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Research article

Successful Exploration: Organisational Ambidexterity and Performance in News Media Firms

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Abstract:

Purpose: This paper sheds light on the distinctive nature of entrepreneurial-oriented behaviours in news media firms. We reconsider conceptualisations of exploitation and exploration in the industry and seek to explore the extent to which they are related to organisational performance.

Methodology: In a cross-sectional study, we draw on data from a longitudinal investigation into the decision making of news media executives worldwide. The study focuses on a correlational analysis of primary data collected from media executives across 107 countries. With a large sample size (N = 1438) and strict significance testing, we address the potential limitations of a purposive sampling strategy.

Findings/Contribution: We find that firms that prioritise exploration higher than exploitation are more likely to be reporting financial success than those who do the opposite. We propose that the study contributes to the understanding of the impact of volatile times on the media industry, by suggesting that, even in the midst of considerable disruption, the exploration of new opportunities nevertheless has the potential to reap financial rewards. In so doing, it answers both the specific appeal for greater clarity of organisational ambidexterity measures, as well as calls to test and expand existing theory in various contexts, and to develop theory that is directly pertinent to media management science.

Keywords: media innovation, entrepreneurship, newspapers, organisational ambidexterity, performance

1. Introduction

Changes in technology and the market conditions of news media firms over the last decade have been described as ‘a moment of mind-blowing uncertainty for journalism’ (Domingo, Masip & Costera Meijer, 2014). Questions about whether news media firms can successfully adapt and

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innovate to meet these demands – and if so, how this occurs – have occupied a number of scholars (Powers & Zhao, 2019; Pavlik, 2013; Storsul & Krumsvik, 2013).

So far, the answers have been mixed. For example, research from Norway indicates that newspaper management there finds it hard to respond effectively to the insecurity created by changes in the environment (Krumsvik, 2014). And a survey among UK broadcasters has found that although many companies are dynamic and adopt dynamic responses to changes, many firms have been struggling to adapt (Oliver, 2013). There have also been notable casualties. The Tampa Tribune, for instance – the subject of several influential – and optimistic – early studies into newsroom innovation in the US (Huang, Rademakers, Fayemiwo & Dunlap, 2004; Singer, 2004), shut in May 2016 after 123 years with the loss of “about 265 jobs” (Madigan, 2016).

This much is clear: while it might be true that firms that do not innovate are likely to fail, innovation in itself is no guarantee of future success. Assuming that the success of surviving firms is not simply rooted in luck, it begs that a perennial question of management studies be posed once again: are there systematic patterns that distinguish those companies able to change and survive versus those that fail? (O'Reilly & Tushman, 2008). James March (1991) certainly believes there is. He observes that central to the ability of a firm to survive over time is its capacity to exploit existing assets and positions in a profit-producing way - and simultaneously to explore new technologies and markets - to configure and reconfigure organisational resources to capture existing as well as new opportunities (March, 1991). However, it is clear that there are risks in both directions. On the one hand, firms that emphasise exploration to the exclusion of exploitation are likely to find that they incur the costs of experimentation without receiving many of its benefits. On the other hand, firms that overemphasise the exploitation of existing markets and technologies are likely to find themselves unable to meet the demands of a dynamic and increasingly-competitive environment (March, 1991). The ability to balance these tensions has been described as organisational ambidexterity (Tushman & O'Reilly, 1996).

Over the past two decades, the ‘ambidexterity premise’ has engaged a growing number of scholars. Researchers have underlined the need for ambidexterity, as news organisations strive to balance various tensions, including those between creativity and economy, change and stability, and control and emergence (Järventie-Thesleff, Moisander & Villi, 2014; Malmelin & Virta, 2017). But despite hundreds of studies across various contexts, it has been pointed out (Bøe-Lillegraven, 2014) that the empirical evidence linking organisational ambidexterity and performance remains uneven. In a meta-analysis of ambidexterity scholarship, Junni, Sarala, Taras and Tarba (2013) found that exploitation was associated with profits whereas exploration was related to growth. However, they noted that it is still unclear when and how ambidexterity affects firm performance and, as such, recommend that future multiple, fine-grained measures within specific industry contexts further our understanding of the ambidexterity-performance relationship (Junni et al., 2013: 19).

This paper responds specifically to that challenge by examining organisational ambidexterity in the context of the media industry. In particular, we (1) challenge and reconsider conceptualisations of exploitation and exploration used in earlier studies of the industry; (2) offer a multidimensional construct for success of innovations; (3) draw on unique data from a longitudinal study into the decision making of news media executives worldwide that provides historical and industry contexts; and (4) test whether there is a significant difference between the priorities of leaders in terms of the growth or otherwise of their revenues.

Next, we take a closer look at the industry context and theoretical framework. Then, we describe our research method and data, after which we present our findings and discuss them. Finally, we offer thoughts on the implications of our study for media managers and for media researchers.

2. Literature Review

2.1. Industry Context

Perhaps it's not surprising that the media industry has been fertile ground for research into the 'ambidexterity premise' (Bøe-Lillegraven, 2014). Rapid and widespread changes in digital technologies and market conditions have spurred news media firms to innovate. And, in the main, they have set to it. Across the globe, newsrooms have been revamped, redesigned, reorganised, converged (Siapera & Vergelis, 2012; Fioretti & Russ-Mohl, 2009; Singer, 2004) and de-converged (Tameling & Broersma, 2013). Websites have been launched and relaunched (Nel, 2013). A wide array of mobile and tablet apps offer consumers news that might be variously aggregated, expanded, editioned, condensed, interactive, pushed, augmented or viewed in 3D. Stories are packaged, repackaged and optimised to help ensure that they are found, bookmarked, rated, liked and shared across a growing assortment of search and social platforms (e.g. Newman, Fletcher, Levy & Nielsen, 2016; Knight & Cook, 2013; Hermida, 2010).

As such, many traditional news producers at the start of the 21st Century have found themselves with larger total audiences than ever before (Nel & Milburn-Curtis, 2019). However, successes by newsrooms have not necessarily been matched by successes for boardrooms. While editorial teams grew audiences on the one hand, on the other many commercial teams found they were not able to adequately measure those audiences and sell their attention on to advertisers at either the volume, pace or price that matched the earnings they were used to from print operations (Nel, 2010; Wray & Allen, 2007). Thus what may once have been considered the 'Golden Rule' of multisided markets that, when applied in the context of the news media, saw "money follows eyeballs" rarely materialised. That is, while on the one side innovative publishers were able to grow the number of "eyeballs" by distributing content online, on the other side these increases in audiences have not necessarily been matched by increases in revenues (Nel & Milburn-Curtis, 2019). As such, there has been a growing recognition that the task for news media firms is not simply product innovation, but business model innovation (Anderson, Bell & Shirky, 2013; Nel, 2010). Anxieties about the sustainability of news media firms remain (e.g. Cairncross, 2019). This serves to remind us that innovation is both widely discussed and variously defined, inside and outside of academic circles.

2.2. Theoretical Framework

2.2.1. The nature of innovation in firms

The terms "radical, incremental, really-new, imitative, discontinuous, architectural, modular, improving, and evolutionary" innovations are all used to define models of innovation (Garcia & Calantone, 2002). The underlying reason for the array of conceptions has been attributed to the diverse perspectives and various levels of analysis employed (Danneels & Kleinschmidt, 2001; De Brentani, 2001). For defining innovation for this firm-level study, in the first instance, we accept there are two key and opposing views on where entrepreneurial opportunities come from, i.e. the Schumpeterian (Schumpeter, 1934) and Kirznerian (Kirzner, 1973, 1997) perspectives.

Schumpeter (1934) takes it that opportunities emerge in times of uncertainty, change and technological upheaval when individuals outside and inside firms create opportunities by combining resources in novel ways. In this approach, the Schumpeterian entrepreneur creates new opportunities that destroy existing markets.

Meanwhile, Kirzner (1973; 1997) posits that individuals secure entrepreneurial profits on the basis of identifying gaps in knowledge and information that arise between people in the market. According to this approach, an entrepreneur is a vigilant person who discovers information

asymmetries in the marketplace and capitalizes on those by arbitrage, i.e., buying low and selling high.

These two perspectives are widely debated and have, in turn, been seen as clashing (Boudreaux, 1994), complementary (Hébert & Link, 1982), and compatible in certain respects but not all, as argued by Kirzner himself in a re-appraisal of his earlier work (Kirzner 1999). What is also true is the two authors have given rise to the recognition that in times of change and uncertainty entrepreneurial leaders face choices that range from focusing resources into the exploitation of existing opportunities to the exploration of new prospects. Thus a Kirznerian approach is taken to signify incremental innovation, while a Schumpeterian approach is seen to signify radical innovation.

These debates have also underlined that while “innovation is about change” (Storsul & Krumsvik, 2013: 15), not all change is innovative. As Drucker (1994) emphasises, innovation is, “the specific instrument of entrepreneurship. It is the act that endows resources with a new capacity to create wealth. Innovation, indeed, creates a resource. There is no such thing as a ‘resource’ until man finds a use for something in nature and thus endows it with economic value” (Drucker, 1994: 30). This is also similar to the idea that “inventions often cannot be transformed into innovations, and therefore lack the market commercialisation” (Liening, Geiger & Kriedel, 2018: 241). Thus, we follow Tidd, Bessant and Pavitt (2013) and employ “a simple model of innovation as the *process* of turning ideas into reality and capturing value from them” [their emphasis] (p. 21).

A key strand of thought has emerged as researchers examine how firms innovate and adapt to market and technological changes: that the leadership of successful firms manage to integrate both efforts to exploit existing opportunities and explore future prospects (March, 1991). However, there are risks in both directions. On the one hand, firms that emphasise exploration to the exclusion of exploitation are likely to find that they incur the costs of experimentation without receiving many of its benefits. On the other hand, firms that overemphasise the exploitation of existing markets and technologies are likely to find themselves unable to meet the demands of a dynamic and increasingly-competitive environment (March, 1991).

Scholars have argued that successful companies are ambidextrous (Alabadi, Alsachit & Almajtwme, 2018; Rialti, Marzi, Silic and Ciappei, 2018; Alghamdi, 2018). That is, they successfully balance the tension between both exploration and exploitation (Alghamdi, 2018: 1). Thus, ambidexterity allows an organisation to synergistically balance exploration and exploitation for maximum gain. Organisational ambidexterity can, therefore, be viewed through two lenses – structural ambidexterity and contextual ambidexterity. As Alghamdi (2018) argues, “the former obtained through structural interventions and is based on the idea of a trade-off” (p. 2). To attain this, Alghamdi (2018) explains that a firm needs to outline relevant activities relating to “exploration and exploitation (separation of exploration and exploitation into independent units with a leadership-integration and coordination at the top of an organisation” (p. 2). The latter, on the other hand, requires exploiting the present capability and exploring future opportunity (Ketkar & Puri, 2017). Achieving this requires creating an organisational context where the employees’ engagement can be both explorative and exploitative (Rosing & Zacher, 2017). Since Tushman and O’Reilly (1996) proposed that organisational ambidexterity – described as a firm’s “ability to simultaneously pursue both incremental and discontinuous innovation... from hosting multiple contradictory structures, processes and structures in the same firm” (p. 24) – was required for long-term success, there have been multiple studies on the topic. Researchers in this area have principally theorised about the influence on firm performance of the sequencing, structures and context of ambidexterity (O’Reilly & Tushman, 2011). A number of case studies into organisational ambidexterity (OA) have focused on the newspaper industry (e.g. Järventie-Thesleff et al., 2014; O’Reilly & Tushman, 2013; Boumgarden, Nickerson & Zinger, 2012; O’Reilly & Tushman, 2004; Tushman, Smith, Wood, Westerman & O’Reilly, 2003). In a review of media management and economics literature, Bøe-Lillegraven (2014) points out that, in the main, these case studies identify print operations as exploitation and categorise

digital news ventures as examples of exploration. It has also been noted that studies into ambidexterity of newspaper firms have typically conceptualised exploitation as activities related to the incremental innovations and efficiencies associated with printed newspapers, while exploration is associated with digital opportunities that are also often considered as radical innovations.

This paper takes a broader view. More than two and a half decades after the introduction of the World Wide Web and, with it, the first companion websites to printed newspapers and broadcast services, engaging in digital activities per se is a given across the sector. Thus, while we agree with those (e.g. Achtenhagen, 2017) that focussing on “digital entrepreneurship” can, in some instances, offer a productive lens for scholars (e.g. Gleason & Murschetz, 2019; Nambisan, 2016), we conclude that “digital” can no longer be considered a proxy for “new” or “exploration”. Instead, we draw a distinction between traditional and non-traditional revenue streams. As such, we re-conceptualise exploitation as innovative activities – digital or not – narrowly associated with capitalising on traditional media revenue streams: established advertising formats and sales of existing news media products.

Furthermore, a wider conception of exploration has also emerged. Nel (2010) proposed that news media firms might not only explore digital revenue streams beyond content sales and advertising, but might also need to look at entirely different revenue models. Thereby, he effectively questions: “Where else is the money?” Picard (2011) noted that while firms were exploring a range of new revenue options, “these have not provided sufficient funding to maintain the levels of journalistic activity previously provided by print newspapers” (p.10). Two years later, he sounded a more optimistic note:

What is clear is that news providers are becoming less dependent on any one form of funding than they have been for about 150 years. Multiple revenue streams from readers and advertisers, from events and e-commerce, from foundations and sponsors, and from related commercial services such as Web hosting and advertising services are all contributing income. It is too early to fully assess the efficacy and sustainability of these sources, but they provide reason to believe that workable new business models are appearing in news provision (Picard, 2014: 280).

Therefore, we re-conceptualise exploration as innovative activities that seek to identify and capitalise on diverse revenue opportunities inside, outside and alongside traditional media products, whether those are online or off.

The optimal sequencing of OA endeavours has been widely explored over the past four decades. Bøe-Lillegraven (2014) points out that researchers are divided on whether exploitation and exploration involve “unavoidable tradeoffs” (March, 1991) or, if the two factors are orthogonal to each other, firms can choose to engage in high levels of both at the same time (Burton, Obel & DeSanctis, 2011; Cao, Gedajlovic & Zhang, 2009). We are reminded by O’Reilly and Tushman (2013) that Duncan (1976), in his original paper, proposed that to accommodate the conflicting alignments required for innovation and efficiency firms needed to shift their structures over time to align the structure with the firm’s strategy; that is, in his view, organisations achieved ambidexterity in a sequential fashion by shifting structures over time. Tushman and O’Reilly (1996) argued that in the face of rapid change, sequential ambidexterity might be ineffective and organisations needed to explore and exploit in a simultaneous fashion. In a recent review of the state of the ambidexterity scholarship, O’Reilly and Tushman (2013) observe that these notions have been tested by scholars in a wide variety of settings and using diverse methodologies. They point out that, overall, the findings suggest that sequential ambidexterity may be more useful in stable, slower-moving environments (e.g. service industries) and for smaller firms that lack the resources to pursue simultaneous

ambidexterity. On the other hand, simultaneous ambidexterity is typically more valuable under conditions of environmental uncertainty with increased competitiveness when a firm has more resources. There is little doubt that newspaper firms are facing great uncertainty and increased competition and consolidation. It is also clear that many are facing a squeeze on resources since the industry's share of advertising started slipping in 2005 (Kirwan, 2009) which, in many instances, has taken print circulation numbers, profit margins, staff numbers and even entire operations down with it (Nel, 2010). As such, we are curious about whether successful and unsuccessful news media firms have different approaches to ambidexterity. In doing so, we take financial growth over the previous financial year as an indicator of resources available for future investment in exploratory activities.

We are also mindful that profit is frequently used as an objective performance measure of OA, albeit that it has been found to be less reliable than growth (Junni et al., 2013). By contrast, in their meta-analysis of OA scholarship Junni et al. (2013) found that "perceptual measures, both absolute performance (not compared with competitors) and relative performance (compared with competitors), were positively and significantly associated with OA" (Junni et al. 2013: 303). With that in mind, they "encourage researchers to consider opportunities for using both combined and balanced approaches [to OA measurement] in a single study to allow for direct comparisons between different measures" (Junni et al. 2013: 309). We addressed that advice in this study. Furthermore, they underline O'Reilly and Tushman's (2013) call to future researchers to seek "increasing clarity in the measurement of OA" (Junni et al. 2013: 309). To clarify our measures of OA, we note that studies into organisational ambidexterity in the news media industry emphasize that for media firms, amongst others, value is not only considered in economic terms (Picard, 2010). We are also convinced by the case Bøe-Lillegraven (2014) makes for the potential that Big Data offers to assess the performance of ambidextrous news organisations by offering insights into, amongst others, the productivity of individual staff members and specific pieces of content alongside traditional financial measures. Following the work of Rao and Weintraub (2013), we notice that the value of a successful innovation can be captured at three levels: external, enterprise and personal. In particular, external recognition shows the extent to which a company is regarded as being innovative by its customers and competitors, and whether an innovation has paid off financially. On an enterprise level, the success of innovations can be measured by the extent to which it enhances those capabilities – human, material, financial, information – the organisation needs to achieve its key objectives. On a personal level, the success of innovation can be measured by considering an individual's perceptions of growth, satisfaction and reward.

We also note that, while illuminating, much of the research exploring the success of news media firms have been exploratory and conceptual. And though empirical case studies (e.g. Powers & Zhao, 2019; Küng, 2015; Tang, 2011; Westlund, 2011; Meier, 2007; Singer, 2004) and surveys conducted in particular geographic regions (e.g. Lehtisaari & Grönlund, 2015; Nel, 2010; Sylvie, 2007) have delivered valuable insights, what had been missing is a broad industry view - one that looks across time, location, firm size, ownership structure, political and market conditions. This paper attempts to step into that breach by drawing on data from a longitudinal study of senior news executives worldwide collected in collaboration with World Association of Newspapers and News Publishers (WAN-IFRA), to discern systematic patterns in the exploration and exploitation strategies and their connections to media companies' objective and subjective measures of success.

3. Materials and Methods

Drawing on data from the World News Publishers Outlook study (see e.g. Nel & Milburn-Curtis, 2017), we set out to investigate the connection between the entrepreneurial orientation of news media leaders, and the success of the company in both financial and perceived terms.

As declared earlier, our data-driven suggestion is that "digital" can no longer be considered a proxy for "new" or "exploration" for media companies. Interestingly, also the notion of media

entrepreneurship, as presented by Khajeheian (2017), does not use the dichotomy of print/digital. Instead of this bifurcation, we draw a distinction between traditional and non-traditional revenue streams. As such, we re-conceptualise exploitation as innovative activities – digital or not – narrowly associated with capitalising on traditional media revenue streams: for example, established advertising formats and sales of existing news media products. And we re-conceptualise exploration as innovative activities that seek to identify and exploit diverse revenue opportunities inside, outside and alongside traditional media products, whether those are online or off. We also recognise that while organisational success is frequently calculated in objective financial terms, media firms have additional other measures that include external recognition and the personal perceptions of staff. These measures, in their turn, are linked to external, enterprise and personal levels of success of innovation (Rao & Weintraub, 2013). The conceptualisation of exploration and exploitation, combined with the different characteristics and levels of success of innovation, underpin our hypothesis.

We hypothesised therefore that, in ambidextrous organisations (i.e., those that engage in both exploitative and explorative entrepreneurial activities) the extent to which such organisations prioritise a) exploration and b) exploitation would differ in relation to their a) objective financial performance (year on year revenue change) and b) subjective perceived organisational success.

3.1. Research Questions

Based on this overarching hypothesis we addressed two research questions:

3.1.1 RQ1: Does an organisation's approach to 'Exploration' correlate with :

- Financial performance (revenue growth)
- Perceived organisational success

3.1.2 RQ2: Does an organisation's approach to 'Exploitation' correlate with :

- Financial performance (revenue growth)
- Perceived organisational success

Data were collected annually from 2011 to 2016 inclusive. Target respondents of the survey included news media decision makers: top managers; editorial, commercial and technology managers; and academics and researchers. Participating organisations included those which were privately owned, government-owned, public service, not-for-profit and cooperatives. The 22-question online survey collected data about ownership, country, language, world region, national income, area of work, geographic focus, publishing and non-media activity, size of organisation, circulation and 12-month and 5-year investment priorities. The questionnaires were translated into Arabic, Chinese, Finnish, French, German, Greek, Italian, Japanese, Korean, Persian, Portuguese, Russian, and Spanish, and participants could choose which language version to use. Anonymity was assured, whilst participants could voluntarily reveal their details if they wished to receive information about study outcomes. A total of 1438 individuals took part in the following annual proportions:

Table 1. Summary of the number of survey respondents per annum

Year	Number of participants
2011	496
2012	244
2013	117
2014	163
2015	172
2016	246

3.2. Design

We employed a cross-sectional design enabling us to explore relationships between variables. Whilst it was not our intention to generalise our conclusions beyond the population of note, we were nevertheless able to inferentially address issues around the strength of relationships between revenues and profitability; investment priorities; organisational success; entrepreneurial orientation, ambition and leadership; operative and dynamic capabilities; diversification; organisational behaviour; and attitudes to innovation, organisational culture and climate, risk and change. The current study isolated the relationships between entrepreneurial leadership and organisational performance.

3.3. Sampling strategy

We employed a purposive sampling strategy (total population sampling) (Black, 2012), a process whereby as much of an available population is examined. It is appropriate where the population has a particular set of characteristics which are not very common; in our case all respondents were top professionals in ambidextrous news media organisations, (i.e., those organisations that, in our survey, indicated that they employed both explorative and exploitative approaches to leadership), in national, regional and local media, or media analysts. We chose to study this subset of the whole population because the global population of newspaper managers is relatively small. According to Bryman and Bell (2011) this type of nonprobability sampling strategy is effective since omitting members of such a small population (e.g., through random sampling) may miss significant data. Whilst this sampling strategy commonly informs a qualitative analysis we were fortunate to have sufficient quantitative data (1388 cases x 336 variables) to be able to perform a wide range of analyses. The advantage of using this technique is that we are able to gain a deep understanding of population behaviour, without the risk of missing important insights. Whilst we acknowledge that we were not in the position to make statistical generalisations beyond the current population, we were nevertheless able to make a wide range of analytical generalisations about the population being studied.

Our sampling frame, therefore, consisted of 1438 news media decision-makers, surveyed from 2011 to 2016 in 107 countries worldwide. Of those, 63 per cent were from developed nations and 37 per cent from developing nations, according to the World Bank classification. Thus, both technology-saturated conditions and more varied environments, such as found across the BRICS nations (Brazil,

Russia, India, China and South Africa) were represented in the study. This enabled us not only to be alert to the general industry, but also to address the dearth of studies that consider geographic, historical and media business contexts (Achtenhagen, 2017; Welter, 2011; Minniti, 2003).

From this sampling frame, we chose to include in our analyses only those cases which we identified as 'ambidextrous', i.e., those participants who were involved in activities across the two measures of ambidexterity (both exploration and exploitation). This sample of 1388 cases, represented 97% of the greater sample.

3.4. Measures

We explored organisational ambidexterity from the perspective of two independent variables, both with normal distributions. We refer to these as 'Exploration' and 'Exploitation' (defined after March, 1991). For the purpose of this study, we argue that they represent the extent to which an organisation prioritises investment either within its own sector (exploitation) or outside its current sector (exploration).

Thus, exploration (c.f. Nel & Milburn-Curtis, 2017) was indicated by the sum of four survey items, each answered on a Likert scale of 1 to 7, which explored: a) the extent of investment in the development of new products inside and beyond the media sector; b) investment in a more diverse workforce (in terms of age, gender, ethnicity etc); c) investment in other media companies and d) investment in non-media companies. Exploitation (c.f. Nel & Milburn-Curtis, 2017), scored on a similar scale, indicating a) investment priorities in the convergence of existing media operations; b) the development of syndication partnerships within the sector; c) the development of partnerships with similar digital platforms; and d) services that extend the core operations.

Our dependent variables of interest represented aspects of "performance" in the context of media organisations. The variables were also derived from the survey questionnaire and represented the following:

1. Financial performance (increases / decreases in revenues over the past year: a continuous variable with a normal distribution).
2. Perceived success (after Rao and Weintraub, 2013): a series of three items, each scored on a 7 point Likert scale:
 - a. PS1: "Our innovation efforts have led us to better financial performance than others in our industry" (external-level success).
 - b. PS2: "Our innovation projects have helped our organisation develop new capabilities that we did not have three years ago" (enterprise-level success).
 - c. PS3: "I am satisfied with my level of participation in our innovation initiatives" (personal-level success).

3.5. Data Analytical Methods

As indicated in Table [2], the analyses employed correlational techniques and explored the relationships between the dependent and independent variables of interest. Since all variables presented normal distributions, Pearson's *r* was the correlational test of choice. Statistics were evaluated using Excel and SPSS. These tests enabled us to report both effect sizes in terms of Pearson's *r* and the statistical significance (*p*). The significance cut-off was $p < .05$ (i.e., less than a 5% probability that our results could have been achieved by chance).

4. Results

Our analysis detected that, in our sample of ‘ambidextrous’ organisations, the more an organisation prioritised exploration (the prioritisation of investment outside the current sector) as their entrepreneurial orientation, the greater their reported growth in revenues. In contrast, no such relationship was detected for organisations that tended to prioritise exploitation (the prioritisation of investment within the current sector).

Leaders who perceived that their innovation efforts had led them to better financial performance than others in their industry, leaders who perceived that their innovation projects had helped their organisations to develop new capabilities that they did not have three years ago, and leaders who were satisfied with their own personal level of participation in their organisation’s innovation initiatives, were all likely to be reporting growth in revenues year on year.

Interestingly, both ‘explorers’ and ‘exploiters’ felt that their innovation projects had helped their organisation develop new capabilities that they had not had three years ago. However, only ‘explorers’ were confident that their innovation efforts had led them to better financial performance than others in their industry.

There was no relationship between the levels of personal satisfaction leaders felt with their own contribution to innovative efforts and their prioritisation of either exploration or exploitation.

Table 2. Correlational relationships between variables of interest

Correlations	Revenue change	Exploration	Exploitation
Exploration	$r = .20; p < .01$		
Exploitation	ns	$r = .58; p < .001$	
PS1 (external success)	$r = .25; p < .001$	$r = .22; p < .01$	ns
PS2 (enterprise success)	$r = .14; p < .05$	$r = .23; p < .01$	$r = .16; p < .05$
PS3 (personal success)	$r = .14; p < .05$	ns	ns
ns: non-significant			

5. Discussion

For the news media industry, the advent of the Internet and, in particular, the World Wide Web, has not only forced innovation of products, processes, and positioning, but also their paradigms (c.f. Tidd et al., 2013) of, amongst others, the source of their profits (Nel, 2010; Picard, 2012). So perhaps it’s not surprising that early research into ambidexterity in the news industry (e.g. Järventie-Thesleff et al., 2014; O’Reilly & Tushman, 2013; Boumgarden et al., 2012; O’Reilly & Tushman, 2004; Tushman et al., 2003) used digital and non-digital activities as binary indicators for exploration and exploitation, respectively. However, this study has shown that more than two decades into the so-called Digital Revolution successful news publishers do not only seek to replicate traditional offline advertising and circulation revenue models online, but that they are indeed looking elsewhere for money (c.f. Nel, 2010; Picard, 2014; Nel & Milburn-Curtis, 2017).

Our results exemplify the advantages of reconceptualising exploration as innovative activities that seek to identify and capitalise on diverse revenue opportunities inside, outside and alongside

traditional media products, whether those are online or off. Thus, the traditional divide between “print” and “digital” (Bøe-Lillegraven, 2014), can be seen as a blunt instrument, as was also suggested by Khajeheian (2017) in his analysis of media entrepreneurship. Indeed, these findings should urge scholars to investigate both incremental innovations (exploitation) and radical innovations (exploration) in, with and of printed media, such as the examples Wilpers (2016) noted of successful new print products launched in under-served markets (e.g. Dr. Oz, The Good Life or any of the many Kickstarter launches) or unique delivery methods (e.g. Hearst’s free pop-up magazines) or tying print to digital, thus enhancing the best of both mediums (e.g. Nivea’s pull-out radar wristband).

Furthermore, these findings call for greater scrutiny of digital innovations, which also range from incremental (e.g. digital replicas of print publications) to radical (e.g. interactive voice-activated news services on smart speakers). They also invite scholars to scrutinize news media company innovations outside of print and digital, such as the ‘analogue’ version of the Financial Times Weekend magazine in the form of a festival that brings journalists, sources, audiences and advertisers together face to face thereby not merely providing alternative revenue streams, but alternative formats of engagement (cf. Financial Times Weekend, 2019).

These findings also challenge those who suggest that ‘all’ news media organisations are in decline. Indeed, it underlines the World Press Trends 2019 findings that “On every continent and in every market context, innovating news publishers are finding ways to adapt and thrive in the face of changing consumer behaviour and competition that is driven, in large measure, by the rapid changes and challenges of digital technology” (Nel, 2019: 9).

These observations may well also be of use to scholars studying innovation in other sectors affected by the uncertainty of rapid advances in digital technologies, such as banking and travel, where exploitation and exploration might be also be categorised as a choice between online and offline services, rather than between existing and new revenue streams.

We have also answered the call by Junni et al. (2013) for scholars to combine both perceptual (relative and absolute indicators) and objective (financial growth) measures - and find that a media organisation which reported significant financial growth was likely to have a leadership that prioritised exploration (the prioritisation of investment outside the current sector). The same could not be said for those that prioritised exploitation. Our findings thus supported the hypothesis that the extent to which an organisation prioritises exploration correlates with its financial growth. Thus, the analysis underlines the view that the entrepreneurial ambitions of news media leaders are connected to organisational success (see e.g. Van Weezel, 2009). Furthermore, these findings confirm the reliability of Tushman and O’Reilly’s (1996) argument that faced with rapid change, organisations need to explore and exploit simultaneously. It further responds to the calls by (O’Reilly & Tushman, 2013) and others for scholars to seek “increasing clarity in the measurement of OA” (Junni et al., 2013: 309).

6. Conclusions

In sum, this paper has contributed to the specific understanding of ambidexterity in news media firms by (1) reconsidering narrow conceptualisations of exploitation and exploration in the industry (Bøe-Lillegraven, 2014) to further clarify OA measures (Junni et al., 2013); (2) offering a multidimensional construct for success of innovations (Rao and Weintraub, 2013) that combines both perceptual and absolute measures in the same study to allow for direct comparisons (Junni et al., 2013); (3) employing an analysis of unique data from a multi-year study into the decision making of news media executives worldwide that responds to calls for entrepreneurship research into specific contexts, including industry and business context (c.f. Welter, 2011; Minniti, 2003); and (4) exploring the relationships between exploration and

exploitation, and both perceived success and actual financial growth. Our findings support the notion that firms that engage in simultaneous OA activities have the potential for financial growth, and that firms that prioritise exploration higher than exploitation are more likely to be reporting financial success than those who do the opposite.

We have also responded to Picard and Lowe's (2016) general appeal for ambitious media management scholarship that does "not simply describe cases, highlight issues and challenges and documents perspectives and behaviours," but tests, expands and develops theory directly pertinent to media management sciences - and which will potentially be relevant to other fields too (p. 63).

6.1 Research Limitations

Whilst we acknowledge the limitations of the study design (e.g. the sampling strategy), care has been taken not to make causal claims, and the analysis has been rigorously objective. While the results of this study cannot be statistically generalised beyond the population of the respondents, our robust analysis invites news media executives who are currently relying on an exploitation strategy to reconsider their priorities.

6.2. Practical Implications for Management

The data for this study were collected during a period of significant volatility, uncertainty, complexity and ambiguity, which has been described as a "VUCA environment" (Picard and Lowe, 2016: 62). The first survey was conducted in 2009/10 in the wake of what became known as a Global Economic Crisis and following the launch of the Apple iPad; the final set of data was collected over the 2016 Northern Hemisphere summer during which the UK voters decided to exit the European Union and US voters - deciding on the 45th President - pondered leaked emails and the candidates' sparring on Twitter, amongst other potentially disruptive phenomena. Throughout this period characterised by permanent, on-going change, which Bauman (2000) describes as a condition of "liquid modernity", some media firms have continued to report both growth and profit even as traditional revenue streams have declined (Gale, 2016; Lee, 2016). This study contributes to the understanding of the impact of these volatile times on the media industry, by suggesting that, even in the midst of considerable disruption, the exploration of new opportunities nevertheless has the potential to reap financial rewards.

6.3. Directions for Future Research

The limitations stated above are guiding us toward possible new openings. For the research on hand, we found no relationship between the levels of personal satisfaction leaders felt with their contribution to innovative efforts and either the objective and perceptual measures of their organisations' success. This certainly invites greater scrutiny. Furthermore, we limited ourselves to looking at links between entrepreneurial leadership and organisational performance in the whole sample. However, there are questions that arise from the data, including those concerning different sub-groups in the study. Are there geographical differences, or differences between media manager generations? What kind of nuances in leadership styles and attitudes may predict successful leadership, enhancing organisational performance? In an earlier analysis (Nel, Lehtisaari & Milburn-Curtis, 2015) it was found that entrepreneurial ambition of a particular manager has more to do with many of the key conditions than do, for example, the geographical orientation of the newspaper or the location of it in a developing or developed country. However, these findings need to be explored further in order to explore further links between entrepreneurial ambition and media company performance.

Our findings invite questions similar to those raised by Tushman and O'Reilly (1996) about the extent to which media companies around the world are engaged in sequential ambidexterity, rather than engaging in both exploration and exploitation strategy simultaneously. However, our survey responses are anonymised and, as such, we do not collect repeated measures: we are therefore unable to see how specific firms progress from one year to the next. Certainly this is an issue that warrants further attention in future research studies.

References

- Achtenhagen, L. (2017). Media Entrepreneurship—Taking Stock and Moving Forward. *International Journal on Media Management*, 19(1), 1-10. Doi: 10.1080/14241277.2017.1298941.
- Alabadi, H. F., Alsachit, H. A. A., & Almajtwe, M. H. S. (2018). Impact of Strategic Ambidexterity on Organizational Success: Strategic Scenario as Moderating Variable. *International Journal of Academic Research in Business and Social Sciences*, 8(5), 18–29.
- Alghamdi, F. (2018). Ambidextrous leadership, ambidextrous employee, and the interaction between ambidextrous leadership and employee innovative performance. *Journal of Innovation and Entrepreneurship*, 7(1), 1.
- Anderson, C. W., Bell, E., & Shirky, C. (2015). Post-Industrial Journalism: adapting to the Present. *Geopolitics, History & International Relations*, 7(2).
- Bauman, Z. (2000). *Liquid modernity*. Cambridge, England: Polity Press.
- Black, T. R. (2012). *Doing quantitative research in the social sciences*. London, England: Sage.
- Bøe-Lillegraven, T. (2014). Untangling the ambidexterity dilemma through big data analytics. *Journal of organisation Design*, 3(3), 27–37.
- Boudreaux, D. (1994). Schumpeter and Kirzner on competition and equilibrium. *The Market Process: Essays in Contemporary Austrian Economics*. Aldershot, UK: Elgar.
- Boumgarden, P., Nickerson, J., & Zinger T. R. (2012). Sailing into the wind: Exploring the relationships among ambidexterity, vacillation, and organisational performance. *Strategic Management Journal*, 33(6), 587–610.
- Bryman, A., & Bell, E. (2011). *Business research methods*. Oxford, England: Oxford University Press.
- Burton, R. M., Obel, B., & DeSanctis, G. (2011). *Organisational design: A step-by-step approach*. Cambridge, England: Cambridge University Press.
- Cairncross, F. (2019). *The Cairncross Review: A Sustainable Future for Journalism*. Policy Paper, retrieved on 23.10.19 from: <https://www.gov.uk/government/publications/the-cairncross-review-a-sustainable-future-for-journalism>
- Cao, Q., Gedajlovic, E., & Zhang, H. (2009). Unpacking organisational ambidexterity: Dimensions, contingencies, and synergistic effects. *Organisation Science*, 20(4), 781–796.
- Danneels, E., & Kleinschmidt, E. J. (2001). Product innovativeness from the firm's perspective: Its dimensions and their relation with project selection and performance. *Journal of Product Innovation Management: An International Publication of the Product Development & Management Association*, 18(6), 357-373.
- De Brentani, U. (2001). Innovative versus incremental new business services: Different keys for achieving success. *Journal of Product Innovation Management: Journal of Product Innovation Management: An International Publication of the Product Development & Management Association*, 18(3), 169-187.

- Domingo, D., Masip, P., & Costera Meijer, I. (2015). Tracing digital news networks: Towards an integrated framework of the dynamics of news production, circulation and use. *Digital Journalism*, 3(1), 53-67.
- Duncan, R. B. (1976). The ambidextrous organization: Designing dual structures for innovation. *The management of organization*, 1(1), 167-188.
- Drucker, P. F. (1994). *Innovation and Entrepreneurship: Practice and Principles*. London: Heinemann.
- Financial Times Weekend (2019). *FT Weekend Festival 2019: The ideas festival for our age*, available at: <https://www.ftweekendfestival.com/> (accessed on 10/10/2019).
- Fioretti N, & Russ-Mohl S. (Eds). (2009). *Merging media, converging newsrooms*. Lugano, Italy: Giampiero Casagrande editore.
- Gale, A. (2016, 24 March). *The slow death of newspapers*. Management Today, available at: <http://www.managementtoday.co.uk/slow-death-print/article/1388956> (accessed on 10/10/2019).
- Garcia, R., & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: a literature review. *Journal of Product Innovation Management: An international publication of the product development & management association*, 19(2), 110-132.
- Gleason, J. P, & Murschetz, P. C. (2019) Online Interactivity and Achieving Business Value Through Digital Media Entrepreneurship. *Journal of Media Management and Entrepreneurship*, 1(2): 14-30.
- Hébert, R. F, & Link, A.N. (1982). *The Entrepreneur, Mainstream Views and Radical Critiques* (1st edition). New York: Praeger.
- Hermida, A. (2010). Twittering the news: The emergence of ambient journalism. *Journalism practice*, 4(3), 297-308.
- Huang, E., Rademakers, L., Fayemiwo, M. A., & Dunlap, L. (2004). Converged journalism and quality: A case study of the Tampa Tribune news stories. *Convergence*, 10(4), 73-91.
- Järventie-Thesleff, R., Moisander, J., & Villi, M. (2014). The strategic challenge of continuous change in multi-platform media organizations—A strategy-as-practice perspective. *International Journal on Media Management*, 16(3-4), 123-138.
- Junni, P., Sarala, R. M., Taras, V., & Tarba, S. Y. (2013). Organizational ambidexterity and performance: A meta-analysis. *Academy of Management Perspectives*, 27(4), 299-312.
- Ketkar, S., & Puri, R. (2017). Ambidextrous human resource practices and employee performance. *Indian Institute of*.
- Kirzner, I. M. (1973). *Competition and Entrepreneurship*. Chicago, IL, US: University of Chicago Press.
- Kirzner, I. M. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of economic Literature*, 35(1), 60-85.
- Kirzner, I. M. (1999). *Entrepreneurship and the market approach to development*. Chicago, IL: University of Chicago Press.
- Khajeheian, D. (2017). Media entrepreneurship: A consensual definition. *AD-minister*, (30), 91-113.
- Kirwan, P. (2009). *The decline and fall of local newspapers*, Press Gazette, 23 June, [online], <http://blogs.pressgazette.co.uk/mediamoney/2009/06/23/the-decline-fall-of-local-newspapers-part-1>
- Knight, M. and Cook, C. (2013). *Social Media for Journalists: Principles and Practice*. London, England: Sage.

- Krumsvik, A. H. (2014). Stability in times of change: Trends in newspaper executives' attitudes towards digital media. *Nordicom Review*, 35, 97–108.
- Küing, L. (2015). *Innovators in digital news*. London, England: I. B. Tauris.
- Lee, T. B. (2016, 2 November). *Print newspapers are dying faster than you think*. Vox, available at: <http://www.vox.com/new-money/2016/11/2/13499004/print-newspapers-dying>
- Lehtisaari, K., & Grönlund, M. (2015). Online activities of Finnish newspapers in the changing media business environment. *Austral Comunicación*, 4(1), 127-152.
- Liening, A., Geiger, J. M., & Kriedel, R. (2018). Bridging the Gap Between Invention and Innovation: The Role of University-Based Start-Up Programs and Private Cooperation. In *Technology Entrepreneurship* (pp. 241-260). Springer, Cham.
- Madigan, N. (2016). *An abrupt end of the Tampa Tribune after a blow from its rival*. New York Times, May 21, available at: https://www.nytimes.com/2016/05/21/business/media/an-abrupt-end-to-the-tampa-tribune-after-a-blow-from-its-rival.html?_r=0 (accessed on 10/10/2019)
- Malmelin, N., & Virta, S. (2016). Managing creativity in change: Motivations and constraints of creative work in a media organisation. *Journalism Practice*, 10(8), 1041-1054.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science*, 2(1), 71-87.
- Meier, K. (2007). Innovations in Central European newsrooms: Overview and case study. *Journalism Practice*, 1(1), 4-19.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management science*, 29(7), 770-791.
- Minniti, M. (2003). Entrepreneurship studies: A stock taking. *Advances in Austrian Economics*, 6, 9-37.
- Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6), 1029-1055.
- Nel, F. (2010). Where else is the money? A study of innovation in online business models at newspapers in Britain's 66 cities. *Journalism Practice*, 4(3), 360-372.
- Nel, F. (2013). *Pressed to change*. RCUK, New Economic Models for the Digital Economy.
- Nel, F. (2019). 30 years of World Press Trends; What has three decades of documenting the world's news media taught us? In Nel, F. & Milburn-Curtis, C. (2019) *World Press Trends 2019*. Frankfurt / Paris: WAN-IFRA, pp 1 - 72.
- Nel, F., & Milburn-Curtis, C. (2019). *World Press Trends 2019*. Frankfurt/Paris: WAN-IFRA, the World Association of News Publishers.
- Nel, F. P., Lehtisaari, K. and Milburn-Curtis, C. (2015). Exploring confidence: Entrepreneurial leadership in news media organisations. *International Media Management Academic Association (IMMAA) Annual Conference*, 170-174.
- Nel, F. P., & Milburn-Curtis, C. (2017). *World News Publishers Outlook 2017: Executive Summary*.
- Newman, N., Fletcher, R., Levy, D. A. L., & Nielsen, R. K. (2016). *Reuters institute digital news report 2016*. Reuters Institute for the Study of Journalism, available at: <http://www.digitalnewsreport.org/>
- Oliver, J. J. (2013). Media management tools: UK broadcast media executives' perspective. *International Journal on Media Management*, 15(4), 245-257.

- O'Reilly, C. A., & Tushman, M. L. (2004). The ambidextrous organisation. *Harvard Business Review*, 82(4), 74-81.
- O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in organisational Behavior*, 28, 185-206.
- O'Reilly III, C. A., & Tushman, M. L. (2011). Organizational ambidexterity in action: How managers explore and exploit. *California management review*, 53(4), 5-22.
- O'Reilly III, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of management Perspectives*, 27(4), 324-338.
- Pavlik, J. V. (2013). Innovation and the future of journalism. *Digital journalism*, 1(2), 181-193.
- Picard, R. G. (2010). *Value creation and the future of news organizations: Why and how journalism must change to remain relevant in the twenty-first century*. Media XXI.
- Picard, R. G. (2011). Digitization and media business models. *Mapping digital media*.
- Picard, R. G. (2014). Twilight or new dawn of journalism? Evidence from the changing news ecosystem. *Digital Journalism*, 2(3), 273-283.
- Picard, R. G., & Lowe, G. F. (2016). Questioning media management scholarship: Four parables about how to better develop the field. *Journal of Media Business Studies*, 13(2), 61-72.
- Powers, A., & Zhao, J. (2019). Staying alive: entrepreneurship in family-owned media across generations. *Baltic Journal of Management*.
- Rao, J. and Weintraub, J. (2013). How innovative is your company's culture?. *MIT Sloan Management Review*, 54(3), 28-30.
- Rialti, R., Marzi, G., Silic, M., & Ciappei, C. (2018). Ambidextrous organization and agility in big data era. *Business Process Management Journal*.
- Rosing, K., & Zacher, H. (2017). Individual ambidexterity: the duality of exploration and exploitation and its relationship with innovative performance. *European Journal of Work and Organizational Psychology*, 26(5), 694-709.
- Schumpeter, J. (1934). *The Theory of Economic Development*. Transaction. New Brunswick, NJ: Transaction Publishers.
- Siapera, E., & Veglis, A. (Eds.). (2012). *The Handbook of Global Online Journalism*. West Sussex, England: Wiley-Blackwell Publishing.
- Singer, J. A. (2004). Narrative identity and meaning making across the adult lifespan: An introduction. *Journal of personality*, 72(3), 437-460.
- Smith, A. (1776). *An inquiry into the nature and cause of the wealth of nations*. London, England: Edwin Cannan.
- Storsul, T., & Krumsvik, A. H. (Eds.). (2013). *Media innovations. A multidisciplinary study of change*. Gothenburg, Sweden: Nordicom.
- Sylvie, G. (2007). *Decision making by Nordic newspaper editors: an exploratory study and comparison to US editors*. Jönköping International Business School.
- Tameling, K., & Broersma, M. (2013). De-converging the newsroom: Strategies for newsroom change and their influence on journalism practice. *International Communication Gazette*, 75(1), 19-34.

- Tang, H. (2011). Transcendental idealism in Wittgenstein's tractatus. *The Philosophical Quarterly*, 61(244), 598-607.
- Tidd, J., & Bessant, J. R. (2018). *Managing innovation: integrating technological, market and organizational change*. John Wiley & Sons.
- Tushman, M. L., & O'Reilly III, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California management review*, 38(4), 8-29.
- Tushman, M., Smith, W., Wood, R., Westerman, G., & O'Reilly, C. (2003). *Innovation streams and ambidextrous organizational designs: On building dynamic capabilities*. Division of Research, Harvard Business School.
- Van Weezel, A. (2009). *Entrepreneurial strategy-making mode and performance: A study of the Newspaper industry* (Doctoral dissertation, JIBS).
- Welter, F. (2011). Contextualizing entrepreneurship—conceptual challenges and ways forward. *Entrepreneurship theory and Practice*, 35(1), 165-184.
- Westlund, H. (2011). Multidimensional entrepreneurship: theoretical considerations and Swedish empirics. *Regional science policy & practice*, 3(3), 199-218.
- Wilpers, J. (2016, March 3). *How can Print Compete with Digital? Imagination and Creativity!*. available at: <https://innovation.media/magazines/imagination-and-creativity-allow-print-to-still-compete-with-digital-media> (accessed on 10/10/2019)
- Wray, R., & Allen, K. (2007, March 31). *Money follows eyeballs and all eyes are glued to the web*. The Guardian, available at: <https://www.theguardian.com/media/2007/mar/31/pressandpublishing.business> (accessed on 10/10/2019)



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