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### Investors' Digital Myopia - The Information Value of Being Digital

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# Investors' Digital Myopia - The Information Value of Being Digital

*Short Paper*

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## Abstract

*Portraying a digital business strategy seems to be what capital markets are looking for in firms. Tech companies raise staggering amounts of capital and long-established companies that announce a digital business strategy double their firm value over night. By drawing from information economics literature, this study investigates drivers and outcomes of a firm's digital business strategy by utilizing the new construct of a firm-wide digital orientation. Applying a cross-industry longitudinal study, results indicate that initial public offerings provide financial flexibility to drive a firm's digital orientation. Yet, against expectations, capital markets react negatively to firms depicting a digital orientation post share issuance. We explain this finding on the basis of investors' digital myopia. Our analysis yields surprising, yet promising results.*

**Keywords:** digital business strategy, financial market performance, equity offerings

## Introduction

Firms portraying a digital business strategy (DBS) seem to be what investors are looking for. Tech companies such as Lyft Inc. raised extraordinary amounts of capital during their initial public offerings (IPOs) and Kodak, almost bankrupt, doubled its firm value in the same day it announced the launch of a blockchain-based rights management service (Field 2018; Salinas 2019). Or consider Tesla's firm value (USD 64.75 billion) on August the 7th, 2018, which exceeded BMW's firm value (USD 64.36 billion) although their electric car operations levels were almost identical and BMW's net income was six times higher than Tesla's (Bharadwaj et al. 2018). The question therefore arises: How do firms become and what is the value of being digital?

A DBS is defined by leveraging digital resources for value creation in- and outside the information technology function and has been at the heart of company strategies in the past decade (Bharadwaj et al. 2013). Although researchers and practitioners reach unity upon the fact that a firm's DBS is driven by environmental and organizational conditions, scholars have paid little attention to the underlying mechanisms which provide the monetary base to promote digital initiatives in the first place, namely: corporate financing policies (Kahre et al. 2017). The merger of SunTrust and BB&T, two American banks, fortifies the need for a better understanding, as both companies merged to accelerate their digital initiatives

in a competitive manner. The CEO of BB&T stressed the urgency as follows: “We face a fundamental choice – disrupt our business or be disrupted” (Rooney 2019). While there is a lack of understanding regarding the underlying financing mechanisms of a firm’s DBS, research is regarding its monetary value generation in discord. Some scholars see a DBS as a transformational power to secure long-term competitiveness by creating and capturing value to boost firm performance (Drnevich and Croson 2013). Others are more skeptical and suggest that a firm’s DBS acts as value destroying by increasing the imitability of the firm (e.g., Grover and Kohli 2013). An explanation for these shortcomings can be traced back to two overarching deficits in DBS research: (1) In the vast majority of studies (e.g., Majchrzak et al. 2016), the research design is based on surveys and case studies, resulting in excerpts rather than cross-industry longitudinal, more generalizable analyses. (2) The measurement of a DBS frequently relies on information technology investments as a proxy (e.g., Tanriverdi and Ruefli 2004), which do not necessarily reflect the trans-functional nature of a firm’s DBS (Kahre et al. 2017). Beutel (2018) addressed these shortcomings and developed a new measure for a firm’s DBS, namely the firm-wide strategic orientation: digital orientation (DO). A firm’s DO can be seen as the operationalization (“the how”) of the overarching DBS (“the what”) and reflects how a firm implements and orchestrates its DBS throughout the organization. Due to the absence of an established measure of firms’ DBS, only a limited amount of studies has empirically validated drivers and monetary outcomes of a firm’s digital strategy (for an overarching literature review, cf. Kahre et al. (2017)). Studies focusing on financial implications concentrate on accounting-based firm performance measures and neglect stock market implications. This is surprising because security prices reflect expected future cash flow and thus more holistically capture monetary outcomes (Mizik and Jacobson 2007).

This study addresses these research gaps by assessing (a) how financial flexibility drives firms’ DO, as slack resources provide the ground to facilitate the experimentation and implementation of a digital agenda (Hess et al. 2016), and (b) how investors value firms with a more pronounced DO. To do so, we use a modified version of the traditional chain of effects model proposed by Rust et al. (2004). The model follows the logic that corporate strategy impacts market position, which, in turn, impacts the financial position and subsequently the stock market value of the firm. We extend the model by including a corporate financing event (i.e., IPO), which impacts corporate strategy as it interplays with corporate resource allocation strategies in direction and in volume (Kurt and Hulland 2013). We thus build on the resource-based view and information economics literature (i.e., signaling theory). The IPO event is the most profound equity offering in a firm’s lifecycle and offers two investigation mechanisms: First, newly issued firms extensively increase their resource base (e.g., higher financial flexibility) and have easier access to additional capital, which subsequently affects resource and capability intensive strategies (Wu 2012). Second, recent public firms suffer from liability of market newness (Certo et al. 2009). Because limited public information is available, investors are highly dependent on and sensitive to the information IPO firms offer after the IPO event and incorporate any additional information into their reservation price for a given stock (Certo et al. 2009; Fama et al. 1969; Malkiel and Fama 1970).

Our research contributes to the information systems literature in four ways: First, we contribute from a theoretical perspective by analyzing a firm’s DBS from an information economics standpoint, which provides the DBS literature with a novel theoretical perspective. Second, we contribute to literature and to the overall discussion by providing empirical cross-industry longitudinal evidence on antecedents of a DBS and the information value a DBS holds. We verify whether a firm’s financial flexibility drives a firm’s DO and how capital markets subsequently value a firm (e.g., Bharadwaj et al. 2013). Third, we reveal an ongoing misconception of a firm’s DBS (managerial vs. investor perception) and offer an explanation to the underlying mechanisms. Finally, we open up various opportunities for future research to assess the value a DO holds and increase the scrutiny to view information technology/information system strategies not as a subordinate but rather as a company-wide strategy (e.g., Kahre et al. 2017).

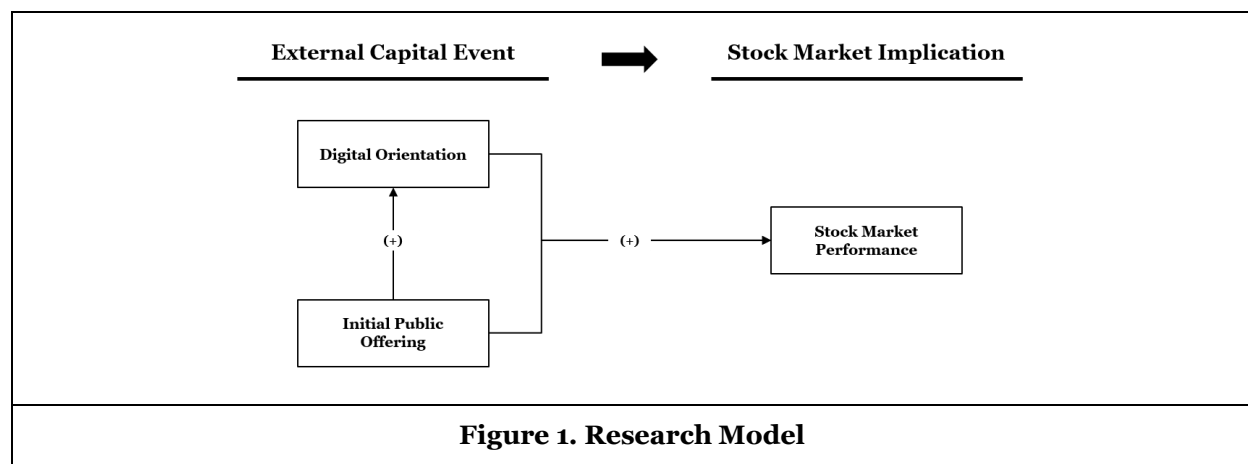
## **Theory and Hypotheses**

The work of Kohli and Grover (2008) illustrates that information technology creates value, when seen as a synergistic part of the wider business organism, and that this value contributes to the differential value when viewed from the resource-based view perspective, as resources and capabilities are heterogenous and imperfectly mobile. This view contributes to the concept of a firm’s DBS, which raises the organizational information technology function from a supporting role to a cornerstone of a firm’s business strategy (Chan and Reich 2007). Bharadwaj et al. (2013) define a firm’s DBS as an “organizational strategy formulated and

executed by leveraging digital resources to create differential value” (Bharadwaj et al. 2013, p. 472) and associate four core strategic themes with a firm’s DBS: extended business scope, scale, speed, and new sources of value creation and capture. Extended business *scope* relates to the digitalization of existing or the creation of new products and services; *scale* relates to building and harnessing network effects; *speed* relates to increased speed for product launches and decision-making; and *new sources of value creation and capture* relates to harvesting the new advancements of digital technology. While a firm’s DBS refers to the overarching business strategy, a firm’s DO reflects the manifestation of a firm’s DBS. DO exhibits how a firm conducts its business, allocates resources, and promotes behavior in the digital domain (Beutel 2018). We define a firm’s DO in a similar vein as Beutel (2018) as an organization’s guiding principles to create the proper firm-wide behavior to capture and create value through the usage of digital technologies to digitize operations (internal and external) and offered goods to achieve a competitive advantage. DO is an aggregated construct consisting of six sub-dimensions: digital infrastructure, digital processes, digital skills, digital portfolio, digital competencies, and digital governance.

Information is a key driver of capital markets as it affects the decision-making processes of individuals and subsequently the security price (Fama et al. 1969). Theory on efficient capital markets proclaims that stock prices reflect the fundamental value of the underlying asset and that the security price is a reflection of investors’ expectation about the firm’s future cash flows (Malkiel and Fama 1970). However, due to information asymmetries, it is difficult for investors to comprehensibly observe and evaluate the characteristics (e.g., firm quality) of a firm. To bridge information gaps, firms indicate and communicate firm quality by sending signals of observable information about unobservable firm characteristics to the uninformed party (Connelly et al. 2011).

To evaluate the information value a DBS holds for capital markets, we use the efficient capital market hypotheses and draw upon two broader concepts of the information economics literature: the concepts of costly state falsification (i.e., a signal needs to be verifiable post-hoc) and cheap talk (i.e., reputation builds on truthful reporting) (Saboo and Grewal 2012). These concepts are chosen as signal theory proclaims that a credible signal requires a cost (Connelly et al. 2011). At first glance, it seems appropriate to argue that a firm’s DBS represents a costless signal because companies could pretend to follow a digital agenda. But a long-term perspective allows to conclude otherwise, since public companies interact in an infinite number of games with capital markets. We therefore propose that a firm’s DBS represents a postponed costly signal, because a firm’s DBS (a) is verifiable at some point since it materializes in the company eventually (e.g., investments made in digital infrastructure) and (b) builds reputation with investors if implemented as proclaimed (Lacker and Weinberg 1989; Stoken 2000). Figure 1 depicts our research model.



### Hypotheses Derivation

A DBS consists of four core strategic themes regarding extended business *scope*, *scale*, *speed*, and *new sources of value creation and capture*. Implementing strategic plans along these core themes is cost-intensive, as they depend on investments and/or require the utilization of existing and the creation of novel firm-wide capabilities (Bharadwaj et al. 2013; Mithas and Rust 2016). The sheer cost intensity of a digital agenda can be seen by the commitment of J.P. Morgan Chase and the Bank of America, who allocated USD

10.8 billion in 2018 and USD 16 billion in 2017, respectively, to investments in digital technology and digital human capital (Rooney 2019). As pre-IPO firms typically do not possess the financial resources and are not able to purchase the missing capabilities (Wu 2012), we propose that the IPO event causes a shift in DO as financial constraints are lifted. An IPO provides financial resources from IPO proceeds through the offered shares (between 1998 and 2007, the average IPO proceed was more than USD 215 million (Certo et al. 2009)) and eases access to additional capital as a firm's stock is publicly tradable after the IPO. Wiklund and Shepherd (2005) provide supporting evidence by showing that unused (slack) resources effectively drive experimentation and implementation of entrepreneurial projects. We therefore argue that an IPO has an uplifting effect and promotes a firm's DO.

**H1:** An IPO event is positively related to a firm's post-IPO level of DO.

As investors do not possess the private knowledge of firm insiders (e.g., managers), information asymmetries make it hard for investors to assess firm quality, especially in the aftermath of the IPO, as financial reporting requirements have just been imposed and a limited amount of information is publicly available (Certo et al. 2009; Wu 2012). Therefore, it is of particular importance for a recent public firm to actively engage in signaling firm quality to continue to be an appealing investment case. Newly issued firms can signal firm quality by voluntarily transmitting information about positive prospects, which, for example, impact the earnings-per-share ratio or intangible asset base as both are a determinant of shareholder value (Bendig et al. 2018). We argue that a firm's DBS is such a signal because considerable evidence suggests that a DBS benefits a firm. Mithas and Rust (2016) show that a firm's DBS increases revenue or decreases costs, or both, and therefore increases organizational efficiency and effectiveness. Moreover, an increased focus on a DBS can lead to strategic advantages and subsequently to a competitive advantage, because organizations increase their organizational flexibility (e.g., infrastructural changes), which makes it easier to respond to upcoming opportunities and threats (Kahre et al. 2017). Although evidence exists that a DBS increases the transparency of the company and thus the imitability by competitors (Kohli and Grover 2008), which can threaten the positive prospects of a firm, we argue that a DBS and its related mechanisms extend the differentiation from competitors and increase the business sustainability. A DBS therefore gives a positive signal to capital markets. However, while we argue that capital markets react positively to firms depicting a DBS, the information value of a DBS should increase with its manifestation. A DO holds additional information value for investors as it exhibits the intensity and embeddedness of a firm's overall DBS. For example, a DO illustrates how firms develop and/or source distinctive digital competencies such as the presence of digital know-how (e.g., for the Lego Group, this was a crucial enabler and amplifier of their digital agenda (El Sawy et al. 2016)). Further, it displays the intensity of the recalibration of a firm's organizational structure and processes. For instance, studies investigating the impact of digital technologies, such as data analytics and artificial intelligence, on existing or new processes find a significant increase in firm productivity (Tambe 2014). In conclusion, a firm's DO will positively affect the earning-per-share ratio (through revenue increase or cost decrease, or both) and a firm's intangible asset base (e.g., through product quality or customer services). Moreover, prior research shows that investors react positively to an increase in the earnings-per-share ratio and intangible assets (Bendig et al. 2018; Rust et al. 2004). Hence, we hypothesize:

**H2:** A firm's level of DO is associated with positive post-IPO abnormal stock returns.

## **Method, Sample and Variable Operationalization**

We built the IPO sample in this study using the Security Data Company (SDC) Platinum new issue database. It comprises of IPO prospectuses (N=1,463) and Management Discussion and Analysis (MDA) sections in 10-K reports retrieved from the U.S. Securities and Exchange Commission EDGAR database of firms that went public in the U.S. between 2004 and 2013. Additionally, we collected a comparison group of MDA sections based on the Compustat database of firms that have been publicly traded for at least five years. The resulting sample reflects a cross-industry longitudinal setting ranging from 2004 to 2018. We gathered firm-level accounting data from the Compustat database. To calculate abnormal stock returns, we gathered data from the University of Chicago's Center for Research and Security Prices, which provides raw stock returns on a monthly basis, and the Kenneth French Data Library, which provides data on the risk factors on a monthly basis. Our final sample consists of 3,164 firm-year observations in the IPO sample and 4,672 firm-year observations in the comparison sample.

The DO construct is operationalized as an aggregated construct composed of six sub-dimensions. Each sub-dimension contains a specific list of words for its individual domain (Beutel 2018). To operationalize these six dimensions and conflate them into a single measure, we employed computer-aided text analysis to count the number of words used in an individual MDA section for each domain. This methodology is commonly used in strategy research and recent publications underline its accuracy for measuring a firm's strategic orientation (e.g., Grünh et al. 2017). This approach is theoretically based on the Whorf-Sapir hypothesis and the attention-based view of the firm. The former refers to the usage of words, which indicates the direction of managerial attention and the intensity of attention based upon the usage and frequency of words used (Sapir 1944; Whorf 1956). The latter refers to a firm's posture and behavior as a function of managerial attention (Ocasio 1997). Thus, a firm which publishes an MDA section that includes a more frequent usage of words associated with the six DO dimensions reflects a stronger DO level for the year.

To measure a firm's DO, we employ both an unadjusted and adjusted measure. The former refers to the raw level of DO; the latter controls for narrative themes and different strategic agendas between industries (Beutel 2018; Grünh et al. 2017). We differentiate between the IPO sample and the comparison sample through a binary variable to test for the impact an IPO event entails. To ensure robustness of our findings, we employ two methodologies to compute a firm's abnormal stock returns: (1) compounded abnormal stock returns (CAR) and (2) buy-and-hold abnormal returns (BAHR) (e.g., Bendig et al. 2018). Both measures reflect investors' expectation about future firm performance and are regularly applied in measuring capital markets' perception. We follow this approach and conduct our study based on an annual basis to measure the long-term information value a firm's DO holds for investors similar to Mizik and Jacobson (2003). The estimation window analyzes abnormal stock returns up to five years post-IPO. Table 2 summarizes the definitions and sources of the main constructs. Additionally, we control for several variables on the firm and environmental level to account for potentially unobserved heterogeneity and omitted variable bias.

<b>Variable</b>	<b>Definition</b>	<b>Source</b>
Unadjusted digital orientation	Word count of each DO dimension in an MDA section in a given year, divided by total words, normalized to a word count by 1,000 words, aggregated to one measure.	Management Discussion and Analysis sections of 10-K reports
Adjusted digital orientation	Difference between the unadjusted digital orientation level of a firm and the yearly average of the DO of competitors in the same industry.	
IPO occurrence	Binary variable that takes the value "1" if the firm is part of the IPO sample and "0" otherwise.	SDC Platinum new issue database
Compounded abnormal stock return (CAR)	We calculate the expected returns for each firm based on the four-factor model, subtract expected from realized returns to generate monthly abnormal returns and take the logarithm of the monthly CARs to generate the annual CARs.	Chicago's Center for Research and Security Prices and Kenneth French Data Library
Buy-and-hold abnormal returns (BHAR)	We calculate the expected returns for each firm based on the time-varying risk approach by regressing realized returns against the log of lagged firm risk characteristics. The resulting residuals are the BHARs by firm and year.	

## Results

To test our hypotheses, we calculated six models shown in Table 2. We applied generalized estimating equation regressions with an identity link function, autoregressive correlation structure, cluster robust standard errors, and a Gaussian distribution (Ballinger 2004). We find support for Hypothesis 1 in model 2 ( $\beta_{\text{IPO occurrence}} = 0.4305$ ;  $p < .05$ ). Hypothesis 2 is not supported in models 4 and 6; instead of a positive relationship, we find a significantly negative relationship ( $\beta_{\text{Adjusted DO (CAR)}} = -0.0470$ ;  $p < .001$  |  $\beta_{\text{Adjusted DO (BHAR)}} = -0.0410$ ;  $p < .001$ ).

To validate the robustness of our findings, we performed a variety of tests. Calculating the variance inflation factors to examine multicollinearity shows no abnormalities. To ensure that endogeneity is not an issue, we ran two assessments. First, we corrected for potential endogeneity using the Heckman model correction and calculating the inverse Mills ratio based on potential antecedents of a firm's DO (Hamilton and Nickerson 2003). Second, as a firm's DO development may follow a longer process, the success of an IPO may also be affected by a firm's DO (e.g., through signaling). As the success of the IPO (proxided by IPO

proceeds as commonly used in IPO research (Certo et al. 2009)) affects the post-IPO stock market performance, we account for this potential endogeneity by including an instrumental variable into our models, namely: predicted IPO success. We predicted a firm's IPO proceeds in a linear regression by using a firm's DO manifestation as showcased in the IPO prospectus and other firm level variables (e.g., sales volume). As both variables controlling for endogeneity (DO correction term and predicted IPO success) do not trigger changes in significance and direction, we conclude that endogeneity is not a problem.

<b>Model</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
	<b>Unadjusted DO</b>		<b>CAR</b>		<b>BHAR</b>	
<b>Independent variables</b>	<i>Base</i>	<i>H1</i>	<i>Base</i>	<i>H2</i>	<i>Base</i>	<i>H2</i>
Controls						
Firm age	-0.1364	0.0083	0.0388	0.0421	0.0359	0.0388
Firm size	-0.4740 ***	-0.4676 ***	0.0461 *	0.0261	0.0197	0.0023
Risk of insolvency	-0.0316	-0.0305	-0.2231 ***	-0.2389 ***	-0.1917 ***	-0.1968 ***
Firm performance	0.0010 **	0.0010 **	0.3396 ***	0.3288 ***	0.3112 ***	0.3018 ***
Competitive intensity	0.0960	0.1027	0.0092	0.0146	0.0075	0.0122
Environmental dynamism	-0.0079	-0.0079	-0.0541 *	-0.0512 *	-0.0558 *	-0.0532 *
Market-to-Book ratio			0.3238 ***	0.3302 ***	0.2989 ***	0.3044 ***
Asset growth <sup>a</sup>			-0.2796 ***	-0.2718 ***	-0.2673 ***	-0.2604 ***
IPO proceeds			0.0283 *	0.0357 †	0.0200 †	0.0266 †
Predicted IPO success			0.0032	0.0062	0.0020	0.0047
DO correction term			0.0170	0.0182	0.0114	0.0125
IPO occurrence		0.4305 *				
Adjusted DO				-0.0470 ***		-0.0410 ***
Industry dummies?	YES	YES	YES	YES	YES	YES
Year dummies?	YES	YES	YES	YES	YES	YES
Observations	7,836	7,836	1,459	1,459	1,459	1,459
Wald chi-squared	781.36 ***	1042.07 ***	2244.23 ***	2386.56 ***	772.30 ***	820.44 ***
Mean VIF <sup>b</sup>	1.04	1.04	1.16	1.17	1.16	1.17

Note. Standardized regression coefficients are reported for non-dummy variables.  
<sup>a</sup> Variable is lagged by one year.  
<sup>b</sup> Variance inflation factor (VIF).  
 \*\*\* p < .001; \*\* p < .01; \* p < .05; † p < .10

## Discussion and Research Outlook

This study demonstrates that an IPO event positively impacts a firm's digital endeavors. Our results provide support for the argument that a firm's DO depends on a firm's resource availability, as an IPO increases the financial resource base substantially and provides the firm with slack resources to pursue and implement its digital entrepreneurial projects (Wiklund and Shepherd 2005).

Against our expectations, capital markets react negatively to firms with a stronger DO. Viewing investor reactions from a prospect theoretical perspective, which posits that individuals do not rest their beliefs on rational outcomes but rather on potential gains and losses (Kahneman and Tversky 1979), allows to generate three insights for the underlying psychological mechanisms triggering these reactions. First, a higher DO ultimately results in a higher devotion and resource allocation towards a firm's DBS (Beutel 2018). As mixed evidence regarding the impact of a firm's DBS exists, it might be difficult for capital markets to pinpoint the true value creation potential a DO entails. Under prospect theory, investors react sensitively to information on potential losses and rank losses higher than gains (Benartzi and Thaler 1995); capital markets may therefore solely associate expenditures such as initial information technology investments

with a DO and neglect the potential gains. Second, business digitalization requires shifts in the organizational configuration (e.g., restructuring) which need to be implemented through profound organizational transformations entailing and increasing firm risk (Hess et al. 2016; Tanriverdi and Ruefli 2004). Increased firm risk affects return expectations, which, in turn, impacts the sentiment towards and the price of a firm's stock (Fama et al. 1969; Tanriverdi and Ruefli 2004). Third, the utility of an option depends on a reference point rather than an outcome (Kahneman and Tversky 1979). As investors are primarily interested in short-term shareholder value (Chakravarty and Grewal 2011) and an investor's reference point excludes intermediates such as information technology investments and increased firm risks of a digital agenda, the reference point reflects higher immediate returns triggering negative capital market reactions. Hence, capital markets might penalize the firm for pursuing a digital agenda and not the short-term shareholder value maximizing strategy. A comparable practical example would be the previously mentioned one of BMW and Tesla (e.g., Bharadwaj et al. 2018). Building on these arguments, we conclude that investors react myopically towards firms depicting a digital agenda and capital markets do not adequately assess a firm's DO. We therefore suggest that the adequate assessment of a firm's digital endeavors depends on contextual factors, which justify the associated investment volume and risk increase.

This study makes three theoretical contributions. First, it contributes to DBS literature by introducing a novel approach of signal models which lay the foundation for analyzing the information value a DBS entails for capital markets (e.g., Bharadwaj et al. 2013). We extend the current understanding of how investors perceive a firm's digital agenda and present, to the best of our knowledge, the first large-scale, longitudinal and cross-industry empirical study analyzing the impact of a DBS on firm value (e.g., Beutel 2018; Bharadwaj et al. 2013). Second, theory advocates that investors have an incentive to align with long-term value-enhancing strategies and should downgrade stock prices of firms focusing on strategies gratifying short-term shareholder value (Mizik and Jacobson 2007). This study shows the contrary: Investors react negatively to firms depicting a digital agenda, which is a long-term value enhancing strategy. We therefore build theory on investors' digital myopia and barriers for implementing a firm's digital agenda. Third, this study extends current literature on drivers of a DBS by providing empirical evidence that a firm's financial flexibility is a prerequisite for a firm's DO. Moreover, our findings provide a first indication that a firm's DO holds dynamic properties and that these properties are dependent on triggers such as external capital events, which lead to shifts in a firm's DO (e.g., Kahre et al. 2017).

The present study also provides valuable insights for managers and investors which help them to drive and value a firm's digital endeavors. First, we note that managers and investors can proactively look for trigger events (e.g., external capital events) to break a firm's strategic stagnation. Second, managers should hold on to a long-term perspective when implementing a firm's DBS. Proceeding this way mitigates the risk of realigning strategy with investor expectation, as capital markets are likely to penalize firms pursuing digital activities in the short term. Thus, managers should actively engage in changing the attitude of capital markets by increasing the disclosure about the short-term benefits, the success factors, and the potential a DBS holds for the respective organization.

Up to the conference, we will further strengthen our theory on investors' digital myopia by analyzing how contextual factors influence investors' perception of the DO. To do so, we follow two avenues. First, as the examples of BMW and Kodak showcased, the stability or instability of current operations plays a crucial role for investors to assess a firm's digital agenda. BMW depicted strong profits and Kodak an overall instability in firm performance by having filed for bankruptcy earlier to the announcement (Bharadwaj et al. 2018; Field 2018). Hence, we currently examine influencing factors in different subgroup comparisons (i.e., high profit vs. low profit/high sales growth vs. low sales growth). Second, the firm's environment justifies the necessity of a business strategy which is the firm's approach to cope with environmental uncertainty and to reduce firm risk (Saboo and Grewal 2012). We therefore examine how environmental uncertainties influence investors' digital myopia. We include technological turbulence as the rate of technological advances and market turbulence as the instability in consumer preferences in our research model (Saboo and Grewal 2012). A DBS provides the firm with capabilities to obtain access to information from diverse pools (Bharadwaj et al. 2013) and increases a firm's customer-focused dynamic capabilities (Setia et al. 2013), which, as we believe, counter the prevailing uncertainties and increase the information value a DO holds for investors. Finally, to further substantiate our current results, we will expand our analyses beyond the IPO event and triple the number of observations.



Our study offers various avenues of future research. First, we only provide empirical evidence on the increase in manifestation as a first indication for the temporal pervasiveness and not on the vertical or horizontal pervasiveness of a firm's DO. An analysis of this pervasiveness would lead to a more granular and processual view on important success factors (e.g., Kahre et al. 2017). Second, scholars should analyze additional events which trigger a shift in a firm's DO (e.g., share repurchases) to increase the understanding of the temporality of a firm's DO. Third, in addition to the appropriateness of the signal, its creditability is an additional factor for investors (Saboo and Grewal 2012). We therefore urge scholars to investigate how moderators of credibility (e.g., career variety of the CIO and the CIO's power degree within the TMT (Vial 2019)) impact investors' digital myopia. Fourth, future research can deepen our understanding of financial and non-financial DBS outcomes. For example, scholars could analyze how a firm's DO impacts firm innovativeness, which ultimately contributes to a firm's competitive advantage and can explain abnormal profits (e.g., Kleis et al. 2012). This procedure would reveal the predominant value source for investors.

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