

# ALTERNATING FORMS OF LOCK-IN: PUBLISHING DIGITAL NEWS IN THE PATH OF A FREE CONTENT CULTURE

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# **ALTERNATING FORMS OF LOCK-IN: PUBLISHING DIGITAL NEWS IN THE PATH OF A FREE CONTENT CULTURE**

*Complete Research*

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## **Abstract**

*The digitization of work and life has generated numerous market opportunities that remain untapped. The realization of strategic potentials of digitization is particularly difficult for path-dependent firms that are locked-in and perceive little scope of action to deviate from their established strategic patterns. In order to gain deeper insights into this phenomenon, we draw on qualitative data from the newspaper industry to explore how the scope of action evolves in lock-ins. We show that the scope of action continuously changes, as new market opportunities emerge and disappear. In particular, cognitive and normative barriers impede the realization of these strategic options until windows of opportunity close and the emergence of new market opportunities opens up new windows of opportunity that may be used to escape the established strategic pattern. Our research results provide several theoretical contributions, such as clarifying the role of digital technology for strategy development in lock-ins and providing empirical evidence for a continuously changing range of strategic options in lock-ins that alters the chances to break the path.*

*Keywords: digitization, path dependence, newspaper industry, windows of opportunity.*

## 1 Introduction

Our lives as well as organizations become increasingly digitized. Digital technology is deeply embedded in products and services and permeates the business processes of many companies (Yoo et al., 2012). Although the profound social change through the digitization of information and communication technologies has long been recognized (e.g., Wiener, 1948), recent technological advances such as the miniaturization of computing hardware, the spread of broadband networks, and cloud computing have embarked on a new stage of digitization in which the use of digital technology and media is ubiquitous both at work (e.g., Jonsson et al., 2008; Wasko et al., 2004; Townsend et al., 2001) and in everyday life (e.g., Kuruzovich et al., 2008; McElroy et al., 2007; Yoo, 2010). Whereas these technological and social changes constitute considerable threats to established business practices (Grover and Kohli, 2013), they simultaneously create tremendous market opportunities that firms may exploit to achieve competitive advantage (Drnevich and Croson, 2013). Consequently, Bharadwaj et al. (2013) call for leveraging digital resources in “digital business strategies” to exploit the market potentials of increased digitization of work and life beyond the operational use of these assets.

To exploit digital market opportunities, firms must have scope of action available (Drnevich and Croson, 2013). In contrast, firms that are constrained in their scope of action as they are locked into a strategic path (Sydow et al., 2009) do not seem to be able to exploit the market opportunities of digitization (Koch, 2008, 2011; Rothmann and Koch, 2014), which is a major—if not the most important—reason why digital market opportunities remain largely untapped (Drnevich and Croson, 2013). Prior research traces tightly constrained scope of action back to different forms of lock-in, i.e., due to a lack of necessary resources, constrained cognitive perceptions of strategic alternatives, or unwillingness to take respective actions (Sydow et al., 2009). Yet, the scope of action in lock-ins may change over time (Sydow et al., 2012a), e.g., due to changed market conditions (Arthur, 1994), leading to different temporal forms of lock-in. Thus, the ongoing digitization of business and society with its continuously emerging market opportunities (Drnevich and Croson, 2013) may influence firms’ scope of action in lock-ins over time.

Considerations regarding temporal changes of scope of action are particularly relevant, as they imply that the chances to break the strategic path and, thus, to realize emerging opportunities of digitization (Drnevich and Croson, 2013), also alternate over time (Koch, 2011). However, in spite of valuable insights of extant literature on the forms of lock-ins, the literature remains silent on temporal variations of the scope of action in lock-ins (Sydow et al., 2012a). Therefore, we formulate the following research question: *How does the scope of action evolve in lock-ins?* Drawing on path dependence theory, we explore this phenomenon in a case study of the German high-quality daily newspaper publishing industry that can be considered paradigmatic for news publishers all over the world whose traditional business models were put in question by digitization (Gilbert, 2005) and that still have been unable to realize the market opportunities of corresponding technological and social changes (Oestreicher-Singer and Zalmanson, 2013).

Our paper provides several theoretical contributions. First, we respond to Bharadwaj et al.’s (2013) call to explore the role of digital technology in the development of business strategies by demonstrating that the difficulties to broaden the constrained scope of action vary over time because of the steady stream of market opportunities that the digitization of work and life generates. Second, we provide empirical evidence for the role of technology in the availability and evaluation of strategic options by outlining the digitization of work and life as a major chance for firms to break paths, a field in path dependence theory that desperately seeks further clarification (Sydow et al., 2009). Third, we show that the scope of action continuously alternates between forms of lock-in that can be overcome and forms that are hardly escapable. In particular, we show that market changes regarding the digitization of the newspaper industry provided various opportunities in time, which were not realized

mainly because of cognitive and normative reasons. Thus, our analysis ultimately illuminates why some firms do not exploit the market opportunities of digitization.

Our paper also has practical implications. Our analysis shows that news publishers may still have strategic potentials to establish a viable business model in the digital world despite a number of missed opportunities to offer paid digital news. These firms must be sensitive to further market developments, which could provide path-breaking opportunities that can be exploited by overcoming cognitive and normative barriers to transforming the traditional business model.

## 2 Theoretical Background: Path Dependence and Forms of Lock-in

Path dependence has recently become a popular concept to explain a wide variety of phenomena in different disciplines. Whereas it originated in an economic context to explain the emergence and persistence of technologies despite the existence of superior alternatives (Arthur, 1989; David, 1985), it was transferred to organization and management theory with a conceptual focus on firms' scope of action to exploit market opportunities (Sydow et al., 2009) and also received consideration in information systems research (Bharadwaj, 2000; Lim et al., 2011; Sambamurthy et al., 2003; Vitari et al., 2012). As a concept of stability, path dependence theory not only shows how firms' scope of action may narrow over time but is also well suited to explain why attractive strategic options—such as market opportunities of digitization (Drnevich and Croson, 2013)—are not exploited (Koch, 2011).

In general, path dependence is, first and foremost, a process (Schreyögg and Sydow, 2011). In an organizational context, it explains how the scope of action to exploit strategic alternatives may narrow over time until it is tightly constricted in the resulting lock-in. Thereby, strategic choice converges to an ultimately predominant pattern over three phases (Sydow et al., 2009, see Figure 1).

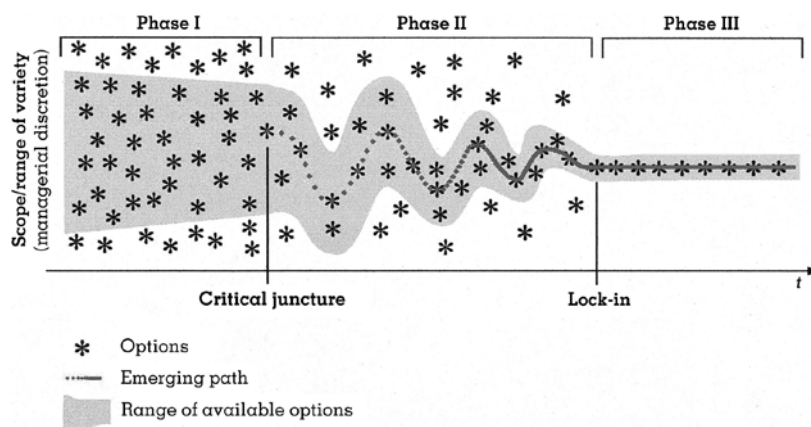


Figure 1. The emergence of a path (Sydow et al., 2009, p. 692)

In the first stage, the pre-formation phase, firms have a wide corridor of options available that is only slightly limited by historical imprints. A seemingly small event (Arthur, 1989) may eventually induce the second stage, the formation phase, in which the range of variety gradually becomes constricted. This process is essentially driven by self-reinforcing mechanisms, such as complementarity effects, learning effects, coordination effects, adaptive expectations, network effects, and economies of scale (Dobusch and Schüßler, 2013). These mechanisms gradually drive out strategic alternatives due to increasing returns, such that they increase the likelihood of the emergence of an ultimately predominant pattern of strategic choice. These strategic decisions are generally still reversible but more difficult to revoke toward the end of this phase (Miller, 1993). Therefore, the scope of action is constricted even further. If self-reinforcing mechanisms drive out most strategic alternatives, firms enter the third stage, the lock-in phase. In this case, firms are bound to the predominant strategic pattern that has emerged and only have a narrow range of variety left.

The resulting lock-in is not critical to firm activity in all cases. Instead, the self-reinforcing dynamics of path dependence lead firms to a strategic fit (Zajac et al., 2000) of the reproduced pattern with specific environmental conditions. Thus, the strategic pattern may be highly efficient and may be reproduced successfully over a long period of time (Rothmann and Koch, 2014). However, lock-ins constitute a major challenge for firms when the environment changes. As the scope of action is sacrificed for increased efficiency of the strategic pattern under given environmental conditions, affected firms are hardly able to adjust their strategic pattern (March, 1991). This rigidity prevents firms from exploiting new market opportunities and may lead to organizational decline (Leonard-Barton, 1992).

In principle, environmental changes broaden the corridor of choice alternatives that are available to firms (Arthur, 1994). Correspondingly, the technological and social changes that come along with the digitization of work and life constitute large strategic potentials (Drnevich and Croson, 2013) even for firms that are locked in. However, particularly the exploitation of new strategic opportunities seems to be challenging in lock-ins (Pentland et al., 2012). Therefore, path-dependent firms tend to reproduce the stable strategic pattern for a long period of time even after environmental changes render the choice pattern inefficient (Rothmann and Koch, 2014). Thereby, path dependence theory provides specific reasons why firms do not opt for attractive strategic alternatives. In particular, the concept differentiates between resource-based, cognitive, and normative forms of lock-in (Sydow et al., 2009).

In case of a *resource-based lock-in*, path-dependent firms dispose of a narrowed scope of action because their entire resource base is tightly aligned with specific environmental conditions. This specificity results from increasing returns on investing in and exploiting the existing resource base to reproduce the established strategic pattern (March, 1991). The required accumulation of new resources renders new strategic options unattractive, such that firms in resource-based lock-ins virtually have no market opportunities available (Arthur, 1994). Firms in *cognitive lock-ins* may have attractive strategic alternatives available but they do not perceive these as such. Along with the increasing success of the emerged strategic pattern, the reconstructed success factors get deeply inscribed into the cognitive structures and are increasingly considered to be unchangeable (Tripsas and Gavetti, 2000). Therefore, affected firms do not recognize viable strategic options as part of their scope of action, even though they may have the resources required to exploit these market opportunities. If firms recognize viable strategic options but still reject them, they are trapped in a *normative lock-in*. In this case, affected firms gradually identify with the business activities determined by the increasingly successful strategic pattern (Tripsas and Gavetti, 2000). Therefore, these firms rather opt for those strategic alternatives that do not threaten their identity, whereas the continuation of the strategic pattern is most likely (Gilbert, 2005). However, particularly in normative lock-ins, self-reinforcing mechanisms may have driving effects even beyond the formation phase. For instance, adaptive expectations may lead to the rejection of alternatives that are part of their scope of action if adverse reactions by consumers and/or competitors are expected (Danneels, 2003).

## 3 Research Methodology

### 3.1 Research Design and Data

To explore how the scope of action evolves in lock-ins, we conducted a retrospective qualitative case study (Yin, 2009) whose design resembles other insightful studies that analyze the inability of firms to conduct strategic change in times of technological shifts (e.g., Burgelman, 1991; Tripsas and Gavetti, 2000). In particular, we analyzed the case of the German newspaper industry in light of path dependence and the emergence of change opportunities through digitization. Starting in 2001, the newspaper industry all over the world experienced a major crisis, driven by the slump-down of advertising markets due to the rupture of the “dot-com bubble” (Gilbert, 2005). Particularly the German newspaper market—formerly one of the world’s largest and most diverse newspaper markets

(BDZV, 2005)—came under big pressure, such that numerous newspapers were discontinued and the remaining news publishers drastically reduced content production (BDZV, 2003). Despite the insightful discourse on the characteristics of viable business models for the commercialization of digital news (e.g., Amberg and Schröder, 2005; Lopes and Galletta, 2006; Oechslein and Hess, 2013), none of the traditional big players in the German newspaper industry has found a sustainable way to transform the newspaper business model (Rothmann and Koch, 2014). Due to the severity of market disruptions that caused urgent needs to transform the traditional business model and the German news publishers' inability to do so because of path-dependent dynamics (Koch, 2008, 2011; Rothmann and Koch, 2014), the German newspaper industry served as a "talking pig" to gain novel theoretical insights (Siggelkow, 2007) in light of the formulated research question.

Our research question innately focuses on the emergence of market opportunities that firms in lock-ins may exploit or reject. Correspondingly, all players in the newspaper industry had the same opportunities and, albeit partially debated, decided not to exploit them. Due to the convergence of firms' strategic activities in this industry, we analyzed the strategic activities of individual players jointly as a holistic single case (Langley, 1999; Yin, 2009) with the industry's lock-in as the unit of analysis. In particular, we were interested in the industry discourse (Phillips and Hardy, 2002) on the scope of action in light of digitization in order to stipulate which strategic options are (or are not) debated and which opportunities are (or are not) exploited over time (Koch, 2011). For our analysis, we focused on the so-called "daily quality press," which is a paradigmatic "lighthouse" (Blum et al., 2011) of the industry with an aggregated paid circulation of 1.3 million pieces in 2000 (IVW, 2011) and well-suited for investigation for mainly two reasons: (1) production costs are higher in this segment than in the overall industry (BDZV, 2002) and, therefore, the need for change rapidly became more urgent during the industry crisis, and (2) the newspapers in this segment were/are regarded as journalistic flagships (Blum et al., 2011), such that the industry discourse was mainly focused on their crisis. Chapter 3.2 describes the context of our case in more detail.

In order to facilitate data triangulation, we gathered data from multiple sources (Yin, 2009), which resulted in a massive amount of data that covers the period from 1995 to date and that is well suited to reconstruct the industry's perspective on their scope of action and its development over time (Geertz, 1973). First, we browsed specialist publications—mainly six trade newspapers and magazines, e.g. "W&V" and "Horizont"—that observe and report developments in the newspaper industry in detail. We read all found articles and saved the 1,986 relevant ones for further analysis. Then, we conducted 27 retrospective semi-structured interviews in all (five) nationwide published German daily quality newspapers between 2010 and 2013. Most of the interviewees were key decision-makers in the strategy process of these firms (6 CEOs, 3 C-Levels, 11 Senior Executives, 5 Middle Managers, 2 Industry Experts) and reflected both the strategic actions taken and the shared rationale behind these actions (Lincoln and Guba, 1985). The interviews focused on the industry dynamic since 1995 and lasted 1h 15min on average. All but one interview were audio-recorded and transcribed for further analysis. One interviewee refused audio-recording. This interview was recorded in writing and the protocol was then confirmed by the interviewee. In an iterative loop, we conducted five additional interviews following our first data analysis to validate our findings.

In detail, the analysis of collected data proceeded in four stages. First, we leveraged the strength of the retrospective research design—the possibility to gather rich data even for lengthy transformation processes that are difficult to observe in real time (Sydow et al., 2012b)—to construct a narrative story of the chronological development (Langley, 1999) of the news publishers' lock-in that has evolved over more than a decade. This thick description provided a rich understanding of this development and enabled the analysis of distinct events using path dependence theory. Second, we decomposed this chronology into analytic periods (Van de Ven, 1992) which distinguished the dominant forms of lock-in in which news publishers were trapped. This step facilitated a more fine-grained analysis of each phase and allowed us to better characterize the scope of action. Third, we coded the whole material across these phases to analyze the evolution of the scope of action using the qualitative data analysis

software *Atlas.ti*, v6. For this purpose, we developed and used 135 codes, which we derived deductively based on proposed frameworks to analyze paths (Koch, 2011; Sydow et al., 2012b) and which partially emerged inductively from the data (Corbin and Strauss, 1990). With these categories, we coded 6,640 instances. Fourth, when we obtained preliminary research findings, we conducted five follow-up interviews with key informants in which we presented and discussed our findings. In light of the weakness of the retrospective research design to bear risks of ex-post rationalization, we could validate and ensure the trustworthiness of our research findings (Lincoln and Guba, 1985).

### **3.2 The Initial Situation: The Newspaper Lock-in and its Crisis**

Traditionally, newspapers relied on two different markets to generate revenues, i.e., the readership market and the advertising market. Building on the high complementarity of both markets in the newspaper context, several self-reinforcing effects created the so-called “advertising-circulation spiral” (Hoskins, 2004). Concisely, the spiral enabled publishing houses to subsidize their product—which has always evoked large production costs (BDZV, 2002)—by reducing the purchase price for readers or by improving the quality of the newspaper product. Each of those actions would most likely increase the readership’s demand for the product and, therefore, enhance product circulation. A higher circulation would simultaneously lead to increased demand in the advertising market, resulting in higher advertising revenues, which again can be used for producing better or more content for a lower price in the readership market. Thus, this spiral drove the self-reinforcing dynamics of path dependence in this industry (Rothmann and Koch, 2014).

The advertising-circulation spiral, which operated efficiently until 2001, enabled publishers to reduce the newspapers’ price for the readers by up to 70 percent: without advertising revenues, a printed newspaper would have cost about three times as much (Dovifat, 1967). The attractiveness of subsidizing newspaper production with advertising revenues resulted in a lock-in in which news publishers focused solely on the generation of revenues in the advertising market (Rothmann and Koch, 2014).

The publishers’ traditional business model of focusing on advertising revenues to offer a subsidized product to readers started to fail during the end of the 20th century, when publishers had increasing difficulties to attract a younger readership as subscribers of their newspapers. Up to 2001, the resulting decline in revenues in the readership market could be compensated by revenues generated in a strongly growing advertising market. However, when the advertising market slumped down due to the rupture of the dot-com bubble in 2001, the business model was in a deep crisis: news publishers dramatically lost both readership and advertising revenues (BDZV, 2002; ZAW, 2004).

## **4 Findings: Multiple Windows of Opportunity for Reinventing the Newspaper Business Model through Digitization**

In this section, we present the findings of our study. We identified five periods (1995–2000, 2001–2007, 2008–2009, 2010–2011, since 2012), three of them characterized by different windows of opportunity that all remained unexploited. For every period, we describe the changes of the scope of action in light of digitization and explain why emerging potential scope remained unutilized by referring to prevailing forms of lock-in. The findings include quotations from interviews that are—for the sake of protection of the interviewees’ anonymity—numbered in order of their conduction.

### **4.1 1995–2000: The First Window of Opportunity: Separating Content and Ads in the Digital Sphere**

When the Internet evolved to a mass medium in the 1990s, publishers had the major opportunity to reinvent their business model by developing digital media products and using digital technology for

the development and commercialization of different products. While the Internet did not provide the same complementarity, i.e., cost advantages of combining ads and journalism in one product, it simultaneously allowed publishers to reduce the overall production costs, as there would have been no need for paper, print, and expensive physical distribution—together about 53.5 percent of the costs of a printed newspaper—in a purely digital newspaper product (BDZV, 2002). With such cost reductions, the revenues from regular readers who paid for the printed product in 2001—about 30 percent of overall revenues—would have been sufficient to refinance the entire content production for a purely digital product. Thus, whereas a printed journalistic product was highly dependent on advertising revenues, the digitization of newspaper content allowed publishers to produce a daily high-quality news product and to sell it profitably without ad-based subsidies to the readership for the first time.

By the end of the 1990s, the online advertising market simultaneously began to grow, although on a very low level (BDZV, 2000). This development provided another market opportunity through product digitization: the missing necessity to subsidize journalistic content with advertising revenues would have allowed publishers to develop online advertising businesses in non-content environments, such as classified ad portals for jobs and real-estates.

*“These [classified ads] were traditional newspaper businesses and if publishers had been a bit more creative and faithful, they could also have founded such businesses in the digital sphere. But the publishers remained passive (...).” (Manager 2)*

However, this initial opportunity of separating content and advertising businesses in the digital sphere elapsed because of a cognitive lock-in that limited the publishers’ perceived scope of action: because classical advertising markets were still very profitable in the 1990s, publishers did not recognize the Internet neither as a potentially attractive advertising market nor as an appealing readership environment, as they directly compared the online reading experience with the print experience (see Table 1 for a description of this cognitive lock-in).

*“Haptics is very important. You don’t want an electronic device during breakfast next to your coffee cup ... It is quite superior when you have a printed page that shows you everything important at a glance.” (Manager 18)*

By comparison, publishers perceived major shortcomings of online news products as against printed newspapers from a consumer perspective: (1) the inability to give a thematic overview (like large newspaper pages), (2) the necessity to sit in front of a PC, and (3) the dependence on an Internet connection. In the publishers’ view, especially quality content needed a quality medium, and during the 1990s, paper was regarded as the higher-quality medium compared with the Internet.

Although the publishers still focused on selling their printed product, they felt the need to be present in the web in order to self-advertise their printed products. In the digital sphere, they decided to be free for the readers, with the aim of strengthening the overall newspapers’ brand coverage in order to attract readers and increase the attractiveness of the brand for advertisers, which was the initial step for an emerging free news consumption culture in digital environments.

#### **4.2 2001–2007: The Second Window of Opportunity: Developing Willingness to Pay and Payment Technologies**

Due to the major crisis on the advertising market in 2001, which was deeply linked to the rupture of the dot-com bubble, the publishers initially felt vindicated about their assumption that the Internet would hardly be an attractive business environment for them.

*“Yes, the crisis led to a very critical attitude in the publishing houses—when managers said, ‘I told you so: the Internet will not work for news publishers.’” (Manager 8)*

Yet, the online advertising market started to grow again relatively soon, while revenues in the print advertising market remained on a low level and decreased even further (BDZV, 2004; ZAW, 2004).



Consequently, publishers started to recognize that it probably was disadvantageous to reproduce their sole strategic focus on the print business and to stay passive in the digital environment. As more and more start-ups began to establish digital business models with which they successfully competed against the publishers' print advertising businesses, publishing houses gave up their hesitant position, resulting in a massive expansion of their online news presence.

*"The most important part of our restructuring was the expansion of our online news portal between 2003 and 2005." (Manager 21)*

The primary goal in reaction of the major crisis in 2001 was now to regain the lost digital advertising business. Although paid content was discussed as a strategic alternative to serving the emerging free news consumption culture, it was evaluated as hindering the potential for developing flourishing advertising businesses in the digital sphere that would support their established business model.

*"Of course, you can earn money through the reader ... but I think this is not a very intelligent approach. (...) Perhaps, we could develop entirely different revenue streams [in the ad market]—like Google shows us." (Manager 2)*

In direct consequence of this free content approach to increase revenues in the advertising market, publishers renounced the emerging technological scope of action to create digital willingness to pay for attractive journalistic products in the readership market. Indeed, the news websites were massively expanded but largely remained free for users. Furthermore, publishers did not make any assiduous efforts to develop digital payment solutions, such as today's famous Paypal.

*"Publishers are per se no adequate innovation environment for such technologies. (...) Our competence is to produce content." (Manager 26)*

With the decision to focus rather on regaining the digital advertising business than establishing a paid content culture, the level of path dependence changed from cognitive to normative (see Table 1 for a description of this normative lock-in). Due to this normative lock-in, digital technologies that build and skim off willingness to pay remained unused, respectively undeveloped. During this time period, the free content culture of digital news consumption became widely established as a direct consequence of utilizing digital technologies solely for strengthening the advertising business.

### **4.3 2008–2009: The Inability to Change**

When a second major advertising crisis hit the newspaper industry in 2008, the publishers intensified their paid content discussions. Although the publishers recognized that advertising revenues would not be sufficient to produce high-quality content in the medium or even long run, a shift to digital paid content products was nearly impossible at this time, as the publishers perceived themselves exposed to a now established free content culture.

*"Sadly, we have accepted over time that a general free content culture has become established on the Internet, which is hardly reversible." (Manager 28, trade press interview)*

As the publishers did not dispose of resources to adequately react to implement paid content business models in this free content culture, publishers were locked-in due to their resource base in 2008, such that their scope of action did not contain any exploitable strategic alternative. However, this resource-based lock-in (see Table 1 for a description) was a direct consequence of the prior focus on providing digital content for free instead of establishing a paid content culture.

#### 4.4 2010–2011: The Third Window of Opportunity: Utilizing Mobile and Tablet Systems for Developing Differentiated Products and Establishing a Digital Paid Content Culture

When tablet PCs and smartphones arrived and were widely used for media consumption, the scope of action opened up again and publishers received a third major opportunity to get over their traditional business model and to shift their strategic focus from the advertising to the readership market: as mobile operating systems like Google Android or Apple's iOS created completely new environments for media consumption and relied on easy-to-use technologies for accessing and paying for media content, publishers faced the strategic alternative to establish a new paid content culture for tablet or mobile systems. With the introduction of tablet systems and smartphones, such as Apple's iPhone and iPad, many of the limiting technological restrictions news publishers were exposed to in terms of paid content were dissolved. First, mobile operating systems like iOS or Android introduced app systems and, thus, the possibility to create closed product environments on computing systems. Second, such tablet systems relied on technologies that eased the process of paying for content. Third, the users became independent from sitting in front of a desktop computer. Instead, they were able to consume news content at different places, for instance on a sofa, in a train, or in the park. Additionally, tablet PCs altered the media consumption process: users did not need a mouse or keyboard anymore but could browse the news with their fingers, resembling the former product concept of printed newspapers. However, although most of the observed publishers released paid content apps, nearly all of them retained free access to their news pages, offering similar or in most cases even the same content. When the advertising market started to recover from its second crisis in 2010, publishers mainly intended to expand their brands by means of a coexistence of app and online offerings. Because users could (and can still) access the publishers' web pages through browsers on their smartphones and tablet PCs, the use of paid news apps remained on a low level. Ultimately, it was another normative decision (see Table 1 for a description of the second normative lock-in) to keep free content news pages accessible: because the advertising market recovered again, publishers aimed to utilize these new digital technologies for stimulating the digital advertising business once more.

*“Let's assume that (...) tablet PCs become established as highly attractive advertising medium. Then, the question arises why you should restrict the coverage of an app by subscription fees. (...) The question regarding the digital business model [paid or free] is still unanswered.”*  
(Manager 29, trade press interview)

#### 4.5 Since 2012: The Re-emergence of a Resource-based Lock-in

The coexistence of paid but rarely purchased apps and heavily used free online news pages undermined the development of a paid content culture as a strategic alternative to the established business model. In addition, publishers also became more and more skeptical about whether their content still had sufficient quality to justify paid content approaches. Due to the necessary savings during the decade of crisis, editorial offices had to reduce their scope of service drastically. Consequently, news publishers now find themselves confronted with numerous competitors from other industry segments, such as magazines or TV stations, which offer similar content in the digital sphere in addition to their original businesses.

*“You decide to reduce the costs—it does not work; you decide to offer free content on the Internet—does not work either; you invent a paid newspaper app for the iPad—could work, but then, the ARD [public television] releases a free app and you dramatically lose coverage.”*  
(Manager 28, keynote speech media trade show)

Thus, newspaper publishers are still bound to their ad-based business model that requires them to offer digital news for free. Overcoming this entrapment and opening up the scope of action again would now require the publishers to make major investments in their resource base, i.e., in differentiating

their content as qualitatively superior. Considering the low revenues generated in both the advertising and readership markets, such investments currently seem difficult to realize, as outlined in Table 1, which provides an overview of the findings in all investigated time periods (4.1–4.5).

Description of news publishers' lock-in	Representative supporting data
<p><b>Time period 1: 1995–2000, cognitive lock-in</b></p> <ul style="list-style-type: none"> <li>• News publishers started to develop digital businesses in the second half of the 1990s.</li> <li>• Compared with the printed product, online products were evaluated as unattractive both in advertising and in consumer environments.</li> <li>• Furthermore, publishers could not imagine that some of their core businesses in the advertising market could also exist without producing content.</li> <li>• When firms like the “Scout Group” started online classified ad portals, publishers did not believe in their success, perceiving themselves as offering superior products in both the advertising market as well as the readership market.</li> <li>• However, publishers felt the need to be present in the web with their newspaper brands.</li> <li>• Free online content was regarded as a suitable self-advertisement for the printed products.</li> </ul> <p><i>Publishing paid digital news without the need of major advertising revenues was not recognized as a potential strategic alternative.</i></p>	<p>Manager 6: “Of course, you can go to a news page but news consumption is quite different there. You click on and on but you won’t get the deep overview like in the printed product.”</p> <p>Manager 2: “... you could not imagine that there is someone who will be able to corrupt your business model. And who was Scout when being founded—a few people and a bit money from Beisheim, that’s it.”</p> <p>Manager 16: “There was no business model in the 1990s but it was obvious that a journalistic brand has to be present in the online segment.”</p> <p>Manager 23: “In 1997, my arguments were: Media use shifts to the web and we need to be present there.”</p>
<p><b>Time period 2: 2001–2007, normative lock-in</b></p> <ul style="list-style-type: none"> <li>• When the dot-com bubble burst in 2001, news publishers were confronted with a massive loss in advertising revenues.</li> <li>• After 2001, the online advertising market grew again, whereas revenues in the print advertising market remained on a low level.</li> <li>• Publishers started the attempt to utilize digitization for recovering their advertising business.</li> <li>• They developed free online content strategies to maximize the coverage of online news brands with the aim to re-gain attractiveness in the advertising market.</li> </ul> <p><i>Publishing paid digital news was perceived as disadvantageous for trying to recover the news brands’ advertising markets and was therefore not evaluated as a suitable strategic alternative.</i></p>	<p>Manager 12: “The newspaper is in a structural declining process. ... It is very important to gain [digital advertising] market share to compensate this effect.”</p> <p>Manager 28 (trade press interview): “The future of digital media will be about catching up with the world’s Googles and Ebays.”</p> <p>Manager 22: “I think, if a publisher had invented Ebay, we would not have today’s problems.”</p>
<p><b>Time period 3: 2008–2009, resource-based lock-in</b></p> <ul style="list-style-type: none"> <li>• A second major advertising crisis in 2008, deeply linked to the worldwide financial crisis, made clear that news publishers would most likely be unable to earn enough advertising revenues in the digital sphere to refinance the efforts in producing high-quality content.</li> <li>• Consequently, an intensive paid-content debate started.</li> <li>• News publishers exposed themselves to a comprehensive and deeply inscribed free content culture of news consumption.</li> <li>• News publishers noticed that it probably was a mistake to publish online news for free but that the effects were irreversible in the short run.</li> </ul> <p><i>Publishing paid digital news was hardly realizable in the short or even medium run because of the established online free news consumption culture. Publishers had no suitable resources (i.e., contents or technologies) to overcome or change these cultural restrictions. As of 2008, paid online news content was no viable strategic alternative.</i></p>	<p>Manager 19: “Everyone says so: in a certain sense, free content is a birth defect of the Internet. You can’t correct a birth defect.”</p> <p>Manager 28 (trade press interview): “The free content culture is a dramatic mistake of early decisions.”</p> <p>Manager 21: “You can calculate the potential loss in coverage [caused by an online pay wall]: we have examples for minus 80 percent.”</p>
<p><b>Time period 4: 2010–2011, normative lock-in</b></p> <ul style="list-style-type: none"> <li>• Tablet systems and smartphones dissolved many of the limiting technological restrictions news publishers were exposed to.</li> <li>• However, at the same time, the advertising market recovered again and publishers recognized the chance to expand their brands by adding app products to their digital portfolio.</li> <li>• The tablet PC was perceived as a very attractive product for advertisers.</li> <li>• Yet, paid news apps and (nearly the same) free online news content co-existed.</li> </ul>	<p>Manager 12: “There are many media businesses that work fantastic with free content, e.g., TV [in Germany], radio, the whole Bertelsmann-Group has built its business on the distribution of free content. (...) The problem of our news portals is that the advertising effect of online advertisements is still too low. (...) The iPad is a chance here.”</p>

<ul style="list-style-type: none"> <li>• Even for tablet apps, free content models were intensively debated as a further option to generate revenues in the advertising market. <i>Paid apps were not evaluated as a strategic alternative to (free) online news portals. Due to the re-gaining advertising market, focusing on the advertising potentials of new technologies for news publishers was (again) perceived as the superior choice compared with attempts to change the free content culture.</i></li> </ul>	<p>Manager 23: “We have also had paid-content debates before. We usually talk about that when it gets economically critical. But as soon as the advertising market picks up speed again and you take notice that nobody is interested in paying for news, it is no longer an issue.”                  Manager 12: “The opportunity of the iPad is (...) to get access to TV-advertising revenues. (...) You have the possibility to integrate motion pictures in the newspaper environment.”</p>
<p><b>Time period 5: Since 2012, resource-based lock-in</b></p> <ul style="list-style-type: none"> <li>• Because the overall revenues had remained on a very low level for many years, news publishers had to reduce their editorial offices by up to 70 percent, resulting in a drastic decay of content quality.</li> <li>• When discussing opportunities for digital paid content now, the branch highlights that the content they produce is not of a sufficient quality to differentiate the digital newspaper product from free deals, such as free news pages or apps of TV stations and magazines with similar content. <i>Publishing paid digital news is no strategic alternative for the core market, as long as the digital news product fails to have a sufficient quality to differentiate it from competing free news offerings in other sub branches. Major investments in content production would be necessary to consider an attempt to overcome the free content culture of news consumption.</i></li> </ul>	<p>Manager 21: “I’m fundamentally skeptical whether there could be willingness to pay for content that is accessible for free in so many portals, anyhow.”                  Manager 9: “There are no more key media in a sense that you commit yourself to a specific news brand.”                  Manager 21: “We publish news you get at 20 different places at the same time. (...) Making this news subject to charge just doesn’t match my idea of demand and supply.”</p>

Table 1. Overview of publishers’ lock-in situations

## 5 Discussion: Lock-in as a Process

According to path dependence theory, firms that reproduce a strategic path do not perceive any alternative to their strategic pattern and, therefore, feel constrained in their possibilities to achieve strategic change (Sydow et al., 2009). However, this circumstance is not equivalent to not having strategic options available. Only in case of resource-based lock-ins, affected firms have no scope of action available to deviate from strategic paths (Rothmann and Koch, 2014). Our results show that path-dependent firms may be exposed to a series of windows of opportunity which, however, remain unexploited even in times of crisis. Thus, lock-ins can continuously alternate between resource-based, cognitive, and normative forms, as new market opportunities emerge and disappear.

Furthermore, we show how the forms of lock-in may unfold over time and inhibit the realization of market opportunities of digitization. Whereas firms may initially fail to recognize these strategic options in a cognitive lock-in or reject these in a normative lock-in, such lock-ins may become resource-based over time. In particular, even if the news publishers had actively attempted to leave the strategic path of renouncing revenues from selling produced content online during the second major industry crisis, the challenge to succeed in this aim would have been much higher as compared with the first years of product digitization in the newspaper industry, such that news publishers had no sufficient corridor of options left. Thus, although the digitization of work and life may generate new strategic options (Drnevich and Croson, 2013), our findings show that their strategic potential may vanish over time and windows of opportunity are eventually closed.

However, our results also show that firms in resource-based lock-ins may not be trapped without having any alternative for an unlimited period of time. Instead, their scope of action may be broadened by further environmental changes. Technological advances such as introduced smartphones and tablet PCs opened up yet another window of opportunity for news publishers, which these firms missed again for normative reasons. Thus, firms in resource-based lock-ins may not entirely be left behind without any prospects. In order to be able to realize digital business strategies (Bharadwaj et al., 2013), path-dependent firms should become prepared for further environmental changes to exploit emerging alternatives to the established strategic pattern. Such processes are reminiscent of “dynamic

capabilities,” a firm’s ability to adapt its resource base to changed environmental conditions (Eisenhardt and Martin, 2000; Teece et al., 1997) with entrepreneurial alertness—the ability to recognize market opportunities—as a central component to spur intra-firm momentum for organizational change (Sambamurthy et al., 2003). Particularly the developments of consumers’ digital lives deserve large attention in monitoring processes of dynamic capabilities because of the power of digitization to transform markets (Mithas et al., 2013). However, these developments remain underemphasized both in theory and practice (Yoo, 2010), particularly in path-dependent firms in cognitive or normative lock-ins, and become ever more complex (Boland et al., 2007).

Because path-dependent firms are ascribed to have lost their dynamic capabilities over time (Teece et al., 1997), these firms can hardly be expected to break strategic paths by leveraging their own resources. Accordingly, news publishers currently seem to be unable to modify their core competences, i.e., producing journalistic content and selling ads (Rothmann and Koch, 2014), which would be required to realize market opportunities of digitization (Bharadwaj et al., 2013); instead, they rely on digitized products to attempt to restore the success of their established business model and do not realize off-path opportunities of digitization (Rothmann and Koch, 2014). Thus, path dependence seems to set a boundary condition of digitized work and life as enablers of dynamic capabilities (Drnevich and Croson, 2013). Conversely, the case of newspaper digitization shows exceptionally: how work and life transform into the digital sphere is highly influenced by firms’ abilities to utilize digital technologies for adapting their business models to changing conditions. Therefore, although the digitization of work and life may generate a continuous stream of strategic options, firms in resource-based lock-ins depend on incidents in their environment that generate exploitable market opportunities. These environmental changes may eventually alter their form of firms’ lock-ins to a cognitive or normative form, which can be overcome by unfreezing and changing the underlying cognitive and normative patterns (Sydow et al., 2009).

Although we emphasize the importance of environmental changes evoked by the digitization of work and life as a major opportunity for firms to break paths, we note that firms do not solely depend on exogenous shocks to re-open their scope of action. Instead, our results also show that path-dependent firms themselves may be responsible for the aggravation and/or change of forms of lock-ins with their strategic decisions. The emerged lack of willingness to pay for digital news was, nonetheless, initiated by their choice to make their produced content freely accessible to reproduce the strategic path, as there had not been any possibility for consumers to consume content of daily quality news publishers for free, neither in printed nor digital forms. Particularly for new products and services for which there is no market yet, markets need to be created by generating willingness to pay (Schmidt and Keil, 2013). This especially holds true for digital products and services, such as digital news in its early days, for which universal adoption and use by consumers cannot be assumed (Koufaris, 2002). Thus, instead of relying on the emergence of digital market opportunities, business success in the digital world may also require firms to generate new strategic options beyond the established strategic pattern (Rothmann and Koch, 2014) by generating willingness to pay for new products and services.

Our research results should be contemplated in light of a number of limitations. The results are drawn from a qualitative case study and are, therefore, by no means statistically generalizable. However, this is not the aim of qualitative research. Instead, this methodology facilitates the obtainment of rich empirical insights into complex social phenomena to gain novel theoretical findings by *analytical* generalization (Yin, 2009). In doing so, we unveiled those forms of lock-in that were dominant in each period. However, lock-ins hardly appear in pure forms but instead often overlap in a way that one form dominates the other (Rothmann and Koch, 2014). Taking into consideration the interplay between dominant and latent forms of lock-in could generate insightful contributions to extending our knowledge of the evolution of the scope of action in lock-ins, which we regard as fruitful avenue for future research. Furthermore, although the joint lock-in of firms in this industry suggested an embedded-single case design, this design does not facilitate considerations of firm-idiosyncratic differences. For instance, the ownership structure of news publishers are quite different, which may

result in diverging abilities to leverage digital technology once an opportunity is recognized (Schäfferling et al., 2012). The same holds true for cross-national differences between individual firms. Nevertheless, the cognitive and normative barriers to exploiting such opportunities became manifest in an industry-level discourse (Phillips and Hardy, 2002), which may explain why all firms in this industry—even worldwide—were bound to the same restrictions (Oestreicher-Singer and Zalmanson, 2013). We regard this phenomenon as a fruitful direction for further research.

## 6 Conclusion

Our research question was: *How does the scope of action evolve in lock-ins?* Drawing on path dependence theory, we conducted a case study of the German newspaper industry and found that the range of potential strategic options continuously changes with the emergence of new market opportunities. However, cognitive and normative restrictions inhibit the perception of new strategic options as viable alternatives until windows of opportunity close. Nevertheless, the emergence of new market opportunities may eventually re-broaden the narrowed scope of action and provide further chances to escape the established strategic pattern.

Our paper provides several theoretical contributions. First, we investigate the role of digital technology in the development of business strategies and, thus, respond to the call of Bharadwaj et al. (2013). In particular, we show that the digitization of work and life may open up a stream of opportunities but their exploitation requires firms to be able to recognize them by continuously being sensible to new technological and social changes and to respond with agility or by shaping new market opportunities that are based on technological advances. Second, whereas the IT context is underrepresented in strategic management research (Drnevich and Croson, 2013), we provide empirical evidence for the role of technology in the availability and evaluation of strategic options. In particular, our longitudinal analysis of a lock-in provides a process perspective on the evolution of the scope of action and outlines the digitization of work and life as a major chance for firms to break paths, a field that desperately seeks further clarification (Sydow et al., 2009).

Third, whereas prior research has contributed valuable insights into the emergence of paths (Dobusch and Schüßler, 2013), we focused our research efforts on the lock-in phase of path dependence. In particular, we show that the scope of action continuously alternates between forms of lock-in that can be overcome and forms that are hardly escapable. Correspondingly, the digitization of the newspaper industry did not open just one window of opportunity that publishers missed. Instead, market changes provided various opportunities in time, which were not realized mainly because of cognitive and normative reasons. Thus, our process perspective on the lock-in phase provides fine-grained insights into the dynamics of the forms of lock-in and, therefore, provides a comprehensive answer to the question why some firms have been unable to exploit the market opportunities of digitization.

Our study also has practical implications. The process perspective on the lock-in phase of path dependence clarifies that the appropriateness of methods to break strategic paths varies over time and that the efficacy of applied methods has temporal constraints. Furthermore, our analysis shows that the crisis of news publishers is not merely attributable to technological and social changes that have virtually eliminated the willingness to pay for digital content. Instead, news publishers have had a series of opportunities that they did not exploit. Although various windows of opportunity have already closed, we show that news publishers may still receive further chances. Even if these firms may currently be trapped in a resource-based lock-in, future market developments may re-broaden their scope of action. In order to exploit emerging market opportunities, they must be sensible to these developments in the environment. As particularly cognitive and normative lock-ins can generally be dissolved by organizational adjustments (Sydow et al., 2009), news publishers may still have a promising future—even in the digital sphere.

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