The Unfolding of Value Sources During Online Business Model Transformation

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Abstract

Purpose: In the magazine publishing industry, viable online business models are still rare to absent. To prepare for the ‘digital future’ and safeguard their long-term survival, many publishers are currently in the process of transforming their online business model. Against this backdrop, this study aims to develop a deeper understanding of (1) how the different building blocks of an online business model are transformed over time and (2) how sources of value creation unfold during this transformation process.

Methodology: To answer our research question, we conducted a longitudinal case study with a leading German business magazine publisher (called BIZ). Data was triangulated from multiple sources including interviews, internal documents, and direct observations.

Findings: Based on our case study, we find that BIZ used the transformation process to differentiate its online business model from its traditional print business model along several dimensions, and that BIZ’s online business model changed from an efficiency- to a complementarity- to a novelty-based model during this process.

Research implications: Our findings suggest that different business model transformation phases relate to different value sources, questioning the appropriateness of value source-based approaches for classifying business models.

Practical implications: The results of our case study highlight the need for online-offline business model differentiation and point to the important distinction between service and product differentiation.

Originality: Our study contributes to the business model literature by applying a dynamic and holistic perspective on the link between online business model changes and unfolding value sources.

Keywords: Online business model, Business model dimensions and elements, Transformation process, Value sources, Magazine publishing industry, Case study.


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Introduction

Rapid advances in Internet-based technologies have provided companies with new business opportunities (Rayport and Sviokla, 1995) and prompted many to supplement their traditional offline business models (BMs) with new online BMs. An online BM can be described as a "blueprint of how a company does business [on the Internet]" (Osterwalder et al., 2005, p. 2). In many industries such as entertainment, media, retail and software, the relative importance of online BMs is continuously increasing (e.g., Chan-Olmsted and Ha, 2003; Gebauer and Ginsburg, 2010; Swatman et al., 2006). This is particularly true for the magazine publishing industry, where changing customer demands led to a steady decrease in print copy sales and print advertising revenues (e.g., Krüger et al., 2004; Mottweiler et al., 2013). To prepare for the ‘digital’ future and to cushion the decrease in print revenues, magazine publishers introduced new online BMs by offering free content on ad-financed websites (Wellbrock and Schnittka, 2014). Nonetheless, most publishers continue to rely heavily on their offline BM since profitable online BMs are still rare to absent (Silva, 2011). The struggle for profitability is mainly driven by the unwillingness of users to pay for online content (Chyi, 2005). Against this backdrop, many magazine publishers are currently transforming their online BM in an effort to make it profitable and to safeguard their long-term survival and success.

Over the last fifteen years, research on (online) BM transformation has accumulated a growing body of knowledge. Specifically, existing studies contribute to a deeper understanding of the barriers and drivers (e.g., Chesbrough, 2010), the types (e.g., Cavalcante et al., 2011), and the phases of BM transformation (e.g., Kuivalainen et al., 2009) as well as the role of capabilities (e.g., Khanagha et al., 2014) and experimentation (e.g., Sosna et al., 2010) in transforming BMs. Moreover, earlier research establishes the link between BM innovation and value creation in terms of organizational performance (e.g., Heij et al., 2014).

Despite these considerable advances, two gaps in the extant literature are particularly noteworthy. First, existing BM research tends to "only consider one or a few pieces of the whole" (Al-Debei and Avison, 2010, p. 364). This shortcoming also applies to prior research in the specific context of the publishing industry, where studies often focus on online revenue models (e.g., Chyi, 2005; Fetscherin and Knolmayer, 2004; Gallaugher et al., 2001). Although the revenue model clearly represents a focal element of any BM, it still represents only one element among many (Al-Debei and Avison, 2010; Osterwalder et al., 2005). Existing research therefore partly fails to provide a more comprehensive understanding of how the different and interrelated building blocks of a BM are affected by transformation processes.

Second, existing research predominantly studies the link between BM transformation and value creation on an aggregated level and from a rather static perspective (e.g., Amit and Zott, 2012; Aspara et al., 2010; Heij et al., 2014; Schief, 2013). In other words, prior studies typically focus on assessing final outcomes (e.g., firm performance) of BM transformation processes at a particular point in time. In contrast, a more dynamic perspective that takes into account how BM changes relate to emerging sources of value creation is widely lacking. Consequently, our understanding of how and in what sequence value sources unfold during BM transformation is still limited.

To address the above-highlighted research gaps, we conducted a longitudinal case study with a German business magazine publisher, BIZ (pseudonym), on the transformation of its online BM. In particular, our study aims to answer the following two research questions (RQ):

- **RQ1:** How are the different building blocks of an online BM transformed over time?
- **RQ2:** How do sources of value creation unfold during the online BM transformation process?

The remainder of the paper is structured as follows: In section 2, we introduce the BM concept and review prior literature on (online) BM transformation and value creation on the Internet. Section 3 describes the research methodology and context. We then outline the initial configuration of BIZ’s online BM in section 4, and present the case results in section 5. Section 6 summarizes key case findings and discusses theoretical and practical implications. We conclude by highlighting our study’s main contributions.
Theoretical background

Business model concept

In many disciplines such as management, entrepreneurship, innovation, and information systems (IS), one can observe an increasing interest in studying BMs (e.g., Johnson et al., 2008; Veit et al., 2014; Zott et al., 2011). Nevertheless, the BM concept is still “fuzzy and vague and there is little consensus on its definition and compositional elements” (Fielt, 2013, p. 86). To address this shortcoming, Al-Debei and Avison (2010) developed a unified BM definition and framework that accounts for “the complex nature of businesses today” (p. 359). Based on their review of 22 well-established BM conceptualizations (e.g., including those by Chesbrough and Rosenbloom, 2002; Hedman and Kalling, 2003; Osterwalder et al., 2005), Al-Debei and Avison define a BM as “an abstract representation […] of all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization [and] all core products and/or services the organization offers” (p. 372), and propose a four-dimensional BM framework (see Fig. 1).

In this study, we adopt the four BM dimensions proposed by Al-Debei and Avison (2010) and tailor them to the particularities of the magazine publishing industry (e.g., Fielt, 2013):

- **Product and services** – captures a company’s market offerings as well as target customers and their preferences. Main customers of magazine publishers include both advertisers (B2B) and readers (B2C).

- **Architecture** – refers to a company’s core resources and their configuration as well as key activities required for generating the market offerings. In the publishing industry, key activities include information gathering, organizing, filtering and synthesizing, as well as content distribution (Rayport and Sviokla, 1995; Wirtz et al., 2010).

- **Network** – describes interactions and relationships with key external partners, such as other publishing houses, news agencies, etc.

- **Finance** – covers the economic configuration including a company’s cost and revenue structures.

Al-Debei and Avison’s (2010) BM framework, which originated from the Information Systems literature, seems to be well suited for understanding, guiding, and structuring our analysis in the specific context of online BM transformation. Furthermore, by adopting their framework, our study takes into the account the multidimensionality of the BM concept (e.g., Günzel and Holm, 2013; Wikström and Ellonen, 2012) and its applicability to the publishing industry. This is in clear contrast to many earlier studies, which focused on a subset of BM dimensions or even a single BM element (e.g., Giessmann and Stanoevska-Slabeva, 2012; Wirtz et al., 2010). Among others, this has led to research on publishers’ online revenue models (e.g., Chyi, 2005; Fetscherin and Knolmayer, 2004; Gallaugher et al., 2001).

Business model transformation

While early research tends to view a company’s BM as static, more recent research emphasizes that BMs are frequently revised and adapted (Sosna et al., 2010) and that they are in “a permanent state of disequilibrium” (Demil and Lecocq, 2010, p. 242). This is referred to as **BM transformation**, which describes how a company’s BM changes over time. Such changes may relate to one specific BM element (e.g., core resources) or may affect several elements (e.g., core resources and products).

Existing research contributes to our knowledge on BM transformation by bracketing the transformation process into phases (e.g., Khanagha et al., 2014; Kuivalainen et al., 2009; Sosna et al., 2010). Relatedly, Chesbrough (2010, p. 362) identifies an “effectual attitude toward business model experimentation” and “internal leaders for business model change” as key facilitators for BM innovation. This is consistent with other studies stressing the importance of experimentation and trial-and-error learning (e.g., Khanagha et al., 2014; Rindova...
and Kotha, 2001) as well as dynamic capabilities (e.g., Daniel and Wilson, 2003; Johansson and Abrahamsson, 2014) in relation to BM innovation and organizational renewal. Furthermore, prior research suggests different types of BM transformation, such as creation, extension, revision, and termination (e.g., Cavalcante et al., 2011; Günzel and Holm, 2013).

Several studies also highlight the central role of a company’s BM for creating customer value (e.g., Teece, 2010; Weill and Woerner, 2013), or, more generally, for creating value for each party in the company’s network (Al-Debei and Avison, 2010; Amit and Zott, 2001). Relatedly, a company’s BM is acknowledged as a source of competitive advantage (e.g., Casadesus-Masanell and Ricart, 2011; Markides and Chariou, 2004) and is used to explain firm performance in terms of profitability, revenue, and headcount growth (e.g., Amit and Zott, 2012; Heij et al., 2014; Schief, 2013). However, given the predominant focus on aggregated BM transformation outcomes (e.g., competitive advantage or firm performance), existing research tends to oversimplify the relationship between BM transformation and value creation. This is consistent with Amit and Zott (2001) who identify four sources of value creation on the Internet, thereby describing more direct outcomes of online BM transformation processes.

**Sources of value creation on the Internet**

Amit and Zott (2001) argue that explaining the value creation potentials of online business (models) goes beyond the scope of single entrepreneurship and strategic management theories. Drawing on and integrating different theoretical perspectives, such as the resource-based view of the firm (Barney, 1991) and Porter’s (1985) value chain framework, Amit and Zott (2001) identify four key sources of value creation on the Internet: efficiency, complementarities, novelty, and lock-in (see Fig. 2).

**Efficiency** relates to lower transaction costs in online business and can be assessed in comparison to a company’s offline business or other companies’ online businesses (Amit and Zott, 2001). Specifically, the Internet helps reduce information asymmetries (Gregor et al., 2006) as well as costs related to marketing, sales, distribution, and coordination (e.g., Bakos and Treacy, 1986). It also enables improved transaction scalability, speed, and staff productivity (Amit and Zott, 2001).

**Complementarities** refer to the value-enhancing effect of (positive) interdependencies among companies (e.g., access to products, services, and resources of a partner company), between online and offline BMs, as well as between different online BM elements (Amit and Zott, 2012).

**Novelty** concerns value creation potentials that are new to a given company’s (online) BM, and thus “captures the degree of BM innovation that is embodied by the activity system” (Amit and Zott, 2012, pp. 45-46). The Internet enables not only new online products and services, but also access to new customer groups and data as well as the development of new market capabilities. Furthermore, it enables new transaction structures (e.g., Ebay) and helps bring together market actors that were not previously connected (Amit and Zott, 2001).

![Fig. 2 Value sources in online business (based on Amit and Zott, 2001)](image-url)
Lock-in refers to BM features that “create switching costs or enhanced incentives for [customers] to stay and transact within the activity system” (Amit and Zott, 2012, p. 45-46). For example, the Internet enables companies to foster customer involvement and participation (e.g., through user-generated content) and to benefit from network externalities, which occur “when the value created for customers increases with the size of the customer base” (Amit and Zott, 2001, p. 507).

It is important to note that Amit and Zott’s (2001) study adopts a broad view of value, which refers to “the total value created in [online] transactions regardless of whether it is the firm, the customer, or any other participant in the transaction who appropriates that value” (p. 503). Our study, however, adopts a more narrow view of value by focusing on value creation potentials from the perspective of the firm that runs the online BM.

In summary, our study draws on two well-established (structural) frameworks: Al Debei and Avison’s (2010) BM framework for conceptualizing the building blocks of an online BM and Amit and Zott’s (2001) value-source framework for conceptualizing the value sources that result from (changes to) the online BM configuration. ‘Continuously’ applying these two frameworks at different points in time enabled us to explore the dynamics and behavioral aspects of the online BM transformation process in a structured manner, and thus to answer our research questions. Interestingly, while several studies use Amit and Zott’s value-source framework to classify BMs in terms of their dominant source of value creation (e.g., Bornemann, 2009; Johansson and Abrahamsson, 2014; Zott and Amit, 2010), our study uses their framework to characterize online BM dynamics during the transformation process.

Research methodology
To answer our research questions, we conducted a longitudinal single-case study with a major German business magazine publisher called BIZ (pseudonym). The case-study approach is particularly suitable for studying “how” research questions (Yin, 2014), and allowed us to conduct an in-depth investigation of the transformation process of BIZ’s online BM – our focal unit of analysis – in its real-life context and over an extended period of time, 2010-2014 (Flyvbjerg, 2006; Yin, 2014).

Case context and selection
The magazine (and newspaper) industry “went through more structural changes in the past ten years than in the whole second half of [the 20th] century” (Silva, 2011, p. 301). These changes were primarily driven by the emergence of new Internet-based technologies, including smartphones and tablet PCs, web 2.0 and social media platforms, etc. (Bharadwaj et al., 2013; Wikström and Ellonen, 2012). Most importantly, these technologies provided Internet users with an unprecedented wealth of freely accessible online content, thereby reducing the incentives for customers to buy print copies and pay for content in general (Sumner, 2010). ‘Digital natives’ especially tend to have less appreciation for high-quality, research-intensive content since they often lack “the ability to read deeply and to sustain a prolonged engagement in reading” (Liu, 2005, p. 701). The rise of the Internet age thus led to shrinking print copy sales (see also Fig. 3) and print advertising revenues in the magazine publishing industry, and ultimately to massive market shakeouts. For instance, in the German market, there were 13 business magazines in 2003, while there were only six left in 2013 (IVW, 2014). In contrast, the online advertising market has been growing considerably in recent years. For instance, in Germany, online advertising budgets grew by 69.2% from 2013 to 2014 (Statista, 2014). Consequently, even though profitable online BMs are still rare to absent (Silva, 2011), the relative importance of these BMs is steadily increasing in the magazine publishing industry (Jarren et al., 2012; Mottweiler et al., 2013; Wikström and Ellonen, 2012).

![Fig. 3 Development of German business magazines’ print copy sales (IVW, 2014)](image)
(Flyvbjerg, 2006). This strategy aims to maximize the utility of information from single cases by selecting a case “on the basis of expectations about [its] information content” (p. 230). Specifically, there were two main reasons for selecting BIZ. First, founded in the 1970s, BIZ is an established key player in the German business magazine market, and is considered to be the market leader in its segment. Second, while BIZ’s online BM had been relatively stable since its launch in the mid 2000s, a management review in 2010 triggered a series of major changes to the online BM in subsequent years.

### Data collection

Consistent with established guidelines on case-study research (Eisenhardt, 1989; Yin, 2014), we collected data from multiple sources. This data triangulation allowed us to do pattern matching across data sources and helped us identify convergent lines of inquiry. First, before the main data collection, we scheduled a series of informational meetings with BIZ’s management. These meetings provided us with a solid understanding of BIZ’s history, business context and key events related to the transformation of BIZ’s online BM.

Second, we conducted ten semi-structured interviews with key BIZ representatives on different hierarchical levels and from different functional areas over an extended time period (April to September 2014). Seven interviews were carried out with the managing director of BIZ. Interviewing him multiple times enabled us to develop a detailed understanding of the online BM transformation process and progress. The other interviews were conducted with the online editor in chief (EIC), an online editor, and the senior IT manager. The interviews followed Myers and Newman’s (2007) guidelines for qualitative interviews, and lasted from 30 minutes to over two hours. Before each interview, an interview guideline with sample questions was sent to the interview partner. The interviews were tape-recorded, transcribed, enriched with case notes, and aggregated into a case study database. Follow-up emails and phone calls were used to clarify questions that arose during the interview transcription and data analysis.

Third, we regularly visited the case site, which enabled us to better understand the case context and make direct observations (Yin, 2014). For example, during one visit, we were able to observe how the online EIC used a new website control system to access real-time performance information on BIZ’s online content offerings.

Fourth, the interview partners provided us with internal presentations, monthly management reports, and meeting minutes covering the period from April 2010 through September 2014. We also reviewed internal documentation concerning the implemented changes to the BIZ website and the historical development of the website reach dating back to early 2010.

Fifth, we retrieved external quantitative data from IVW (Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e.V.) and AGOF (Arbeitsgemeinschaft Online Forschung e.V.). On their publicly accessible websites, these associations provide detailed performance data on the reach of BIZ’s website (e.g., website visits).

Sixth and finally, we scanned industry insider blogs and business news websites to gather external qualitative data about BIZ’s online BM developments. The main purpose for collecting such external data was to enrich and validate the data collected internally (Huber and Power, 1985).

### Data analysis

We approached the analysis of our case data with a deep understanding of the theoretical domains of our study (BM transformation and value creation on the Internet). To analyze the collected data, we performed a combination of concept- and data-driven coding (Gibbs, 2010) with help of a qualitative data analysis software (Nvivo 9). We derived the initial coding scheme from the BM dimensions proposed by Al-Debei and Avison (2010) as well as the value sources identified by Amit and Zott (2001), and subsequently refined it by codes that emerged from our line-by-line coding.

The coding was done by the first author in an iterative process. Preliminary results were discussed with the other authors to resolve ambiguities and uncertainties. In these discussions, the authors alternated between constructive and critical positions (Eisenhardt, 1989) to consolidate the coding scheme and ensure consistent coding across the case data. During the coding process, we also wrote memos to document the timeline

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1 Coefficient of reliability = \( \frac{2m}{n1+n2} \), where \( m \) is the number of coding decisions upon which the two coders agree, and \( n1 \) and \( n2 \) are the numbers of coding decisions made by coder 1 and coder 2, respectively.
of events, capture the relationships between different codes, and link the codes with existing literature. We continued the iterative coding process until we reached theoretical saturation, which occurred when no new codes and relationships between codes emerged from our data (Yin, 2014). To ensure the reliability of the coding process, a second, independent researcher (who is not part of the author team) re-coded two randomly selected interview transcripts. We then calculated the inter-rater agreement using Holsti’s (1969) coefficient of reliability, which was 88%. According to Neuendorf (2002), a coefficient of 90% or greater is acceptable in all, and a coefficient of 80% or greater is “acceptable in most situations” (p. 145).

To analyze the process of how BIZ transformed the different dimensions and elements of its online BM, we sorted the developed codes in chronological order. Here, we identified several critical events that triggered a set of related changes. These changes are ‘bracketed’ into four phases and describe the transformation of BIZ’s online BM as well as the related unfolding of value sources between April 2010 (when BIZ performed a critical review of its online BM) and September 2014. According to Langley (1999), a temporal bracketing strategy is well suited for single-case studies such as ours. Finally, we compared the results of our analysis with prior research results to draw and explain conclusions, and also discussed our conclusions with BIZ management for validation purposes.

**Initial configuration of BIZ’s online business model**

This section depicts the configuration of BIZ’s online BM in early 2010, the starting point of our investigation, along the four BM dimensions (see Fig. 1 above). The main results of our case study follow in section 5.

**Products and services**: The core products of BIZ’s online BM comprised offerings for online readers and advertisers. For its readers, BIZ provided up-to-date business news and business-related articles (such as company analyses) on its website. All website content was generated by BIZ’s online editorial office, and was offered free of charge. For advertisers, BIZ offered static advertising formats (e.g., online banners), either separately or combined with print advertising space. The targeted customers were middle- and upper-class business people seeking thoroughly researched, high-quality business content. Consequently, BIZ targeted advertisers selling products and services that match with the preferences of the targeted readers, e.g., luxury goods and private wealth management services.

**Architecture**: In 2010, core resources of BIZ’s online BM included the editorial office staffed with highly skilled business journalists as well as the brand that the BIZ website ‘inherited’ from the print magazine. The latter implies that BIZ’s online offerings also had a reputation for high-quality, investigative business journalism. The managing director highlighted the importance of the (offline) brand for BIZ’s online BM:

“The brand [BIZ] is a gift for both the print and the online advertising market because it justifies higher advertising prices and because everyone immediately understands that it addresses a premium target group...”

(Managing director)

At this point in time, the online editorial office was part of an affiliate company whose management, along with BIZ management, were jointly responsible for BIZ’s online BM. Key activities in the online BM related to data and information sourcing as well as online content creation and publication. On average, each online editor published one content item (business news/article) per day on the website.

**Network**: Back in 2010, the most important external partners within BIZ’s online network were news agencies and freelance editors. Furthermore, BIZ outsourced most back-office activities, such as human resources management, sales of advertising space, and IT services (e.g., hosting and maintenance of the website editorial system) to external service providers. In contrast, all editorial activities were carried out by BIZ’s online editorial office.

**Finance**: BIZ’s online BM was mainly based on a single-revenue source, namely, selling advertising space to business customers. Additional revenues from selling proprietary content to other news websites were only marginal. In 2010, personnel expenses for the online editorial staff clearly dominate the cost structure of BIZ’s online BM. As the advertising revenues did not cover the incurred cost, BIZ’s online BM had to be cross-subsidized by the print BM.

2 All interview quotes were translated from German to English.
Transformation and value sources of BIZ’s online business model

Below we map critical events onto the development of the website reach. The transformation of BIZ’s online BM can be divided into four phases, namely consolidation, service addition, service experimentation, and product experimentation (see Fig. 4).

In the following, we present a phase-by-phase account of the critical events that triggered the different BM transformation phases (see Fig. 4 for an overview), the implemented BM changes, and the resulting value sources that unfolded during the respective phases.

Consolidation phase

Since its installation in the late 1990s, BIZ’s online editorial office had steadily grown to 22 editors by 2010, whereas the online reach of BIZ’s website had started to decline steadily since 2008. Adding to this, in 2010, the churn rate of BIZ’s print magazine reached a historical high of almost 12%, which restricted BIZ’s financial ability to cross-subsidize the online BM. Given the unfavorable cost structure of the online BM and the reduced ‘appetite’ to subsidize this BM, BIZ management conducted a critical review of its online strategy in April 2010, which triggered the subsequent consolidation phase. The BM changes implemented in this phase concerned the architecture and finance dimensions of BIZ’s online BM, and were primarily targeted towards increasing the efficiency of BIZ’s online operations.

First, BIZ’s online editorial office was carved out from an affiliate company, where it had been pooled together with other online editorial offices of the publishing group. It was transferred into a separate legal entity and formally assigned to BIZ. As a consequence, BIZ management gained a clearer understanding of the cost and revenue structures of its online BM, thereby improving financial transparency (efficiency), and was able to exercise direct control over its online editorial office (efficiency). The revised company structure also enabled BIZ to strengthen the collaboration between its online and print editorial offices by providing online editors easier access to the editorial resources of the print magazine (complementarities). For example, online editors benefitted from the business and editorial knowledge as well as the informant networks of their print colleagues. The managing director and the print EIC of BIZ commented on the closer organizational in-
tegration between the online and offline BMs, thereby also highlighting the importance of considering the transformation of the online BM from a top-down perspective as well as from a bottom-up perspective:

“...we came to the conclusion that we have to consider the [digital] transformation from an overall company perspective and that we cannot operate [our offline and online businesses] completely separately.”

(Managing director)

“[From now on, our] print and online editorial offices will operate in close alignment and answer our claim of ‘first-hand business journalism’ on all channels.”

(Print EIC)

Moreover, the reorganization of BIZ’s company structure was accompanied by a cost-cutting initiative. Here, BIZ decided to lay off more than 30% of its online editors. Despite the reduced headcount, the remaining online editors managed to increase their productivity (efficiency) and limited the decline of website visits to 7% in the same time period.

Service addition phase
A continuing decline in website visits further increased the pressure on BIZ’s management to find a viable BM for its online activities and triggered the second transformation phase, referred to as service addition phase. Here, BIZ initiated substantial changes that affected the products & services, network, and finance dimensions of its online BM. These changes primarily resulted in complementarities with partner firms as well as between BIZ’s online content and its new online services. They enabled BIZ to double its website visits (see Fig. 4).

In 2011, BIZ entered into a joint venture with an affiliate company for the purpose of launching a career service portal, which included job postings and career-related content such as company, industry, and job portraits. This broadened BIZ’s targeted customer group of middle- and upper-class business professionals to younger people with a general interest in business topics (e.g., job seekers). The online EIC highlighted the rationale of this step as follows:

“The idea behind the [career service portal] was to attract people who are at the beginning of their career, who need a pension plan, who earn their first money, who want to buy their first car, who are eventually also the talents looking for a job.” (Online EIC)

An affiliate company managed the design and implementation of the career service portal and an external firm with a particular focus on offering (online) career services was contracted for the underlying job database. BIZ and the affiliate supplied the service portal with career-related content:

“...there are a lot of things that we can transfer from our website [to the career portal]: for example, when we report on the top employers, or when we do a salary report.” (Managing director)

The service portal was offered for free, but created an additional revenue stream in terms of service-related advertising revenues.

Regarding the value sources that unfolded during the service addition phase, the decision to offer online career services represented a novelty for BIZ. The significant increase in website visits during this phase, however, can be mainly attributed to complementarities enabled by the joint venture. First, BIZ gained access to the affiliate’s editorial resources and the two pooled their editorial staff to generate or leverage content for the career portal. Second, BIZ gained access to the customer groups of both the affiliate and job database provider. Third, BIZ observed considerable ‘transit’ traffic on its website, i.e., website visitors who accessed the BIZ website via the service portal.

Service experimentation phase
Inspired by the positive development of the website reach, a newly hired online EIC started to experiment with additional services, triggering a new transformation phase referred to as the service experimentation phase. The related changes created a need for new capabilities (i.e., competences) and affected the products & services, architecture, and network dimensions of BIZ’s online BM. Ultimately, BIZ unfolded new value sources in terms of both complementarities and novelty.

The new online EIC expanded the scope of the joint
venture with the affiliate company by an online stock information service. Furthermore, he assigned BIZ-internal staff to design and implement three additional online services. Consequently, the in-house development of service concepts became another key activity of BIZ’s online BM.

One of these services was an online real estate service (novelty). The real-estate listings were sourced from another external partner firm. Herewith, BIZ not only gained access to complementary data resources, but also created synergies between this new service and the print magazine since print editors used the service data to write articles on the development of the German real-estate market (complementarities).

From a technical perspective, the other two services were more complex and BIZ experienced a series of setbacks during their implementation. After almost one year, BIZ’s management finally decided to cancel the implementation of these services:

“...there was this watch service, where we failed to merge different databases. And this was exactly the point: an [online] editor in chief, who does not really have the competences of an IT guy, still tried to manage such a project.” (Managing director)

Although BIZ managed to successfully implement and launch at least two new online services (real estate and stock information), these services did not result in the anticipated further growth of the website reach. Given their primary focus on BIZ’s original target customer group, these services only seemed to have led to a redistribution of website traffic:

“The final outcome was [that the real estate service] did not result in a significant increase of the overall website reach. [...] The service itself was successful, but the clicks [generated by this service] were missing in other areas.” (Managing director)

The failed services led to a conflict regarding the future development of BIZ’s online BM: While the management was convinced that the existing core product did not have the potential to achieve a sufficient website reach, the print EIC argued that the online editorial office needed to embrace the core values of the print magazine (i.e., investigative business journalism). To resolve this conflict, BIZ management replaced the print and online EICs and revised the editorial management structure: A new shared EIC and two Vice-EICs (one for online and one for print) were from now on responsible for BIZ’s print and online activities. This change enabled synergies between BIZ’s online and offline editorial resources in two ways (complementarities). First, both benefited from the editorial competences and network of the new shared EIC. Second, the new online Vice-EIC worked as print editor for about 20% of his time, thereby fostering the exchange of information between the editorial offices. Consequently, BIZ was able to leverage the complementary activities to its strategic advantage (Porter, 1996). Furthermore, with the new ‘protagonists’, BIZ also acquired a new organizational mindset towards digital topics (novelty). Ultimately, this led to an increased openness and willingness to experiment with new ‘things’.

**Product experimentation phase**

The fourth transformation phase was characterized by extensive product experimentation, affecting the products & services and architecture dimensions of BIZ’s online BM. It resulted in the unfolding of manifold value sources, with novelty being the dominant value source.

To broaden the targeted customer group (novelty), the new shared EIC extended the original scope of the website’s core product (i.e., elaborated business articles) by including short articles on more lightweight, entertainment topics (e.g., manager rankings). This change also required new modes of content creation. First, acting as so-called ‘trend scouts’, online editors began to curate content. That is, they collected content from various sources (e.g., Internet blogs), verified and summarized the content, and added their own opinions or perspectives. Second, BIZ started to syndicate content, which refers to the procurement of complete articles and news items. Third, BIZ invited industry experts to publish short opinion articles on its website. The managing director and the online EIC of BIZ commented on the implemented changes:

“...we changed the ‘swing’ of the website, which means we changed the product. The product we had in the past was a product that consisted almost entirely of propri-
etary content [...], e.g., company analyses with an unfavorable cost-benefit ratio. We could not continue to operate like this, given that we wanted to become profitable.” (Managing director)

“...we wanted to become more trend-oriented and also more international, so we have to accept that we cannot oversee everything – this is simply not possible, this is too big. However, we can identify other persons [...] or other media.” (Online EIC)

With these change in place, the daily output per editor doubled (efficiency) since the new content formats (novelty) could be produced much faster than the proprietary ones. In addition, the online staff developed new editorial competences (novelty) to produce the new formats. Also, print editors used some trends identified by online editors as input for elaborated articles in the magazine (complementarities).

To strengthen the online marketing of its content and services, BIZ hired a social media expert (Facebook, Twitter) and a search engine optimization (SEO) consultant. The latter, for example, trained online editors on how to formulate headlines so that they are easily retrievable by search engines. Through this, BIZ acquired/developed new content marketing and IT capabilities (novelty). Furthermore, BIZ enriched its website, enabling readers to interact with online editors and to participate in discussions of articles and news with other readers (lock-in). The growing social media presence created new incentives for other readers to participate in BIZ’s social media channels, leading to positive network externalities (lock-in).

For advertisers, BIZ offered new advertising formats (novelty) such as multi-media and native advertising. Being generated by the website’s editorial content system and therefore resembling the regular editorial content, the key advantage of native advertising is that it is not detected by advertising blocker software.

Finally, BIZ implemented a website control system for evaluating the content reach as well as the reading behaviors of online readers. A key feature was the so-called “A/B testing” functionality used for testing two alternative article and news headlines (A and B) and then selecting the headline that ‘clicked better’. Another key system feature was a control panel, which automatically rearranged the order of the articles and news items on BIZ’s website based on their popularity. The website control system provided an unprecedented amount and quality of real-time data on customer behaviors and content performance (novelty). Consequently, the responsiveness of BIZ’s online editorial office increased as they were now able to react on website traffic dips in real-time (efficiency). In addition, the real-time data helped BIZ to better forecast the traffic on its website and to steer its online advertising sales in accordance with expected traffic highs and lows.

**Summary**

The results of our longitudinal case study show that BIZ substantially transformed its online BM during the

<table>
<thead>
<tr>
<th>Phase</th>
<th>Consolidation</th>
<th>Service addition</th>
<th>Service experimentation</th>
<th>Product experimentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td>Critical review of online BM</td>
<td>All-time low of website reach</td>
<td>New online EIC</td>
<td>New shared EIC</td>
</tr>
</tbody>
</table>
| Products & services | | • Introduction of career service  
• Broadening of customer group | • Introduction of additional services (real estate and stock information) | • Extension of core product  
• Further broadening of customer group  
• Additional advertising products (e.g., native advertising) |
<table>
<thead>
<tr>
<th>Architecture</th>
<th>• Spin-off of online editorial office in separate legal unit and assignment to BIZ</th>
<th>• Development of service concepts</th>
<th>• Syndication and curation of online content</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Development of service concepts</td>
<td>• Replacement of print and online EICs and addition of shared EIC</td>
<td>• Hiring of social media expert and SEO consultant</td>
</tr>
<tr>
<td></td>
<td>• Replacement of print and online EICs and addition of shared EIC</td>
<td>• Syndication and curation of online content</td>
<td>• Implementation of website control system</td>
</tr>
<tr>
<td>Network</td>
<td>• Setup of joint venture with affiliate company</td>
<td>• Partnership with external service provider</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>• Reduction of editorial staff</td>
<td>• Addition of service-related advertising revenue stream</td>
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<tr>
<td></td>
<td>• Addtion of service-related advertising revenue stream</td>
<td>• Implementation of website control system</td>
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<tr>
<td>Efficiency</td>
<td>• Direct control</td>
<td>• Increased staff productivity</td>
<td>• Increased responsiveness</td>
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<td></td>
<td>• Improved financial transparency</td>
<td>• Increased staff productivity</td>
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<td></td>
<td>• Increased staff productivity</td>
<td>• Increased staff productivity</td>
<td>• Increased responsiveness</td>
</tr>
<tr>
<td>Complementarities</td>
<td>• Access to print editorial resources</td>
<td>• Access to affiliate’s editorial resources</td>
<td>• Synergies between online and print content (online trend scouting)</td>
</tr>
<tr>
<td></td>
<td>• Access to partners’ customer groups</td>
<td>• Access to partner firm’s data resources</td>
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<tr>
<td></td>
<td>• Synergies between online content and online services (‘transit’ traffic)</td>
<td>• Synergies between online services and print content (real estate data)</td>
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<td></td>
<td>• Synergies between online and offline editorial resources</td>
<td>• Synergies between online and offline editorial resources</td>
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<td></td>
<td>• Synergies between online and print content (online trend scouting)</td>
<td>• Synergies between online and offline editorial resources</td>
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<tr>
<td>Novelty</td>
<td>• New service offering</td>
<td>• New service offerings</td>
<td>• New content formats</td>
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<td></td>
<td>• New organizational mindset</td>
<td>• New organizational mindset</td>
<td>• New customer groups</td>
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<td></td>
<td>• New organizational mindset</td>
<td>• New organizational mindset</td>
<td>• New editorial, marketing, and IT capabilities</td>
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<td>• New content formats</td>
<td>• New organizational mindset</td>
<td>• New advertising formats</td>
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<td>• New content formats</td>
<td>• New organizational mindset</td>
<td>• New real-time data</td>
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<tr>
<td>Lock-in</td>
<td></td>
<td>• Customer participation</td>
<td>• Positive network externalities</td>
</tr>
<tr>
<td>Dominant value</td>
<td>Efficiency</td>
<td>Complementarities</td>
<td>Novelty</td>
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<tr>
<td>source</td>
<td>Efficiency</td>
<td>Complementarities</td>
<td>Novelty</td>
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<tr>
<td>BIZ website</td>
<td>Slight decrease</td>
<td>Strong increase</td>
<td>Low volatility</td>
</tr>
<tr>
<td>development</td>
<td>Slight decrease</td>
<td>Strong increase</td>
<td>Low volatility</td>
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<tr>
<td></td>
<td>Slight decrease</td>
<td>Strong increase</td>
<td>Moderate volatility</td>
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</tbody>
</table>
studied time period (April 2010 to September 2014). Table 1 summarizes the changes implemented in the four BM dimensions (RQ1; see first half of the table below) and the unfolding value sources (RQ2; see second half) along the four phases of the online BM transformation process.

Discussion
Based on a longitudinal case study of a major German magazine publisher, BIZ, we aimed to develop a deeper understanding of (1) how different dimensions and elements of an online BM are transformed over time and (2) how value creation sources unfold during this transformation process. In the following, we discuss theoretical implications of our case findings and suggest promising areas for future research. We then highlight practical implications and discuss the limitations of our study.

Theoretical implications & Future research
Regarding our first research question, we find that the transformation of BIZ’s online BM can be divided into four phases: consolidation, service addition, service experimentation, and product experimentation.

These phases closely resemble the BM transformation phases described in related studies. For example, Kuivalainen et al. (2009) identify three phases (initial steps, rapid growth and crisis, and new growth), which largely match with our phases. In particular, after the consolidation of its online BM (initial steps), BIZ managed to double the number of website visits by expanding its network of partner firms and adding a career service portal to its website (rapid growth). Experimenting with other online services, however, did not yield the expected results leading to the replacement of key managers and the revision of BIZ’s management structure (crisis). Not until BIZ started to experiment with the extension of its core products did the number of website visits reach new peaks (new growth). The observed sequence of the BM transformation process suggests that setbacks (“crises”) paved the way for more significant BM changes. This is consistent with the results of prior studies (e.g., Kuivalainen et al., 2009), which suggest that “a severe crisis can provide a strong impetus […] to initiate deep enough reflection on the currently prevailing dominant logic and status quo of the business model design” (Sosna et al., 2010, p. 397). Furthermore, the transformation process sequence suggests that the BM changes implemented in earlier phases primarily concerned the cost structure, the partner network, and the service offerings, while later changes predominantly affected all elements of the products & services and architecture dimensions.

A key finding of our case study is that BIZ used the transformation process to differentiate its online BM from its traditional print BM. The importance of BM differentiation is also highlighted by prior research. For example, in their multiple-case study of Xerox subsidiaries, Chesbrough and Rosenbloom (2002) show that subsidiaries with a BM that is differentiated from the parent company’s BM performed significantly better than other subsidiaries with a similar BM. Relatedly, Kuivalainen et al. (2009) find that a critical success factor of the online BM of a Finnish magazine publisher was that its “website was established as an independent medium” (p. 148). However, as our study’s results suggest, BM differentiation is by no means limited to the product element of a BM: BIZ’s decision to add new content formats also led to online-offline differentiation in terms of key activities (content sourcing vs. creation) and key capabilities (editorial vs. IT capabilities). Against this backdrop, an interesting opportunity for future research could be to develop an instrument for measuring the level of differentiation between online and offline BMs. Such an instrument may help explain the inconclusive results of prior studies as to whether online and offline BMs complement (e.g., Chyi and Huang, 2011) or cannibalize (e.g., Fetscherin and Knolmayer, 2004) each other.

Another key insight gained from our study relates to how BIZ differentiated its online BM from its offline BM. While BIZ’s decision to add services to its content offerings (service addition and experimentation phases) represents an extension of the online BM, its decision to experiment with new content and formats (product experimentation phase) is a BM revision (Cavalcante et al., 2011). Interestingly, BIZ experienced more problems with extending its online BM than with revising it (e.g., in the service experimentation phase, technical problems with two additional services prompted BIZ to stop the implementation of these services). This observation stands in marked contrast to the results of Cavalcante et al. (2011), who argue that BM revision
is “likely to involve significantly more challenges than business model extension, because it requires more fundamental changes.” (p. 1333). A potential explanation for these contradictory findings relates to BIZ’s transformation sequence of its online BM: At first, BIZ was reluctant to revise its core product. Rather, it focused on making this product more attractive by adding complementary services. Later, BIZ started to think about major changes but this was not before experiencing problems in implementing additional services, which ultimately led to the replacement of the print and online EICs and the addition of the new shared EIC. This pattern of resistance to BM change is in line with earlier research, which finds that companies tend to adhere to organizational routines (Teece et al., 1997) and ways of thinking (Johnson et al., 2008), and that innovation barriers lie in prevailing business values (Chesbrough, 2010; Christensen and Overdorf, 2000). Furthermore, despite the challenges that BIZ experienced in the service experimentation phase, our case data shows that the addition of the career service portal was the BM change with the greatest impact on BIZ’s online performance, helping BIZ double the number of website visits in only 16 months (Fig. 4). This finding calls for future research on the characteristics that qualify a service for a given online BM as well as on the conditions under which a company should develop complementary online services in-house or involve an external partner.

Turning to our second research question, we find that, during the transformation process, BIZ’s online BM changed from an efficiency- to a complementarity- to a novelty-based model. This finding challenges the results of existing studies, which use Amit and Zott’s (2001) value-sources framework to classify the BMs (Bornemann, 2009; Johansson and Abrahamsson, 2014; Zott and Amit, 2010). More specifically, the results of our study show that this classification approach neglects BM dynamics, and is therefore only applicable for ‘static’ BM comparisons (at a particular point in time). Consequently, future research is needed to develop BM classification frameworks that better take into account the dynamic nature of BMs.

Our case results further suggest that the aforementioned dynamics in terms of value-source focus also entailed a shift from short-term considerations (e.g., cost-cutting and profitability) to more long-term considerations (e.g., new capabilities). In other words, the transformation of BIZ’s online BM resulted in a need for, and the development of, new editorial, marketing, and IT capabilities, which helped BIZ prepare for its ‘digital future’. This shift in focus can be explained from a knowledge-based view of the firm. For instance, Kogut and Zander (1992) highlight that “too strong reliance on current profitability can deflect from the wider development of capabilities” (p. 393) and that new capabilities may serve as “platforms into new markets” (p. 395). Our findings also relate to Tushman and Anderson’s (1986) distinction between competence-enhancing and competence-destroying technological shifts. The latter requires the development of new capabilities, which is what BIZ ended up doing when transforming its online BM. The capabilities required for the online BM were fundamentally different from those required for the print BM, and it took BIZ almost four phases to realize this. A potential explanation may be that BIZ is a leader in its industry and it hoped to exploit its offline capabilities to gain competitive advantage in the online space.

Relatedly, Markides (2013) proposes that “managing two different and conflicting business models simultaneously can be framed as an ambidexterity challenge” (p. 313). Hence, we argue that BIZ became more ambidextrous by developing new editorial, marketing, and IT capabilities and by differentiating the online from the offline BM. In this regard, future research could explore the conditions that favor different types of organizational ambidexterity (i.e., spatial, temporal, and contextual) as well as the organizational benefits and challenges associated with each type (Markides, 2013). For example, Gilbert (2006) finds that structural separation (i.e., spatial ambidexterity) decreases the need to integrate the online and offline BMs on the sub-unit level; but, at the same time, increases the need to manage inconsistencies across the BMs on the senior management level. This is consistent with the results of our case study, which point to the importance of considering online BM transformation from both a bottom-up and a top-down perspective. Against this backdrop, future research could also look into the level of online-offline BM integration as well as the integration capabilities and mechanisms that need to be in place to exploit synergies between the online and offline BMs (Markides, 2013; Porter, 1996). Such research
may, for example, draw on the critical role of the “business architect” (Hendrickx, 2015) to develop a deeper understanding of the critical capabilities required to compete with dual BMs.

**Practical implications**

The results of our case study provide valuable implications for companies, especially publishing companies that are currently transforming their online BM. First, for companies that consider adding complementary services to their online product offerings, our findings highlight the need to carefully select the ‘right’ services and partners since the introduction of additional services may require specific capabilities often not available in incumbent firms. For example, BIZ management had to stop the development of more sophisticated online services due to a lack of internal IT capabilities.

Second, our case results indicate that high-quality website content does not necessarily require exclusive reliance on proprietary, research-intensive content. For example, by involving external partners in content creation (e.g., industry experts for opinion articles) and relying on new modes of content creation, BIZ reduced its level of vertical integration without cutting back on the desired level of quality or harming the strong print brand. In addition, leveraging the resources of partner firms facilitated the introduction of new online services, which, in turn, also served the offline BM.

Third, the findings from our case study support the results of earlier studies, which find that focusing on immediate revenues and profitability is too shortsighted and may, in the worst case, jeopardize the company’s long-term survival. Thus, when transforming their online BM, incumbent firms need to make a careful trade-off between ensuring short-term cash inflows by leveraging existing offline capabilities and ensuring long-term competitiveness by developing new online capabilities (Lee and Baskerville, 2003). A particularly effective way to expand a company’s capability base seems to be the engagement in experimentation and trial-and-error learning processes as well as the involvement of consultants to facilitate the former.

Fourth, our case findings provide insight on how to compete with dual BMs. Specifically, our findings point to the importance of differentiating an incumbent firm’s online BM from its traditional offline BM. BM differentiation not only helped BIZ increase the attractiveness of its website but also helped mitigate the risk of cannibalization effects between its ‘free’ website and its print magazine (e.g., Fetscherin and Knolmayer, 2004; Simon and Kadiyali, 2007). In line with prior research results (e.g., Christensen and Overdorf, 2000; Koen et al., 2011; Markides and Charitou, 2004), we found that online BMs require their own ‘playground’ in terms of organizational decision-making and values.

**Limitations**

Our case study results should be interpreted with the following limitations in mind. First, they are based on a single-case study in a specific industry, the magazine publishing industry. To address the problem of results generalizability, we followed established guidelines on conducting single-case study research (Yin, 2014). In particular, our study sheds new empirical light on existing theoretical concepts (Al-Debei and Avison, 2010; Amit and Zott, 2001) for the purpose of analytical generalization as opposed to statistical generalization. Our study also provides a ‘thick’ description of the case context, which allows other researchers to assess to what extent our results can be translated to other company and industry contexts. Second, the four identified online BM transformation phases served primarily as a means for structuring the transformation process of BIZ’s online BM, enabling us to study how value sources unfolded during this process. In contrast, although the four phases resemble the BM transformation phases identified in other studies (e.g., Kuivalainen et al., 2009), the goal of our study was not to develop a process theory that applies to all online BM transformations. For instance, related research indicates that some online BMs take off very slowly but then grow very quickly without consolidation during the first phase. Third, drawing on Amit and Zott’s (2001) seminal article on value creation in online businesses, our case study focuses on sources of value creation (i.e., value creation drivers or potentials). In particular, we studied what and how value sources unfolded from the online BM changes implemented by BIZ. In contrast, the actual value (in terms of profitability, etc.) resulting from the identified value sources was not the focus of our study. Nevertheless, consistent with the knowledge-based view of the firm, some of the identified value sources (e.g., new capabilities) can be regarded
as actual value themselves. Fourth, to investigate how value sources unfolded during the BM transformation process, we assigned new value sources to the transformation phase in which they emerged. Using this approach, we do not know to what extent value sources that unfolded in earlier transformation phases transfer to later phases. A promising area for future research is to study whether and how value sources transfer across BM transformation phases, as well as how companies can sustain value sources once they are established.

Conclusions

Based on a longitudinal case study, we show how a leading German business magazine publisher transformed and differentiated its online BM from its traditional offline BM, and how different value sources unfolded during the transformation process. The study’s main contributions are threefold:

First, earlier BM research tends to focus on single BM dimensions or elements (Al-Debei and Avison, 2010). Taking into account the multidimensionality of the BM concept, our study provides a refined understanding of how a company transforms the different building blocks of its online BM over time. A major conclusion of our study is that earlier transformation phases tend to focus on single BM elements (e.g., cost structure, partner network, and service offerings), while later changes predominantly affected all elements of the products & services and architecture dimensions. On a related note, the results of our study also point to the important distinction between service and product differentiation, and the greater impact of the former on online BM performance.

Second, prior research typically studies the direct link between BM transformation and value creation on an aggregated level (e.g., Heij et al., 2014; Schief, 2013), thereby neglecting the actual sources of value creation. By addressing this research gap, our study contributes to a deeper understanding of how different BM changes relate to distinct value sources.

Third, most existing studies focus on rather static aspects of BM transformation and value creation. In contrast, our study applies a dynamic perspective and shows how BM transformation phases vary in terms of their dominant sources of value creation. Taken together, we believe that our results can inform future research on the ongoing transformation of online BMs in the (magazine) publishing industry as well as in other industries, such as the entertainment, media, retail and software industries, where companies face challenges akin to those in the publishing industry.

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