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Editor, executive and entrepreneur: strategic paradoxes in the digital age

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**EDITOR, EXECUTIVE, AND ENTREPRENEUR:  
STRATEGIC PARADOXES IN THE DIGITAL AGE**

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**Abstract:** To survive in today's increasingly complex business environments, firms must embrace strategic paradoxes: contradictory yet interrelated objectives that persist over time. This can be one of toughest of all leadership challenges, as managers must accept inconsistency and contradictions. In this article, we develop and empirically test a set of hypotheses related to ambidexterity, a key example of a paradoxical strategy. Through our analysis of data from a survey of executive leaders, we find a link between organizational ambidexterity and strategic planning, suggesting that the complexities of navigating in explorative ventures require more explicit strategy work than the old certainties of the legacy business. We identify and discuss inherent paradoxes in 22 industry-specific strategies and their implications for firm performance, where empirical industry data shows a pattern of conflict between explorative growth strategies and exploitative profit strategies. We argue this is just one of the inherent paradoxes in the ambidexterity construct.

**Keywords:** ambidexterity, leadership, strategy, paradoxes, organizational change

## INTRODUCTION

An emerging idea in strategic management studies is that in the highly competitive business environments of the 21<sup>st</sup> century, being very good at just one thing is not good enough. To survive and prosper over time, firms must be *ambidextrous*—able to implement both incremental and revolutionary change—continuously exploiting the existing business while simultaneously exploring new and potentially disruptive market opportunities (March, 1991; O’Reilly & Tushman, 1996). However, exploration and exploitation are associated with conflicting business logics that create fundamental strategic challenges for firms and their leaders (Smith & Tushman, 2005). Exploitation aims to refine products in existing markets, whereas exploration seeks to introduce new products and services to uncharted markets. Undertaken simultaneously, they create a strategic paradox: “contradictory yet interrelated demands embedded in an organization’s goals” (Smith, 2014, p. 1542).

Paradoxes denote tensions that coexist and persist over time, pose competing demands that require ongoing adaptation and change, and defy resolutions (Lewis, 2000). The strategy literature is full of examples of such paradoxes organizations face, including tensions between corporate synergies and business unit specialization, financial viability and social responsibility, or high growth and high profitability; still, we know little about the specific nature and management of strategic paradoxes (Smith, 2014, p. 1593). Effectively implementing and managing contradictory business objectives is complex and challenging, yet a research gap remains regarding exactly how leaders plan and execute paradoxical strategic intent (O’Reilly & Tushman, 2013). This paper addresses this gap by examining how executive leaders manage conflicting strategic priorities in response to environmental and internal pressures for change: Does a readiness for change help organizations simultaneously explore and exploit to “become” ambidextrous? Do multiple, conflicting

objectives lead to more explicit, written strategic planning, or alternatively a more *laissez-faire* approach given the complexities involved?

The empirical setting of this study is the newspaper industry, which provides a particularly relevant context for studying how incumbent firms adapt paradoxical strategies in response to increasingly complex business environments (O'Reilly & Tushman, 2013; Smith et al., 2010). Over the past decade, newspaper readers and advertisers have been migrating to digital media, leaving the industry in a constant state of change. Smith and Lewis (2011), in their study of strategic paradoxes, noted that such increased environmental dynamism may encourage leaders to push the boundaries of both explorative and exploitative strategies. The strategic tensions become further prominent in “complex settings” where there are overlapping technological paradigms. Such is arguably the case in the newspaper industry, where digital media over the past 20 years have competed for primacy over the legacy printed newspaper. For leaders, this introduces a strategic dilemma: Should they focus on what they know well—keeping their current newspaper businesses profitable—or should they attempt to compete with Facebook, Google, Twitter and the like for future digital revenues? The answer is probably that they must do both; an either/or response to these strategic tensions would most likely be inadequate (Smith et al., 2010). In the digital age, leaders may be charged with being editors, executives, and entrepreneurs. As editors, their responsibility is to uphold ethic and journalistic standards across different media platforms. As an executive, they must ensure financial sustainability of current products while growing new revenue streams. As entrepreneurs, they have to outsmart the Silicon Valley start-ups to build new digital business opportunities that disrupt their existing print business. In sum, industry leaders are charged with making choices and trade-offs among competing, conflicting, and often paradoxical strategies (Jansen et al., 2009; March, 1991; Smith et al., 2010; Smith & Lewis, 2011; Tushman & O'Reilly, 1996).

Our contribution to current research on strategic paradoxes and ambidexterity is three-fold: First, our study links a firm's readiness for change to both exploration and exploitation, suggesting such readiness may indeed help firms sustain ambidextrous strategies. Second, we link ambidexterity to strategic planning, suggesting the complexities of navigating explorative ventures require more strategy work than the old certainties of the legacy business. Finally, we discuss paradoxes involving 22 industry-specific strategic initiatives, giving new insights into the financial viability of ambidexterity strategies. In the following section, we propose a set of hypotheses grounded in theory to be empirically tested; then, we present our findings; finally, we conclude the paper with a discussion of the theoretical and practical implications of our study.

### **THEORY AND HYPOTHESES**

One of the cornerstones of modern management theory is the idea that the consistent manipulation of organizational structure and resources is key to financial success. Strategic management can be framed as a series of processes aimed to regulate the actions of the organization to achieve consistent firm performance. But the need for stability can be self-destructive in the long run. Prone to the success paradox (O'Reilly & Tushman, 1996), incumbent firms may resist change, ignoring business strategies regarded as disruptive to the current recipe for success and favoring the activities they know best (Benner & Tushman, 2003; March, 1991). In this view, sometimes called *punctuated equilibrium*, fundamental change occurs only through an interruption—disruption—of the status quo, either by the direct intervention of executive leadership or by an external event such as a new technological paradigm (Christensen, 1997; Romanelli & Tushman, 1986). These disruptions (punctuations) can lead to an upheaval of an organization's deep structures, leaving it in disarray until the disturbance ends and new stability is found. In this view, organizations

inevitably gravitate toward a state of equilibrium in which managers fall back on learned patterns of exploitative response, as “the certainty, speed, proximity, and clarity of feedback ties exploitation to its consequences more quickly and more precisely than is the case with exploration” (March, 1991, p. 73). Levinthal and March (1993) called this the myopia of learning: firms tend to rely on strategies that are proximate, less risky, and more measurable. Such resistance to change is rational, but can also be self-destructive in the long run, as firms and managers risk losing their competitive edge.

**INSERT TABLE 1 ABOUT HERE**

### **Ambidexterity Strategies**

Ambidexterity theories suggest that firms and their managers must overcome these self-enforcing patterns to simultaneously exploit existing business and explore new opportunities in rapidly changing environments (O’Reilly & Tushman, 2008; Taylor & Helfat, 2009; Teece et al., 1997). To remain successful over time, managers and organizations must be able to implement both incremental and revolutionary change (O’Reilly & Tushman, 1996, p. 8). As shown in Table 1, the ambidexterity framing introduces a number of trade-offs on both operational and strategic levels, making it a “key example” of a strategic paradox (Papachroni, 2014; Smith, 2014). The ambidextrous firm must simultaneously pursue both explorative and exploitative strategies that are internally consistent but contradictory across strategies (Smith et al., 2010). This introduces a particular type of leadership challenge, as managers must confront and overcome both personal and organizational needs for consistency (Brown & Eisenhart, 1997; O’Reilly & Tushman, 2013; Smith & Tushman, 2005). Senior executives in particular are regarded as playing an important role in helping organizations attend to contradictory demands and foster

## STRATEGIC PARADOXES IN THE DIGITAL AGE

ambidexterity (See for example Birkinshaw & Gupta, 2013; Gibson & Birkinshaw, 2004; Lubatkin et al., 2006; Raisch & Birkinshaw, 2008; Smith & Tushman, 2005; Tushman & O'Reilly, 2011). Rather than attempting to align and resolve conflicting demands of exploration and exploitation, executive leaders need to embrace divergence and build the capacity to attend to competing and conflicting demands simultaneously (Smith & Lewis, 2011), combining the attributes of rigorous cost cutters and free-thinking entrepreneurs (O'Reilly & Tushman, 1996, 2013). In day-to-day business, managers need to achieve operational efficiencies by making incremental improvements to existing products to exploit existing resources and customers, thereby reducing risk and improving short-term performance. However, to secure a firm's long-term survival, leaders must also plan and prepare for the inevitable revolutions required by discontinuous environmental change (Tushman & O'Reilly, 1996, p. 11). From the perspective of long-term planning, ambidexterity strategies may be particularly challenging because even if the theory suggests firm must pursue explorative and exploitative activities simultaneously, organizations typically look to leaders to provide definitive answers to questions such as, *Should we pursue strategy A or B?* Ambidexterity strategies offer no such resolution, but rather ask, *Can we do both?* Accordingly, leaders must make seemingly rational and consistent choices in the short term, while remaining acutely aware of accepting strategic paradoxes and contradictions in the long term; "Doing so involves consistent inconsistency as managers frequently and dynamically shift decisions" (Smith & Lewis, 2011, p. 392). Such strategic paradoxes defy rational, linear logic, and may foster frustration for the organization's lower-level workers, who experience management as inconsistent, ambivalent, or even hypocritical (Lewis, 2000; Smith, 2014). This can lead to internal pressures to stick with one strategy, but as Birkinshaw and Gupta (2013) point out, why else would firms need managers, if not to override the organization's natural tendency to resist change and help it do things that do not come

naturally? In summary, fostering and leading organizational cultures that can handle both incremental and discontinuous change is perhaps the most demanding aspect of strategic management (O'Reilly & Tushman, 1996, p. 24). The arguments above suggest that readiness for change may be needed for the successful implementation of ambidexterity strategies, leading us to propose the following hypothesis.

*Hypothesis 1: Readiness for Change is Positively Related to Ambidexterity.*

This is in line with previous ambidexterity studies, which suggest that a capacity for change enables firms to both explore and exploit market opportunities (O'Reilly & Tushman, 1996; Papachroni, 2014; Taylor et al., 2009). As Judge and Blocker (2008), pointed out, leaders sensing the need to change is undeniably the first step in firms becoming ambidextrous, but simply acknowledging what must be done is not enough; actually following through and implementing changes to pursue both exploitive and exploratory strategies is likely the biggest hurdle in a firm's pursuit of strategic ambidexterity (p. 920). This leads to the question of whether it is actually possible to plan for ambidexterity—that is, both incremental and discontinuous change. There is a long-standing debate regarding whether strategic planning (defined as an organization's process of defining its objectives and making decisions on allocating its resources to pursue this strategy) is beneficial in unstable environments, with one school of thought arguing that strategies come into existence not as “snapshots in time” (for example, though a written, explicit long-term strategic report/statement) but rather through small decisions that are assessed and updated periodically. These small decisions are not predetermined, but emerge logically through experimentation and learning (logical incrementalism). In this view, strategic planning is of little help for explorative activities (see for example Eisenhart & Brown, 1998; Mintzberg

1991, 1994). Another school of thought contends that strategic planning can provide a roadmap to help a firm achieve its vision and goals regardless of environmental stability (see for example Ansoff 1991, 1994). In this view, strategic planning is seen as a deliberate, rational, linear process where the goals are specified first, followed by a detailed implementation plan. Brews and Hunt (1999), in their study of strategy processes at 656 firms, attempted to resolve these conflicting views by suggesting that both the deliberate and emergent approaches may be part of good strategic planning, especially when firms face increased environmental turbulence. The authors suggest that exploitation strategies in stable environments may require *less* planning, as firms may rely more on existing routines and capabilities in predictable, slow-moving industries where uncertainty is low. Increased environmental turbulence may force the development of more sophisticated explorative strategies and planning capabilities (Brews and Hunt 1999, p .905–906). Based on the arguments above, we speculate that the paradoxes inherent in ambidexterity strategies could lead to a greater degree of explicit strategic planning, suggesting a positive relationship between the two.

### *Hypothesis 2: Strategic Planning is Positively Related to Ambidexterity*

There are two arguments to consider. First, managing strategic paradoxes is presumably more complex than managing one, internally consistent strategy. Second, we would expect a stronger relationship to exploration, as this represents new strategic territory, while exploiting old certainties may require *less* strategic planning. This is in line with Kohtamaki et al. (2010); in their study of ambidexterity strategies, they found that strategic planning, defined as “a detailed process that aims to explicate strategy though the analysis of various strategic options” (p. 222), could help facilitate the exploration of new

opportunities—in particular, by helping leaders focus on the big picture rather than day-to-day operational details. Their study also emphasized the importance of making such strategies understandable and tangible to secure lower-level employees' commitment to the success of strategy implementation. Several other studies have also suggested that a compelling strategic plan that justifies the need for simultaneous exploration and exploitation, as well as the relentless and explicit communication of such a strategy, may increase the likelihood of a firm actually achieving ambidexterity (see for example O'Reilly & Tushman, 2008, p. 197–198). Lastly, in line with a number of other studies, we also speculate that ambidexterity strategies are perceived to be linked to improved firm performance (see for example Junni et al., 2013, and O'Reilly & Tushman, 2013, for extensive reviews of the literature linking organizational ambidexterity and financial performance). One of the key arguments in the literature is that ambidexterity strategies are needed to secure firm survival in fast-changing, complex business environments, where an *either/or* approach to strategic planning may be inadequate. To stay competitive, firms and their leaders must adopt a *both/and* approach, committing to conflicting strategies and their associated product, market, and organizational architectures (Smith et al., 2010, p. 449). Put more succinctly, the reason leaders pursue strategic paradoxes, given their complexities and inconsistencies, is probably that they believe they will improve firm performance.

### *Hypothesis 3: Ambidexterity is Perceived as Positively Related to Firm Performance*

In the next section, we outline our research methodologies, procedures, measures, and analysis results. We end the paper with a discussion of practical implications for both researchers and practitioners, as well as some limitations of our study and avenues for further research.

## METHODS

### Procedures and Sample

Our procedures consisted of: (1) one-on-one interviews with top executives in newspaper firms across the Nordic countries, (2) management group sessions in Norway, Sweden, Denmark, and Finland, to explore issues related to strategic planning (3) a survey sent to all newspaper executives in the four Nordic countries. In this study, we primarily report on quantitative data from the survey. Our survey sample was based on email lists provided by the respective publishing organizations in Denmark, Finland, Norway, and Sweden was distributed to all (N = 917) media top executives (editors and/or business managers) in the four Nordic countries to assess to what extent they saw their firms as ready for change, as well as which of a list of 22 pre-defined strategic challenges to the industry they consider priorities (Wilberg, 2010; 2011; 2012). We made this list through management sessions and interviews with news executives, and reviewed, tested, and validated it annually to find the most relevant issues for the industry at the time. The 2012 survey included several new items—exploration, exploitation, and organizational ambidexterity, which were theory-based and found valid and reliable. The survey used *SurveyMonkey*, a popular Web-based survey tool. We first piloted it on a small group of executives and one external researcher. We made some adjustments for clarity and language, then sent the final survey to respondents in late fall 2012. At the end of the data collection we had a sample of N = 143 executives from the four Nordic countries, representing 13–20% of the news organizations in each country. Sample sizes and country breakdown for 2012 appears in Table 2.

**INSERT TABLE 2 ABOUT HERE**

## Measures

**Organizational ambidexterity (dependent variable).** For the purpose of this study, we conceptualized ambidexterity as a multi-dimensional construct comprised of explorative and exploitative capabilities. Thus, in line with existing studies, we computed ambidexterity as an additive integrative construct of multi-item scales for exploration and exploitation (Lubatkin et al., 2006; De Visser et al., 2010; Jansen et al., 2009; Revilla 2009). However, we also created both additive (e\*e) and subtractive (e-e) models to be tested.

**Exploration and exploitation.** In line with previous ambidexterity studies, we constructed separate scale items for *exploration* and *exploitation*. We captured **exploitation** by asking executives to indicate, on a four-point Likert scale, the degree to which they agreed with the following statements about their organizations:

- 1) *“We offer refined products and services which we know will satisfy our customers.”* (Principal component extraction .77)
- 2) *“In our organization, we value experience and professional conduct. This helps us maintain consistently high quality standards.”* (.77)
- 3) *“We have a mature product, and know what our readers want and need.”* (.78)
- 4) *“We run a pretty tight organization with clearly defined roles and responsibilities.”* (.81)
- 5) *“Productivity and efficiency is a core value in our organization.”* (.84)
- 6) *“Employees have freedom to improvise on current products.”* (.81)

The items loaded on three factors (refinement, consistency and experience), explaining 79.61% of the total variance. The Cronbach’s alpha for the exploration measure is .60. Hair et al. (2006) notes that alpha values over 0.60 are accepted in exploratory studies. Next we created an additive construct comprised of these three factors, which we believe now

adequately captures the essence of exploitation: *refinement, consistency and experience* (March 1991).

We captured **exploration** by asking respondents to indicate, on a four-point Likert scale, the degree their organization was characterized by the following:

- 1) “*We have to put out new products to survive*” (.70)
- 2) “*Ongoing redefinition of job descriptions*” (.81)
- 3) “*Constantly changing*” (.70)
- 4) “*Authority tied to tasks rather than positions*” (.74)
- 5) “*Every failure is seen as a learning experience*” (.54)
- 6) “*We believe in limited structure and flexibility*” (.61)

The items loaded on three factors (*experimentation, flexibility, and change*), explaining 68.17% of the total variance. The Cronbach’s alpha was .60. Next we created an additive construct comprised of these three factors, which we believe now adequately captures the essence of exploration: *experimentation, flexibility and change* (March 1991).

**Readiness for change.** We captured a firm’s perceived readiness for change by asking survey respondents, on a 7-point Likert scale to assess how ready their firm was for change on editorial as well as the business side of operations. There was also a comparison with a study from 2006 where the same question in regards to readiness for change had been given with the same target group, and with a sample size of  $N = 130$ .

**Firm performance.** To measure firm performance, we asked respondent to rate, on a 5-point Likert scale, how they perceived their firm’s performance in terms of newspaper sales, online users, mobile users, tablet users, print advertising revenues, digital advertising revenues, mobile advertising revenues, and other revenues. We found this scale to have a Cronbach’s alpha of .67. We also created separate scales for performance in explorative and exploitative product/marked domains respectively. We found it loaded on three components

## STRATEGIC PARADOXES IN THE DIGITAL AGE

(digital (Web, tablet, mobile)/print/other revenues) for a cumulative eigenvalue of 71.95%.

We also asked respondents how much of their total revenues came from the digital side of the business. The market average in the Nordic countries for 2012 was 4%. We were looking for firms that outperformed the market.

***Strategic planning.*** We asked respondents if they had a written strategic plan for their firm, but also to rank the strategic importance of 22 industry-specific strategy items on a 7-point Likert scale. We wanted to assess the importance of specific strategic intents. This would also allow us to examine the relationship between an organizations capacity/propensity for ambidexterity (what characterizes the organization) and the strategic intent. We found this scale to have a Cronbach's alpha of .74.

***Control variables.*** In line with previous ambidexterity studies, we controlled for firm size, country, leaders' functional areas, and perceived environmental munificence (market volatility).

### ANALYSIS AND RESULTS

Mean, standard deviation, and correlations among the variables appear in Table 3. Strategic planning and readiness for change significantly and positively related to ambidexterity. It is interesting to note that strategic planning had a positive relation to exploration, but no significant relation to exploitation. Readiness for change linked to exploration and exploitation strategies, as well as perceived firm performance.

#### **Main Effects**

Next, we tested the main effects by employing a multiple regression analysis, entering independent variables cumulatively to assess the increments in variance explained. The results of the analyses appear in Table 4. For the hypotheses regarding ambidexterity, the firm control variables first appear in Model 1, but show no significant effect on the variance

## STRATEGIC PARADOXES IN THE DIGITAL AGE

in ambidexterity. In Model 2, we added the environmental control variables, with no significant effect. In Model 3 we add the first main effect, finding that readiness for change significantly improves the fit of the model, now accounting for 15.8% of the variance in ambidexterity ( $p < .01$ ).

**INSERT TABLES 3, 4 AND 5 ABOUT HERE**

This supports Hypothesis 1, which proposes a link between readiness for change and ambidexterity. Adding strategic planning in Model 4 further improves the fit of the model, which now accounts for 21.2% of the variance in ambidexterity ( $p < .001$ ). This supports Hypothesis 2, which suggests a positive link between ambidexterity and strategic planning. In Model 5 we test for the link between ambidexterity and firm performance, while controlling for the other variables. We find no significant relation. This means we must reject Hypothesis 3, which suggests a positive link between ambidexterity and firm performance. We will discuss this somewhat surprising finding in the discussions section.

Table 5 summarizes significant correlations on the 22 industry-specific strategic items. In line with He and Wong (2004), we divided our sample into three firm groups based on a median cut-off criterion, ranking them in descending order of explorative or exploitative factor scores. We coded firms that fell in the upper half of the explorative ranking as such, and did the same for the upper half of exploitative rankings. A firm was ambidextrous if it belonged in both upper halves. We found 26% of the firms could be classified as ambidextrous, based on leader responses. For these, top strategic priorities included application of new technologies, market-driven product development, and top customer service. “Explorative” firms put significantly stronger importance to strategic intents in regards to collaborations with other firms, or even competitors; developing both brand and

internal competences on all levels of the organization. Exploitative firms saw significant negative relations to experimenting with new business models, technologies, and alliances with competitors. This should prove quite challenging in the long term, given the rapid changes in the news industry.

### DISCUSSION

In this study, we found a link between ambidexterity and a readiness for change. Without such a recognition that change is needed, leaders would probably just go about exploiting their daily business, failing to explore new, potentially disruptive technologies and business opportunities. However, given that the newspaper industry has been in constant turmoil and change over the past decade, a recognized need for change is not enough. Leader's don't want to talk about change, they need to plan and execute strategic paradoxes. Based on our review of the literature, we predicted a link between strategic planning and ambidexterity. Our data confirmed this. We had some concerns as to the validity of this finding, however. It could simply be that larger firms do more strategic planning (because of their size) and are more likely to be ambidextrous due to resource slack—they have the resources to both explore digital opportunities and exploit their legacy print business. In our regression models on ambidexterity, we controlled for firm size, finding no significant effect. Second, we had a concern about reversed causality. Is ambidexterity an antecedent to strategic planning? We suggest it is an iterative process, a dynamic interaction. Explicit and detailed strategic planning may help navigate the complexities of explorative digital domains. But such plans need continuous revision as the front lines of technological innovation shift. In theory, exploiting the “old certainties” of the legacy print business may require less strategic planning if the legacy business could simply be left to manage on its own devices. However, the inherent dilemma in ambidexterity strategies is that every strategic move made

## STRATEGIC PARADOXES IN THE DIGITAL AGE

in explorative digital domains may disrupt the exploitation of print domains. This means any ambidexterity strategy must consider both dimensions and be continuously updated and realigned to reflect changing market dynamics.

Our study suggests a significant positive relation between strategic planning and exploration, but no significant relation between strategic planning and exploitation. This fits with our observation that newspaper firms are quite elaborate in their digital strategizing, but less clear about the implications for exploitation strategies. It seems as if the tendency is to attempt to align digital exploration and print exploitation into some sort of consistent middle-of-the-road strategic framework without accounting for the inherent dilemmas and paradoxes involved in radical exploration and exploitation. We have rarely seen newspaper strategies that recognize and embrace paradoxical and conflicting objectives. This is of course quite rational behavior, as most managers arguably get paid to fix problems—not invite conflicts with inconsistent strategic objectives.

Indeed, strategic paradoxes may be of more interest to academics than to practicing managers. After all, a paradox is by definition a proposition that works well in theory, but may seem senseless, logically unacceptable, or self-contradictory in practice. As Birkinshaw and Gupta (2013) note, the paradoxical nature of ambidexterity may be part of its attraction to researchers, but ambidexterity is an academic construct, which may offer little intuitive meaning to practicing managers—unlike other management literature terms such as innovation, growth, or leadership (p. 290).

**INSERT FIGURE 1 ABOUT HERE**

However, we would argue that any simplistic, one-sided strategy could have dire real-life financial consequences. Our study suggests that discomforts of these strategic paradoxes

## STRATEGIC PARADOXES IN THE DIGITAL AGE

should be seen as growing pains, as firms and leaders learn to do new things. Facing the complex business realities of the digital era, top leaders have to tackle inconsistencies and even risk appearing hypocritical as they balance short-term and long-term goals. We have seen many executive keynotes showcasing the next big digital opportunity, which were followed a few months later by much less-publicized quarterly financial results, with red numbers foreshadowing another round of cost-reduction and budget constraints in print operations. This brings us to the link between ambidexterity strategies and firm performance.

Our study did not find that leaders perceived ambidexterity strategies linked to improved firm performance. This is in contrast with the ambidexterity premise (Raisch et al., 2009), but fits a pattern we have seen over the past decade in the given empirical context—for most newspaper companies, growth in explorative digital product/market domains has come at the cost of persistent revenue declines in the legacy print business, leading to a general decline in industry profitability. And as indicated by Figure 1, the outlook for the period from 2012-2017 is further decline. A similar pattern emerges though a more granular analysis of the previous research into the ambidexterity-performance linking. See for example Junni et al. (2013), who in their meta-analysis of empirical studies to date found that exploitation strategies link to profits, whereas exploration strategies are linked to growth, which implies that ambidexterity may have quite different impacts on different aspects of firm performance (p.308). The empirical context of our study supports this argument and suggests the direct conflict between digital exploration and print exploitation. Still, newspaper leaders have no choice but to continue digital exploration even if it slowly eradicates their legacy print business and overall industry revenues keep dropping. This is just one of the inherent paradoxes in ambidexterity strategies.

## CONCLUSION

The purpose of this study has been to examine how executive leaders manage the paradoxes introduced by ambidexterity strategies. This can be one of the toughest leadership challenges, as it requires “consistent inconsistency as managers frequently and dynamically shift decisions” (Smith & Lewis, 2011, p. 392). Ambidextrous leaders may make rational and consistent choices in the short term, while acutely aware of accepting contradictions in the long term. Such inconsistency is probably an acquired taste for most. In closing, we would like to offer a telling example of an emerging strategic paradox in the context of the newspaper industry. Consider the recent trend of online paywalls—newspaper firms requiring online readers to pay to access news and other content on their Web sites. In our view, these paywall strategies, heralded as an innovative industry move, really indicate the organizational need for consistency. The paywall strategy attempts to eliminate the challenges of managing two different and directly conflicting business models simultaneously—namely that of having a paid-for print newspaper, while also offering news for free online (Markides 2013). This one consistent pay-for-news strategy across print and digital domains may look good on paper for top executives.

However, it most likely introduces a new strategic paradox. How can newspaper firms hope to compete against open access, free-for-all social media such as Facebook, Twitter, or Google for new digital revenues if top management decides to erect digital paywalls that keep potential new audiences out?

## LIMITATIONS

This study involves cross-sectional data from single informants using perceptual scales, which potentially introduces common bias effect—some of the observed co-variation between variables may be due to a shared method of measurement. To control for such bias, we deployed five specific procedural remedies *ex ante* as suggested by Podsakoff et al.

(2012) to maximize respondent motivation and ability to respond accurately. First, we deployed at a proximal separation between constructs for exploration, exploitation by means of dedicated buffer items to diminish use of prior responses to answer subsequent questions (Podsakoff et al., 2003). Second, we minimized the scale properties shared between predictor and criterion variables by using varying Likert scales/items so the respondent would not combine related items. Third, based on our pilot survey, we improved scale items to remove ambiguity: keeping questions simple, specific, clear, and concise. In line with suggestions from Krosnick (1991) we also labeled every point on the response scale to further reduce ambiguity. Fourth, we introduced positive and negative items to control for response style tendencies that may produce misleading factor scores and deflate or inflate regression scores. As suggested by Chang et al. (2010), we assured respondents of the study's anonymity and confidentiality; that there were no right or wrong answers, and that we valued their honesty. We believe these remedies should minimize common method bias, but we also performed Harman's one-factor test on items included in the regression models. If common method bias was still a problem in the study, we would expect either a single factor to emerge from factor analysis, or one general factor to account for the majority of the covariance among the variables (Podsakoff & Organ, 1986; Podsakoff, Todor, Grover, & Huber, 1984; Podsakoff et al., 2003; Mom et al., 2009). We did not find such a single factor. Note the methods deployed in this study are suited to establish relationships between constructs, not causality.

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**TABLES AND FIGURES**

Table 1. The Ambidexterity Paradox: Conflicts between explorative and exploitative strategic intent (strategic intent)

	<b>Exploitative activities</b>	<b>Exploratory activities</b>
<b><i>Strategic intent</i></b>	Cost control, profit	Innovation, growth
Critical tasks	Operations, efficiency, incremental innovation	Adaptability, new products, breakthrough innovation
Competencies	Operational	Entrepreneurial
Structure	Formal, mechanistic	Adaptive, loose
Controls, reward	Margins, productivity	Milestones, growth
Culture	Efficiency, low risk, quality, customers	Risk taking, speed, flexibility, experimentation
Leadership role	Authoritative, top down	Visionary, involved

Source: Tushman and O'Reilly, 1996

## STRATEGIC PARADOXES IN THE DIGITAL AGE

Table 2. 2012 Survey sample size and country breakdown

	<i>2012 Survey Responses</i>	<i>2012 Survey recipients</i>
Denmark	27	146
Finland	28	223
Norway	54	376
Sweden	34	172
<b>Total</b>	<b>143</b>	<b>917</b>

STRATEGIC PARADOXES IN THE DIGITAL AGE

Table 3. Correlations, means and standard deviations between the measures used in this study

	Mean	St. Dev.	1	2	3	4	5	6	7	8	9	10
1 Exploitation	.000	1.732										
2 Exploration	.000	1.732	.260**									
3 Ambidexterity	-.028	2.676	.786**	.801**								
4 Strategic Planning	.895	.307	.101	.198*	.207*							
5 Readiness for change	5.874	1.421	.258**	.257**	.323**	-.015						
6 Firm performance	19.335	5.389	.079	.123	.139	.135	.366**					
7 Leaders functional area	1.839	.801	-.079	-.080	-.096	-.155	-.029	-.108				
8 Firm size	2.671	.940	-.001	.171*	.092	.245**	.080	.281**	-.005			
9 Firm country	2.664	1.041	-.096	.083	.030	-.111	-.277**	-.161	-.065	-.207*		
10 Type of firm	1.795	1.028	-.055	-.008	-.003	.119	.066	.086	-.194*	.407**	-.292**	
11 Environmental munificence	30.050	5.694	.009	.227**	.144	.105	.082	.141	-.196*	.263**	.034	.066

Note: Number of respondents is 142 from the four Nordic countries Denmark, Finland, Norway and Sweden. Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed).

STRATEGIC PARADOXES IN THE DIGITAL AGE

Table 4. Effects of ambidexterity, readiness for change and strategic planning, 2012 (standardized regression coefficients)

	<b>Model 1</b>		<b>Model 2</b>		<b>Model 3</b>		<b>Model 4</b>		<b>Model 5</b>	
	Dependent variable, ambidexterity		Dependent variable, ambidexterity		Dependent variable, ambidexterity		Dependent variable, ambidexterity		Dependent variable, performance	
	<b>B</b>	<b>SE</b>	<b>B</b>	<b>SE</b>	<b>B</b>	<b>SE</b>	<b>B</b>	<b>SE</b>	<b>B</b>	<b>SE</b>
Intercept	.122	.974	-2.23	1.990	-6.914	2.191	-9.358***	2.302		
<b>Main effects</b>										
Ambidexterity									-.029	.194
Readiness for change					.365***	.172	.392***	.168	.353***	.373
Strategic planning					.249***	.790			.097	1.674
<b>Control variables:</b>										
<i>Leaders functional area</i>	-.108	.321	-.069	.336	-.067	.315	-.007	.315	-.062	.659
<i>Firm size</i>	.109	.300	.069	.315	.070	.295	.005	.295	.242*	.607
<i>Firm type</i>	-.059	.279	-.026	.297	.009	.279	.032	.272	-.84	.558
<i>Firm country</i>			.063	.268	.168	.261	.198*	.255	-.080	.536
<i>Environmental munificence</i>			.121	.048	.094	.045	.090	.044	.033	.092
<i>F improvement of fit</i>	.745		.949		16.664***		7.793**			
<i>R Squared</i>	.019		.035		.158**		.212***		.213**	
<i>Adjusted R Squared</i>	-.006		-.007		.113		.163		.155	
<i>ANANOVA F</i>	.0745		.926		3.559**		4.346***		3.630**	

Note: Number of respondents is 120 from the four Nordic countries Denmark, Finland, Norway and Sweden. Standardized regression coefficients are shown in the table.

\*p < .05. \*\*p < .01. \*\*\*p < .001.

## STRATEGIC PARADOXES IN THE DIGITAL AGE

Table 5. Strategic planning – importance of key strategic issues over the next three years

	EXPLORATIVE FIRM	EXPLOITATIVE FIRM	AMBIDEXTROUS FIRM
Focus on profitability in all parts of the organization	-.043	.125	.183*
Focus on collaboration with other firms	.240**	-.320**	.137
Rapid implementation of changes	.127	-.092	.035
Reduction in number of employees	.104	-.130	.024
Product development - editorial	.150	-.048	.049
Product development - market and advertising	.147	.036	.189*
Stable and reliable distribution	.091	-.004	.000
Better market research/documentation	.165*	.092	-.012
Spend more money on Web site(s)	.100	-.129	.138
Increase marketing budgets	.147	-.090	.006
Top customer service	-.066	.065	.169*
Development of the firm brand	.305**	-.219**	.010
Develop employee competences	.225**	-.130	.096
Develop a good working environment	.045	.041	.070
Encourage cooperation between departments	.172*	-.089	.113
Increase overall competence in the organization	.276**	-.130	-.016
Relationships/alliances with competitors	.284**	-.173*	.126
Management and leader development	.275**	-.083	-.120
Board level competence	.139	-.188*	.180*
More interaction with users	.101	-.185*	.018
Application of new technology/software	.175*	-.061	.239**
Experiment with new business models	.143	-.192*	.126

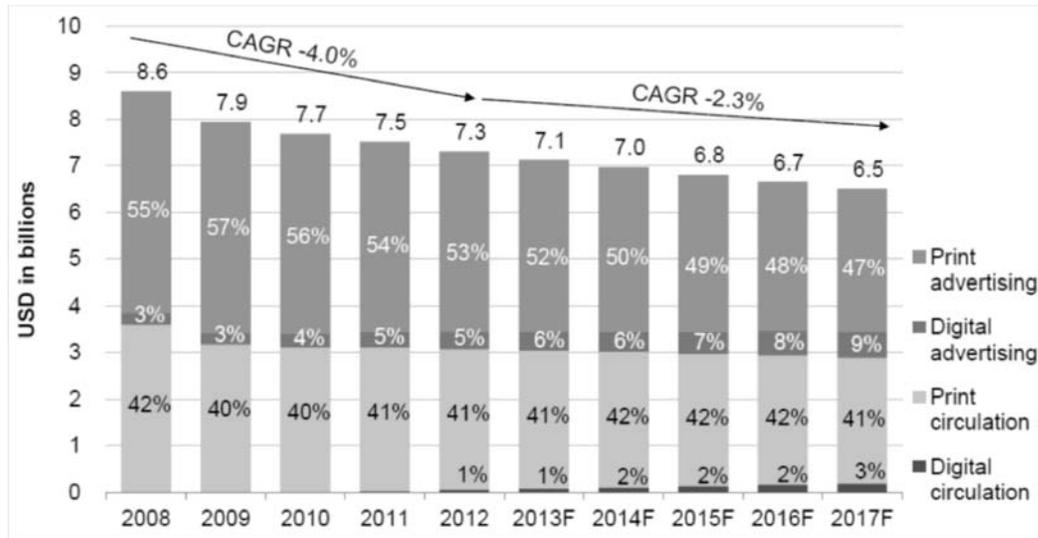
Note: Number of respondents is 143 from the four Nordic countries Denmark, Finland, Norway and Sweden. We deployed the Median cut off (He and Wong, 2004).

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

## STRATEGIC PARADOXES IN THE DIGITAL AGE

Figure 1. Strategic outlook: Development of Nordic newspaper industry revenues 2008-2017 (USD in billions)



Source: PwC, 2012