to achieve a perfect fit, consulting with reporters in case of significant modifications. In all three newspapers, print editing work includes removing excessive paragraph breaks and subheadings, rewriting the headline (often shortened due to limited available space) and occasionally adjusting the lead (which does not always require the same level of contextualization); in sum, accounting for the best practices of print that do not align with digital ones.

The above common production system features do not as such define *digital first* news-making. Instead, they should—for now—merely be viewed as likely linked in some way to it. We use the accounts below to identify those features most strongly associated with *digital first*, the practices they entail, as well as critical views about such practices.

Discussing *digital first*: Newsworkers Definitions, Views and Experiences

Prior to being prompted (or the term being used in one of the interview questions), 15 of 17 newsworkers interviewed used the term *digital first* to describe how their newspapers produced their web and print editions. Eleven used it in the first sentence of their answer to *question 1*, which asked them to describe how print and web related to one another. However, not all emphasized the same properties, and some found it difficult to define.

Temporal Properties

When asked to define *digital first*, most interviewees mentioned the temporal dimension of *digital first*. It was frequently the first feature to be mentioned, four viewing it as constitutive. More often, it was cited alongside other dimensions.

Editorial management at *Le Temps* explained that concretely, *digital first* implied that stories would be published in digital form first unless specified otherwise. A reporter explained: “*Digital first* means that a story must appear online very quickly” (20M-J2).⁷ Speed was intrinsic to many news stories, while beating the competition was also important. Another said “It’s a bit cliché, but you have content which should be available as quickly as possible to a large range of people” (LT-J2). A print production manager from *20 Minutes* echoed this point, explaining that their newspaper had an advantage over others when it came to publishing online before in print, because there was no risk of undermining the sale of the print issue. The validity of this point is however arguable, since almost all web and print newspapers in Switzerland (including *Le Temps* and *La Côte*) now place their most valuable content behind paywalls. However, a reporter at *Le Temps* also insisted that the paywall had enabled newspapers to offer stories in digital prior to print.

Several newsworkers referred to the web-to-print publication sequence as a key property, for example:

First, we think of the website and the mobile application, in terms of style, presentation and editing of the story. Then, in a second stage we write for print. What’s important is temporality: when speed is needed, we always think of the web first. (20M-WE)

According to respondents from all three newsrooms, temporality impacted story structure and style. Several believed *digital first* extended beyond publication sequence to require keeping stories alive and updated throughout the day:

A truck tips over and you stay there all evening in the hope that it won’t rain. You work on your phone, you go back to your car to recharge it, and you write everything from there [...] You are almost reporting live: ‘I’m here, the crane has arrived, we hope the road can be cleared soon. Of course, not all of that is worthy of inclusion in the print edition.’– (LC-R1)

This reporter did however admit that this change of logic was often not applied. Too often, they confessed, they only filed their stories shortly before the print deadline.

The need to update stories created incompatibilities with requirements for print. One reporter at *Le Temps* found such differences to be a source of frustration: “You have to think of multiple versions, with a deadline that is always shifting. You don’t know whether to focus on the definitive story, or to keep updating it” (LT-R1). The editor-in-chief of *20 Minutes* explained that developments could be added to online stories “in layers”, usually at the bottom (with any major elements being added to the lead), whereas print stories were required to provide a sense of closure. This required stories to be almost entirely rewritten: almost systematically at *20 Minutes*, less frequently at the others. Newswriters at *La Côte* said they understood the principle, but lacked the headcount to do so.

The importance of the temporal dimension of *digital first*, identified in the literature, was matched in newswriters’ definitions and discourse. However, it was not merely about speed or publishing online prior to print. Consistent with Robotham (2021a), *digital first* meant complex strategic temporal negotiations with a view to catering to digital audiences.

Formats and Story-level Affordances

Many also viewed *digital first* as translating digital formats and affordances, although these tended not to be considered core definitional elements. This dimension was considered self-evident to the three junior reporters: it was how they were taught to write in journalism school. The web editor from *20 Minutes* claimed it required specific digital editing such as the inclusion of hyperlinks, social media embeds, videos, interactive maps or infographics, as well as writing headlines according to SEO factors.

Story length was highlighted by most newswriters as being related to *digital first*. In theory, it meant no longer writing to lengths dictated by page layouts. However, as we have seen, production realities were very different in the three newsrooms. At *20 Minutes*, the likelihood of rewriting a story entirely for print meant reporters were less likely to be held back by print imperatives (definitive structure, concise writing, which information to include) and allowed them to produce news faster. At *Le Temps*, the differences were smaller but often required changes such as removing entire sentences or paragraphs. This was occasionally a source conflict with the print team, with several interviewees pointing to a recent example of the print production team having made substantial changes to articles; modifications that reporters had objected to because they considered these transformed the overall impression of the story. However, they attributed this to having to adjust to recent changes. Finally, respondents from *La Côte* explained their newsroom’s size meant that they had no other choice but to calibrate digital stories to the exact lengths required for the print version.

Story-level features and practices—discrete in the literature—were prominent in discourse (unsurprisingly, since it was discussed in depth in the third part of the interviews). They reflected the broad set of affordances and best-practices extensively studied by digital journalism scholars over the past two decades (Boczkowski 2004; Thorsen and Jackson 2018). In particular, hyperlinking (Karlsson, Clerwall, and Örnebring 2015), video (Kalogeropoulos and Nielsen 2018) and embedding of social media content (Hernández-Fuentes and Monnier 2020). Headline writing also featured prominently (Hagar and Diakopoulos 2019). This suggests that views of *digital first* are also grounded in

more mundane practices of (digital) journalism. Respondents also consistently stated that *digital first* gave rise to complex questions about story lengths; a topic that has largely been overlooked by digital journalism scholars and that would warrant further investigation, especially in the context of dual web/print production.

Workflow and CMS First

Several newswriters considered the question of *who* adds digital features to stories, *when* and *how* as playing an important role. *Digital first* meant reporters being required to file stories in a form closely resembling the one ultimately placed online, and surrendering the entire print editing process to the print team, located further down the production line.

After being taken aback by our request for a definition (see introduction), a print editor eventually provided the following definition: “*Digital first* means that people work for one platform first, which is a screen, and we—as a print team—come after, in order to fill blank pages” (LT-PE). Back when they first heard the term in the mid-2000s, it came with the assumption that print would disappear. This had changed, “Today, I think it is a production method. [...] It doesn’t mean web from A to Z, but from A to P for *print*”. Recent changes at *Le Temps* reflected this, with a reorganized larger desk (no longer to be called a web-desk) and redesigned editing and proofreading workflows. The deputy editor-in-chief responsible for digital viewed print as “an appendage” (LT-EM2).

Digital Production Mindset

The idea of a specific mindset, described as “web-thinking”, was present throughout the interviews.

[digital mindset] means that journalists should not focus on the print outcome of their story. Some are concerned when they write that it might not come out great on the page. I tell them not to care and just write for the web, and that the print production manager and I are here to make the text compatible with print. (LC-EM1)

The editor-in-chief of *20 Minutes* insisted that their newspaper had moved beyond being just *digital first* to being *video first* as well. This included setting up a new video team (see above). *Digital first* and *video first*, should be understood as slogans that serve to “evangelize my teams” (20M-EM). Such easy-to-understand terms served “as a kind of compass”. In view of this, print-specific terms had been banished from budget meetings. Editorial management of one of the newspapers mentioned that *digital first* required a minimal level of commitment to a set of production principles. Those most resistant to this had been forced to leave during a restructuring, making implementing *digital first* much easier. However, our data suggests the issue should not be viewed as “obey and conform, or leave”. Our data also provided several examples of negotiated ad hoc practices and processes, where journalists (often older ones) were outside the confines of the production system as it was designed. For example, one experienced reporter was the only one to have been granted access codes to the print layout tool. This provided them with more control over their story and later deadlines. In exchange, their work later along the production line reduced the workload of the print team (one of whom

was a member of editorial management). Such highly individualized practices are consistent with Lemieux's (2010) concept of "journalistic subjectivity".

As a reminder, mindset was not identified as a feature of *digital first* within the literature. It has however been highlighted by Ferrucci and Vos (2017, 874) as an important component of digital journalists' specific identities:

Digital journalism, to the majority of informants, incorporates a mindset that extends itself to the newsgathering process. They believe it is essential that to be a digital journalist, a journalist must consistently be thinking about digital publication throughout the working of a story.

Strategy and Jargon and More

Some respondents' definitions hinted at strategic dimensions. This was particularly the case for editors-in-chief and those with previous experience in editorial management. According to the deputy editor-in-chief of *Le Temps*, true *digital first* is achieved once the website and mobile application "become the priority", adding that "the future of our newspaper is online" (LC-EM1). Several other respondents used *digital first* to define their newspapers' overall strategies, but seldom elaborated. One newsworker believed that the term *digital first* was emblematic of a turning point and a way of framing how their newspaper might be perceived from the outside; as such, it was also a sort of jargon that on its own lacked "magical performative power" (anon.). Another wondered whether, when their newspaper changed production process, *digital first* might have been used as a sales argument aiming to boost digital subscriptions (anon.). A web editor from *Le Temps* reckoned that the term itself had evolved over the course of the last years, from merely being an issue of publication temporality, to something all-encompassing (LT-WE). One respondent complained that implementing their newspaper's strategy meant there would soon be more analysts and media managers than reporters (anon.).

Conceptualizing *digital first*

We first sought to identify the full range of properties pertaining to *digital first* (RQ1). This full range is described in two empirical sections above, from the perspective of the three newspapers' production systems (all self-described as *digital first*) as well as the discourses of the newsworkers we interviewed. The questions of common shared properties (RQ2), and how these may constitute a newsmaking paradigm (RQ3), are addressed below.

Respondents' commonly shared definitional properties were consistent with the three dimensions identified within the literature (temporal, workflow and strategic). Thus, to the question of common shared properties (RQ2), we would increase the number of dimensions of *digital first* from the three to five, adding format and story-level affordances and production mindset. Short of providing a full definition, these dimensions identified within the empirical data point to the following necessary (but not sufficient) conditions for *digital first* newsmaking:

Digital first can only occur when the production of news for digital and print come into contact. It applies to newspapers (and only newspapers that can be said to be digital first when the print production system (workflow) and related mindset have been adapted to

enable the online edition to better implement digital affordances (temporal and textual) with a view of placing digital at the core of business activity.

A Five Dimensional digital first Matrix

The five dimensions identified and described above fit within the broader semantic meanings of *digital first*, in view of the double polysemy of the words *digital* and *first*, which we briefly explore in view of providing definitional clarity:

- *Digital* may be understood as referring to:
 - specific platform-related entities (e.g., a digital currency, a pdf, or digital content)
 - a broader set of considerations and features that all somehow relate to a dematerialized business activity domain (e.g., digital transformation or web 2.0)
- *First* may denote:
 - a sequential order (e.g., arriving first at the finish line)
 - a primacy in terms of importance (e.g., safety first)

Complicating matters further is the fact that when it comes to digital content, both process and outcome were linked to “digital firstness”. Temporality is a good example of this, since *digital first* referred to, on the one hand workflow (digital related work precedes print work), and on the other hand publication sequence (the digital version of a story is available to the reader before the print version).

Combining the realities of self-described *digital first* production systems at *La Côte, Le Temps* and *20 Minutes* with the discourses about them, and the above-mentioned semantic analysis, we developed the following *digital first matrix*.

		Digital		
		Content		
		Production side	Publication side	Business activity domain
First	Sequential order	1. a. Workflow and CMS	2. b. Temporality	3. e. Business model and strategy
	Importance	1. c. Production mindset	2. d. Story-level features	

On the first level, it is a 2 × 2 matrix that incorporates the double polysemy of *digital* and *first*. On a second level, it accounts for the above-mentioned split between production and publication properties. We then placed the five dimensions that emerged from our interviews within this table, which we believe provides a heuristic device for understanding and discussing web and print newspapers.

It is worth repeating how strongly interconnected these different dimensions are. In many newsrooms reporters have switched to writing directly into websites’ content management systems (CMS) according to web editing guidelines. This might include adding hyperlinks, designing headlines around keywords favoring online search (SEO), etc. This would constitute *digital first* according to a., c., and d. But writing directly into the CMS also means that the original story is the web version, which must be repurposed for the print issue. This invariably increases control over publication temporality, in particular allowing breaking news to be published immediately (b). Often, changes

such as these fit into broader strategies placing digital activities and revenue streams at their core (e).

Implementation: From Theory to Practice

In practice, the production systems of all three newspapers include properties belonging to all five dimensions identified, although to varying degrees. The logics applying to faster moving stories differed more between web and print than for slower, more context-rich and feature-style news. Those being frequently updated often require being entirely rewritten. At *20 Minutes*, rewriting the story for print was integrated into work routines, since differing lengths between web and print meant significantly rewriting most stories anyway. At *La Côte* on the other hand, this was judged to be more problematic in view of the small newsroom. Paradoxically, in all three newsrooms, *digital first* was also seen to involve scheduling some online publication to occur after rather than before availability in print form to keep the website moving during mornings, when available content is scarce. Properties of *digital first* were occasionally antagonistic. In particular, the need for breaking news to be fast (temporality) conflicted with the desire to include story-level digital features, the latter being time-consuming. This was particularly visible at *20 Minutes*.

Newsworkers also felt that there were significant obstacles to reaching this ideal. Many believed that their newspapers could be more *digital first* with increased staff numbers in the newsroom: more reporters to accelerate overall story output, while allowing for more time to add digital affordances; more editors to edit and promote stories online. Respondents from *La Côte* and *Le Temps* insisted on the importance of being able to achieve content output beyond that required for the print edition.

Returning briefly to our *digital first matrix*, we would hypothesize that the first line (dimensions a & b) corresponds to older understandings of *digital first*, while having resources available beyond those needed to merely produce the print newspaper holds the key to achieving all-encompassing ones: it allows newspapers to apply a more digitally focused mindset and implement related logics (c) by integrating them more deeply and systematically into stories (d), thereby achieving business strategies that place digital at the core (e).

The ongoing changes at *Le Temps* illustrate this well: since changing ownership, it has begun shifting from a production process similar to *La Côte* to one closer to *20 Minutes*, in which stories numbers (according to topic) and lengths are decorrelated from the printed newspaper. One newsworker explained that all the key strategic elements had already been in place under previous management; what had lacked was the work force to implement it. The print production manager at *Le Temps* outlined the challenge ahead:

The rule now is to completely detach print production from the web. [...] In practice, what hasn't really been successfully implemented is this airtightness between web and print. It isn't so clear cut. This doesn't bother me because we aren't the Washington Post or the New York Times with hundreds of people and the critical mass needed to operate with totally hermetic teams.

Understanding *digital first* is one thing, being able to fully implement it is something else altogether. According to one managing editor:

Digital first is a term that has been used in newspapers for a long time, but that has seldom been put into practice. (LT-EM1)

A Newsmaking Paradigm?

Definitions of *digital first* varied from one newsworker to the next, as well as between newspapers, reflecting their specific production systems and editorial lines. Reporters seemed more likely to place story-level practices at the center, while editorial management focused more on strategy. This seems logical, although sample size prevents us from making bold claims.

Beyond differences, an ideal-type of *digital first* as a newsmaking paradigm nevertheless emerges (RQ3):

A digital first newspaper is one that offers stories across a range of temporalities, dissolving the deadline-driven 24-hour news cycle. Its stories are published according to criteria which places the online reader at the center. For breaking-news this means immediately, but it also means delaying the publication of less-time-sensitive stories. Stories should exploit digital potentialities such as hypertextuality, multimedia, social media embeds etc. while also accounting for its constraints (e.g., the need for SEO driven headlines). All of this is facilitated operationally by a CMS-first workflow, and culturally by a digital mindset. From a business standpoint, this activity is intertwined with a model that places online revenue at its heart.

Conclusion

Of course, the limited scale of this study—three newspapers from the same relatively small news market—means that caution must be applied when seeking to generalize its results. Journalism research has shown that elements of journalistic cultures and practices are often localized. The people designing production systems, journalists, editors and other newsworkers discuss practices and exchange views. These do not always travel well, so some geographical specificity is therefore likely.

However, we are convinced that the five dimensions we identified in our data are strongly linked to newsmaking described as *digital first* in many countries and newspaper markets and that phenomena not identified in this study can most likely be fitted into the *digital first matrix*, which unboxes the intricacies of the production systems currently being used—or considered—by many newspapers worldwide. As such, it may help newsworkers and other news industry professionals better communicate about the ways in which digital and print platforms relate to one another.

The *digital first matrix* also seems a useful starting point for considering future research prospects. Newsroom tools and workflows have indeed been studied, but we have little ethnographic data to prove (or disprove) that things really occur as they were designed to (interviews revealed discrepancies between theory and practice). Simultaneously catering to digital and analog has increased the complexity of time management within the newsroom; this is still poorly understood. The parameters of the successes and failures of infusing a digital mindset in the newsroom surely also need more attention. Our research suggests journalists' positioning towards digital is highly strategic and carefully negotiated. Questions of format and story-level features also constitute a rich line of enquiry, and in particular the issue of story lengths. What defines whether a story can

merely be shortened or if it requires rewriting? What kind of tactics are used by reporters to avoid having to rewrite their stories, or insure against surrendering control to editors. Also, best practices and affordance for digital stories seemed to be highly prescriptive, without newswriters and editorial management fully understanding how audiences perceive them and what added value they bring to stories. On a business strategy level, since the *digital first* model seems to be becoming a dominant model for newspapers, we would advocate for research that transparently collects and shares data related to its costs and opportunities, and examines whether the model is sustainable and under which conditions. The past few years have served as a stark reminder of the importance of reliable quality information. In this context, what happens to our newspapers suddenly seems as important as ever before.

Notes

1. In our study, the term *web-first* was systematically used in French by respondents of our study. A loanword from English, *web-first* seems to be used less and less frequently in English speaking newsrooms as well as in the literature, with the synonym *digital first* more commonly used today. We suspect this may be because “web” no longer fully describes the range of digital platforms used by newspapers, and their related activities. However, the term seems to have stuck in French (and certainly in the speech community formed by the French language newsrooms (of Switzerland). Unless specified otherwise, when *web-first* was used in French, we have translated it to *digital first*. This is both because we have evidence pointing to their equivalence as respectively used in each language, and in order to facilitate reading. When used as such in the English literature, we leave it unchanged.
2. Under strategic definitional elements of *digital first* we group the research and literature, which either explicitly uses the term “strategy” or refers to *digital first* in terms of a means to achieve a core business-related objective that at least to some degree reaches beyond strictly editorial considerations (to get a better sense of how editorial and business strategies are linked, see Küng 2008). It is also worth noting that uses of the term strategy itself has been shown to be problematic. As Evered (1983) notes: “The concept we call “strategy” refers to a familiar human activity, particularly human activity in organized settings, that is apparently crucially important, subtly complex and excruciatingly elusive to conceptualize with any precision.”
3. The decision to interview two reporters was twofold. First, reporters largely outnumber other functions in the newsroom; thus we sought to reflect this balance. Second, this allowed us to question one junior and one senior reporter, which we believed could be an important variable in terms of definitions and views related to *digital first*. We did not seek to focus on specific beats, although five of the six reporters interviewed worked within beats that covered regional or national news that was not topical. One reporter worked within a beat that was topical, producing stories closely related to daily hard news as well as colder feature stories.
4. This of course within the limited scope of this study.
5. In 2021, *Le Temps* made its most recent change towards a fully *digital first* production system when it decided to no longer discuss the print issue during its daily budget meeting and to stop calibrating digital story lengths to the needs of the printed newspaper. These issues will be discussed below.
6. Information related to the production process was collected during the interviews and confirmed through triangulation.
7. To facilitate reading, we do not systematically refer to newsroom functions. However, for those readers who may wish to identify the newspaper and function and of the persons quoted, we use the following codes: *La Côte* = LC, *Le Temps* = LT, *20 Minutes* = 20M; reporters

= R2 & R2, web editor = WE, print editor = PE, editorial management = EM(1) and (2) (when a second member of editorial management was interviewed); The journalists from La Côte are therefore referred to as LC-J1 and LC-J2, the print editor from Le Temps as LT-PE, etc. Occasionally quotations are not attributed either due to a respondent's specific request, or of precaution because we believe the quotation could harm the newswriter were they to be identified. These are marked "anon".

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