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Ambidexteridy and the concept of fit in strategic management - Which better predicts success?

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ABSTRACT

We introduce a strategic management perspective into the ambidexterity discussion and show that ambidexterity is a much better predictor of organizational performance than traditional strategic management concepts, specifically the concept of fit. Our main contribution lies in the combination of ambidexterity- and strategic management research where we highlight commonalities as well as differences and show that the two research streams lead to opposing findings. While ambidexterity claims that organizations need to build up capabilities for both exploitative and explorative behavior to be successful, strategic management literature, and especially the concept of fit, rather argues that organizations should focus themselves. Only if they manage to create a fit between their strategic orientation and an aligned behavior will they outperform their competition. We address this contradiction with our study and show that the explanatory power of the concept of fit on organizational performance has diminished. Rather, organizations are successful if they show exploitative as well as explorative behavior. Thus we lay the ground for further research that combines ambidexterity and strategic management.

INTRODUCTION

Ambidexterity research addresses the behavior of organizations towards managing their businesses (Raisch, Birkinshaw, Probst and Tushman, 2009). In our paper, we combine ambidexterity research with the concept of fit in strategic management. While we believe that there are major similarities between the underlying mechanisms in both approaches, we argue that the ultimate notion of both research streams is fundamentally different. Furthermore, in the context of today´s business environment, we believe that ambidexterity will have more explanatory power on firm performance than the traditional concept of fit.

According to the concept of ambidexterity, organizations can choose between two dominant options. The first option is to align themselves on activities that increase efficiency. Such a behavior that focuses on e.g. operations, cost-reduction and quality to improve the performance of the current business is called exploitation (March, 1991). On the other hand, organizations can also choose to concentrate on activities that increase flexibility, which is called exploration and refers to a focus on e.g. product innovation, growth and opportunities to ensure future effectiveness (March, 1991). While naturally a combination of both approaches will lead to a trade-off in resource allocation (Tushman and O'Reilly III, 1996), ambidexterity studies show that organizations that are able to achieve a high-level balance between both will be more successful than others (He and Wong, 2004; Lubatkin, Simsek, Yan and Veiga, 2006). Such organizations that integrate exploitation and exploration are efficient in their management of today's business demands and adaptive to changes in the environment at the same time (Gibson and Birkinshaw, 2004) and are called ambidextrous (Tushman et al., 1996).

The concept of ambidexterity originated in the literature on learning (March, 1991) but has recently gained popularity in various research fields including technology and innovation

management (Ambos and Schlegelmilch, 2008; He et al., 2004; Markman, Siegel and Wright, 2008; O'Reilly III and Tushman, 2004; Tushman and Anderson, 1986; Tushman et al., 1996), organizational adaption (Brown and Eisenhardt, 1997; Levinthal and March, 1993) or organizational design (Adler, Goldoftas and Levine, 1999; Benner and Tushman, 2003) and organizational behavior (Birkinshaw and Gibson, 2004). Most of these studies confirm the positive impact of a high level of ambidexterity.

However, only few studies have so far looked at ambidexterity from the viewpoint of strategic management (e.g. Lubatkin et al., 2006; Smith and Tushman, 2005) and those that do have hardly linked ambidexterity to existing theories in strategic management. In our view this is surprising because of two main reasons. First, much of ambidexterity research addresses the behavior of an organization in terms of orientation, structures and processes (Raisch and Birkinshaw, 2008) and how they should be adapted to achieve exploitation- and exploration-oriented behavior (Simsek, 2009). These factors are typically part of strategic decisions of the top management (Lyles and Schwenk, 1992) and thus we see a need for an additional assessment of ambidexterity also from a strategic perspective. More importantly, we secondly believe that the underlying notion between ambidexterity and traditional strategic management research is different in a number of relevant dimensions. Accordingly, it is important to address this contradiction to allow for better understanding of which approach today leads to better results. Specifically, we believe that the concept of fit, one of the central concepts in strategic management (Venkatraman, 1989) poses a contrary standpoint to the results of ambidexterity studies.

The concept of fit roots in contingency theory and argues that organizations will be more successful if they are designed to fit the nature of their primary task (Donaldson, 1987; Miles and Snow, 1984; Venkatraman, 1989). Accordingly, organizations that are able to align their

behavior to the chosen strategic orientation will perform better than those that do not create such a fit (Miles et al., 1984). If an organization aims to become a dominant player in a certain niche, for example, a focus on efficiency with cost-reduction, quality etc. is needed. If it conversely aims to excel through constant harvesting on new opportunities and expanding existing markets, then a focus on flexibility, i.e. opportunity recognition, product innovation and growth is substantial (Doty and Glick, 1994). Although concept of fit researchers also address a combination of efficiency and flexibility in certain situations, in essence they argue that a clear focus on either exploitation or exploration is needed for superior performance.

In this paper, we build on the research stream on ambidexterity and extend it to the strategic management context. Specifically, we argue that the notion behind ambidexterity and the concept of fit is fundamentally different. While the factors that are highlighted in both research streams to ensure superior performance are rather similar, the combination of these factors in essence differs. Thus we see the need to include both concepts in one study to better understand their performance implications and the interaction effects between both. For this, we aim to deliver a synthesis of both concepts that allow for a better understanding of success factors in organizations.

With our study, we contribute to ambidexterity research by connecting it to the so far neglected strategic management literature. We deliver a synthesis of similarities between the concept of ambidexterity and the concept of fit from strategy research. With this we aim to provide for a better understanding on which of these concepts has a more overriding effect on performance and highlight recommendations for future research avenues.

THEORY

The concept of ambidexterity was first outlined by Duncan (1967) and March (1991) in the organizational learning literature. It bases on the observation that firms tend to concentrate either on capabilities for exploitation or exploration (March, 1991). While exploitation-oriented firms aim to achieve better efficiency by focusing on e.g. production and routinization (Levinthal et al., 1993), firms that are exploration-oriented aim to create flexibility in the organization through an open approach to learning, e.g. through experimentation and embarking into riskier innovation projects (Cheng and van de Ven, 1996; Gibson et al., 2004; McGrath, 2001; Tushman et al., 1996). Ambidexterity stands for the combination of both and describes the behavior of an organizations that succeeds to achieve a high-level of exploitation and of exploration at the same time (Gibson et al., 2004; Simsek, 2009; Tushman et al., 1996) and thus to manage conflicting demands in its task environment. This allows the organization to be efficient in its management of today's business demands, while also showing the needed flexibility to adapt to new challenges and opportunities in the environment (Benner et al., 2003; Gibson et al., 2004).

Traditionally, most organizations choose to concentrate either on exploitation or exploration (Smith et al., 2005). To take such a focused approach seems to be a viable option as both require substantially different capabilities in the organization (He et al., 2004) and are conceptually easier to implement on their own (Tushman et al., 1996). Aiming to simultaneously create a high level of exploitation and a high level of exploration on the other hand is seen as a rather complex challenge (Raisch et al., 2008) and has been referred to as "central paradox of administration" (Thompson, 1967).

However, a dominant focus on either exploitation or exploration may induce a company to fail in the market place. As exploitation refers to the optimization of the current business (Benner et al., 2003; Jansen, 2005) and short-term profit generation (Tushman et al., 1996) it

might result in a competency trap (Levinthal et al., 1993), where the capabilities of the organization become outdated and long-term performance is endangered. On the other hand, also a concentration on exploration may endanger long-term performance as the focus on constant renewal of capabilities and know-how may lead to a failure trap (Levinthal et al., 1993). As organizations then tend to become over sensitive and -reactive to short-term variations (Volberda and Lewin, 2003) they might enter a cycle of constant search and unrewarding change (Levinthal et al., 1993).

With regards to these risks, already March (1991) called for the pursuit of ambidexterity, the simultaneous creation of exploitation and exploration and argued that achieving ambidexterity has a positive impact on performance. However, two main challenges pose obstacles to the creation of ambidexterity. First, exploration and exploitation activities require substantially different, often conflicting, structures, processes, capabilities and cultures (He et al., 2004; O'Reilly and Tushman, 2004). Secondly, pursuing both can lead to a trade-off in the allocation of resources between the two types of behavior (Markides and Chu, 2008) and could result in not having enough emphasize neither on exploitation nor exploration.

In recent years, a growing number of authors has addressed the concept of ambidexterity and introduced it in various research fields (Raisch et al., 2008). While earlier studies often regarded the trade-off between exploitation and exploration as impossible to solve, more recent studies argue in favor of ambidexterity (Cao, Gedajlovic and Zhang, 2009; Simsek, Heavey, Veiga and Souder, 2009) and present a range of solutions to support ambidexterity, including structural separation (O'Reilly III et al., 2004) and non-structural, context-related elements such as culture, values or mindset (Adler et al., 1999; Bierly and Daly, 2007; Eisenhardt and Martin, 2000; Jansen, George, Van den Bosch and Volberda, 2008). So far, many studies showed a positive relationship between organizational performance and the ability to be ambidextrous (Adler et al., 1999; Benner and Tushman, 2002; He et al., 2004).

The concept of fit is central to the study of strategic management (Venkatraman, 1989; Venkatraman and Camillus, 1984) and researchers repeatedly argue that a fit between strategy and organizational structure is favorable for firm performance (e.g. Chandler, 1962; Govindahajan, 1986; Miles, Snow, Meyer and Coleman, 1978; Rumelt, 1974;Venkatraman and Prescott, 1990) This literature stream originates in the objective of much of strategic management research to better understand the contingent effects of strategy on firm performance (Donaldson, 1987). For this, researchers examined a wide variety of contingency factors like environment (Miller, 1988), technology (Dowling and McGee, 1994) or marketing choices (Claycomb, Germain and Dröge, 2000). But especially the relationship between a firm´s strategy and its organizational structure has been at the focus of many studies in this field (Doty, Glick, and Huber, 1993; Miles et al., 1978; Mintzberg, 1978).

Based on Chandler's (1962) contribution that a firm can choose from a variety of internal structural forms when it implements a particular strategy, the debate about the fit relationship gained increasing popularity from the 1970s to the 1990s onwards (Zott and Amit, 2008). The basic premise of the concept of fit is that for any given strategy only a limited number of potential structures will be beneficial (Miles et al., 1984); depending on certain contingency factors (Donaldson, 1987). Thus, the better a firm manages to create a fit between its strategy and its structure, the better it will perform (Doty et al., 1994; Miles et al., 1984).

The concept of fit has been thoroughly conceptualized and empirically confirmed in numerous studies (Amburgey and Dacin, 1994). One of the most widely accepted and common approaches to assess the concept of fit refers to a seminal work from Miles and Snow (1978) (Hambrick, 2003) and has been used in various studies (e.g. Conant, Mokwa and Varadarajan, 1990; Desarbo, Benedetto, Song and Sinha, 2005; Kabanoff and Brown, 2008; Shortell and Zajac, 1990; Zott et al., 2008). According to the Miles and Snow (1978) typology of strategic behavior, the organization should respond to its environment in a

relatively consistent manner over time. Generally, firms trying to follow such a pattern of strategic behavior can then be seen as either pursuing a defender-, prospector-, analyzer- or reactor strategy.

Prospectors are firms that continually search for market opportunities, and experiment with potential responses to changes in the environment (Miles et al., 1978). These organizations often pioneer the development of new products, being structurally very organic and thus need a high level of decentralization (Miles et al., 1978). Defenders are organizations that take a more conservative approach and prefer to compete on price and quality rather than to invest heavily in new product development. They often focus on niche markets and pay attention to improve the efficiency of their existing operations (Miles et al., 1978). Accordingly, they need more mechanistic structures which require more central coordination (Doty et al., 1993). Analyzers share elements of both strategic behaviors of prospectors and defenders. They rarely are first movers but, instead continuously screen their industry for new ideas, and adopt quickly to those that appeal promising (Miles et al., 1978). Thus, they try to simultaneously explore new market opportunities and to harvest on a stable base of existing products and customers (Miles et al., 1978). For this, analyzers need to implement a structure that ensures a balance between autonomy on the on hand and central control on the other (Conant et al., 1990; Doty et al., 1993). Finally, reactors are firms which lack any consistent forward-looking strategy. A reactor seldom adjusts its strategy or behavior unless forced to do so by pressures from the environment (Miles et al., 1978). They typically lack any fit between strategy and structure but mainly respond to market changes in uneven, transient ways (Miles et al., 1978).

In essence, the concept of fit then argues that an organizations success is independent of the focus it takes, but that it needs to stick to that focus and align accordingly. Even more, as long as it creates such a fit, no difference of performance outcomes is expected between the

singular strategy types (Hawes and Crittenden, 1984; McKee, Rajan Varadarajan and Pride, 1989; Smith, Guthrie, and Ming-Jer, 1989). Although the Miles and Snow (1978) typology has been criticized for oversimplifying the discussion about strategy and structure (Conant et al., 1990), it is still today one of the most widely used approaches (Desarbo et al., 2005; Hambrick, 1983; Kabanoff et al., 2008; Shortell et al., 1990). It has been shown to be a valid measure (Shortell et al., 1990), and been described as "the most enduring, the most scrutinized, and the most used of the several strategy classification systems introduced over the past 25 years" (Hambrick, 2003:116).

Both, ambidexterity and concept of fit share a common understanding of factors that are important to be successful for an organization. The discussion about efficiency versus flexibility in the Miles and Snow (1978) typology of firm strategies resembles strongly the exploitation versus exploration conceptualization in ambidexterity literature. Furthermore, also many of the examples given for exploitation and exploration are similar. Exploitation in both concepts refers to activities such as refinement or effectiveness, whereas exploration can be connected to notions like experimentation and discovery (Van Looy, Martens and Debackere, 2005). Interestingly in both research streams it is also highlighted that a singular focus on either of the two behaviors bears inherent risks for the organization that might lead to failure. Finally, a call for ambidexterity can also be found in the discussion about the analyzer strategy that basically argues that a balanced approach can be beneficial but is hard to achieve (Miles et al., 1984).

However, several major differences between ambidexterity and the concept of fit are also apparent. A starting point for the ambidexterity argumentation is the high risk associated with a focus on either exploitation or exploration. The two highlighted problems of competency trap and failure trap deliver the basis for the theoretical reasoning to aim for a high level of both in an organization. According to the literature in ambidexterity, this notion is applicable

on a wide variety of organizational contexts, including innovation management, organizational behavior and, in part, also strategic management. Yet, so far there exists no differentiation with respect to the different strategic orientations a company is taking, in other words, a thorough assessment from a top management strategic view has so far been neglected.

Within the literature on the concept of fit, in contrast, risk is only a side issue. The main argumentation reasons that, independent of whether an organization is focusing on exploitation or exploration, it is essential that its behavior is aligned with the strategic orientation the organization is pursuing. Thus, defenders should focus on exploitation and prospectors on exploration. Only analyzers should try to integrate both dimensions and aim to achieve a balance in their behavior. Finally, fit researchers also do acknowledge the risk associated with a focus on either exploitation or exploration (Miles et al., 1984) in much the same vein as the ambidexterity literature, but see this only as a minor factor behind the overriding impact of fit on performance.

HYPOTHESES

We have shown in the theory section that the concepts of ambidexterity and fit share some common understanding, but lead to fundamentally different recommendations. According to the concept of fit and its empirical evidence, there should be no major performance differences between the three strategy types defender, prospector and analyzer as long as there is a fit with the described expected behavior (Hawes et al., 1984; McKee et al., 1989; Smith et al., 1989). Yet, we believe that ever more dynamic market environments lead to a performance dominance of organizations with an analyzer behavior. In addition, we also expect that the information value of the concept of fit analysis will become blurry, as increasingly organizational capabilities will be more important than a fixed orientation (Volberda, 1996).

The concept of fit argues that companies will perform better, if they align their organizational behavior to their strategic orientation. This finding has been empirically researched in the past and several studies confirm this notion (Lukas, Tan and Hult, 2001; Olson, Slater and Hult, 2005; Venkatraman et al., 1990). However, we believe that in a current study the concept of fit approach will lead to less informative results. The concept of fit differentiates between four strategy types which are connected to a certain strategic orientation and behavior. Defenders often aim on sealing off a small niche market in rather stable industries and should be more successful, if they apply exploitation oriented behavior (Doty et al., 1993; Miles et al., 1984). However, this can quickly lead to a competency trap where the organization is so focused on its approach that it does ignore outside developments, changing market demands or new technologies (Levinthal et al., 1993) that it literally can be bypassed by the market. With an increasingly dynamic environment in many economic dimensions (Bettis and Hitt, 1995; Kraatz and Zajac, 2001; Wiggins and Ruefli, 2005), defenders are

even more prone to be affected by the downsides of the focus on exploitation. This risk is lower with prospectors as they are very explorative and are often active in dynamic markets (Doty et al., 1993). Their main problem can be traced back to the high investments that go to product development and innovations. Typically not all such initiatives are successful and thus a prospector organization can suffer from the losses inferred by high failure rates. The inaptitude of prospector organizations to harvest on current products and markets will additionally lead to a lack of cash-flow because focus is on growth rather than on profit maximization (Levinthal et al., 1993). Reactors again are known to fail in enacting any kind of consistent approach and thus we agree with an expected low performance rate here. Only the analyzers should succeed in achieving a balance between exploitation and exploration and should thus have a higher likelihood to avoid both the competency and the failure trap.

In summary, we expect that the information content of the concept of fit is decreasing, because a dominant focus on either exploitation or exploration, as definitely associated with defender and prospector strategies, will not suffice to be successful in today`s market environment. This leads to our hypotheses 1:

> *Hypothesis 1: A fit between a company´s strategy type and its organizational behavior will not lead to conclusive results for the influence on firm performance.*

We do not say that the concept of fit inherently is flawed, but we believe that other factors have become more important as drivers of success than a total alignment of the organization on either efficiency or flexibility. We argue that both are important to ensure long-term success. Exploration enables an organization to be receptive for changes in the environment and lays the basis for the development of future products and markets. Any explorative activity has of course to be financed sufficiently, which can mainly be derived from

exploitative behavior in the core business that aims on profit maximization. Vice versa should an organization that depends on the exploitation of any business be cautious to develop explorative capabilities to avoid long-term decline.

As several studies on ambidexterity have shown, organizations do indeed perform better, if they succeed in becoming ambidextrous (Simsek et al., 2009), i.e. to combine high capabilities for exploitation and exploration (Lubatkin et al., 2006). Such capabilities can hardly be measured by a concept of fit approach, but we believe that ambidexterity delivers a clearer picture of organizational behavior in this context and will thus lead to clearer results regarding success factors. This results in our second Hypothesis:

Hypothesis 2: A high level of ambidexterity in an organization will have a positive impact on performance.

RESEARCH DESIGN

Sample Selection

In order to test our hypotheses, we randomly identified a company sample of 2,500 German firms using a database from a commercial provider. The chosen sample covered a broad range of industries and was aimed on Small and Medium-sized Enterprises (SMEs). We chose to include only SMEs in accordance with other researchers in the ambidexterity literature (Lubatkin et al., 2006) as we believe that ambidexterity of an organization can best be measured in smaller organizations that do not have the size- and resource advantage of large corporations to build up separate units for exploitation and exploration. Thus we are better able to assess if the core organization actually enacts behavior for ambidexterity or not. We ensured that the informants were professionally interested, conscientious, and committed to providing accurate data by assuring them of confidentiality and by offering them a summary of the results (Dillman, 1978). We collected data in spring and summer 2009, sending the questionnaire out in a single respondent design, directly addressed to the firms´ CEOs. Top-managers of 204 companies returned their questionnaire, representing a response rate of 8,2%. After detailed cross-checking we excluded 7 questionnaires because of considerable missing data, and eliminated another 22 as they failed our posthoc tests of informant quality. Finally, 175 usable questionnaires were obtained as they are sufficient to be used for our analysis.

The firms were operating in a wide range of industries such as manufacturing, construction, and service. To test for nonresponse bias, we examined differences between respondents and nonrespondents for our final sample. T-tests showed no significant differences based on the number of full-time employees, and prior performance. These comparisons did not reveal any differences ($p < 0,05$), showing that nonresponse bias was not a given problem. Furthermore,

we compared early and late respondents using a t-test procedure under the assumptions of both equal and unequal group variances. No significant differences were detected in the means of the created constructs between the two groups.

Definition and Measurement of Variables

Strategic orientation: To assess the Miles and Snow (1978) strategic archetypes of defender, prospector, analyzer and reactor, we used the self-typing paragraph approach (Doty et al., 1993). For this, we asked the respondents to identify which of four strategy descriptions best describes the orientation of the own firm. We used adapted descriptions for the four strategic types as proposed by Snow and Hrebiniak (1980). Despite the potential limitation of oversimplification and boundary blurriness (Conant et al., 1990), this method has been widely accepted and used in strategy research (Desarbo et al., 2005). Studies have furthermore shown a self-assessment of the managers to have a strong linkage to the strategic reality of the firm (Shortell et al., 1990).

Organizational behavior: For measuring the firm's behavior to assess fit, we used a construct developed from Hill (1988) that allows us to assess the degree of centralization versus decentralization. This measure assesses behavior along three different dimensions and captures to which degree different management levels in an organization are able to act independently. The three dimensions identified by Hill (1988) are operative, strategic, and financial. The scale "operative" measured top management involvement in the operative decisions of the company. Similarly, "strategic" and "financial" measured the extent to which the top management exercised strategic and financial control. All scales ranged in value from 1 to 5; less than 2 on a scale indicated that a firm was decentralized with respect to the assessed function or behavior.

Strategic fit: In Accordance with research in strategic management, we conceptualized and assessed fit as profile deviation to our pre-defined ideal types (Drazin and Van De Ven, 1985; Glick, Huber, Miller, Doty, and Sutcliffe, 1990). Using a form of the weighted Euclidian distance formula, we measured the concrete deviation and assessed to which extent the organizational characteristics of the business differ to those specified in the particular ideal profile.

With this approach we follow empirically derived ideal profiles as the baseline for our study. An alternative would have been to theoretically derive ideal fit combinations, but we agree with other researchers that questioned the appropriateness of such an approach (Vorhies and Morgan, 2003).

Organizational ambidexterity: We used an adapted form of Lubatkin's et al. (2006) measure of ambidexterity in our study. Although there is no commonly accepted measure of ambidextrous orientation, a number of possible approaches already exist and we believe that Lubatkin et al. (2006) provided the most appropriate construct so far that integrates several prior measures. Specifically, it integrates dimensions for ambidexterity used by He and Wong (2004) that designed a measure primarily based on product design differences and of Benner and Tushman (2003) who conceptualized ambidexterity on a two-dimensional definition, entailing exploration and exploitation differences along an innovation's proximity. The final measure we used consisted of 12 items in which managers were asked to assess their firm's behavior during the past years using a 5-point scale. Six items asked for exploratory orientation, similarly, 6 items asked for exploitative orientation. We derived the level of ambidexterity through the addition of the individual values along the 12 dimensions.

Firm performance: We measured performance of an organization using a five point Likert scale to which extent 2008´s firm performance was according to the company goals. In

addition, we supported these data with ROE measures that were partly derived through the questionnaire and both validated and complemented using a commercial database on company financials.

Control variables: Additional to these constructs, we controlled for contextual influences on firm performance in our multiple regression analyses, namely, the effects of firm size (number of employees), the firm age and the industry sector (manufacturing, service or construction). We therefore included respective dummy variables in our analyses.

RESULTS

In our sample, firms have an average age of 69 years (median of 48 years) in 2009, and an average of 2168 employees (median of 223 employees). We note the variance among sample firms as evidenced by the minimum and maximum values of these variables, as well as by the standard deviation. Within our sample we identified 58 Prospectors (33,14%), 66 Defenders (37,71%), and 32 Analyzers (18,29%). Due to the commonly accepted irrelevance of reactor strategies on performance we did not further analyze this strategy type. Table 1 shows the Pearson correlations among the variables used in the following regression analyses.

TABLE I Pearson Correlations Analysis and Descriptive Statistics

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Independent variables																
1	Prospector																
2	Defender	-,548**															
3	Analyzer	-,333**	-,368**														
4	OPERATE	-0,055	0,099	-0,035													
5	FINANCE	0,125	-0,073	0,007	-0,088												
6	STRATEGY	0,086	-,168*	0,119	-0,074	,579**											
7	Strategic FIT	-,785**	,493**	,353**	0,122	-0,058	0,001										
8	Exploration	,225**	-0,062	-0,061	-,213**	0,09	0,041	-,231**									
9	Exploitation	0,047	-0,043	0,042	-,158*	0,035	0,055	-0,084	,473**								
10	Organizational Ambidexterity	,161*	-0,072	-0,004	-,217**	0,066	0,053	-,194*	,850**	,866**							
	Dependent variable																
11	Performance	-0,067	-0,024	0,138	-0,024	0,039	0,13	0,079	,171*	,172*	,212**						
	Control variables																
12	Service Industry	-0,062	-0,022	0,074	-0,066	0,093	,243**	-0,018	0,08	0,09	0,099	0,053					
13	Construction Industry	0,138	-0,016	-,155*	-0,025	0,013	-0,032	-0,09	0,086	-0,016	0,044	0,141	-,164*				
14	Manufacturing Industry	0,004	-0,057	0,022	0,086	0,011	0,017	0,042	0,117	0,034	0,086	0,049	-,279**	-,178*			
15	Firm Age	,164*	-0,122	-0,076	-0,062	-0,102	-0,01	-0,109	-0,015	0,025	0,012	-0,097	-0,061	-0,02	0,141		
16	Firm Size	0,066	-,152*	0,027	-0,018	,201**	,375**	-0,016	0,024	0,069	0,059	0,024	,204**	-0,052	,178*	,169*	
	Descriptive statistics																
	Mean	n.v.	n.v.	n.v.	2,7	1,9	1,8	-1,7	3,4	3,6	6,9	3,3	n.v.	n.v.	n.v.	69,5	2168,5
	Median	n.v.	n.v.	n.v.	2,7	1,8	1,8	-1,4	3,3	3,7	7	3	n.v.	n.v.	n.v.	48	222,5
	S.D.	n.v.	n.v.	n.v.	0,87	0,8	0,9	1,1	0,7	0,8	1,3	0,9	n.v.	n.v.	n.v.	67,1	9167
	Min	n.v.	n.v.	n.v.	1	1	1	-3,93	1	1	2	1	n.v.	n.v.	n.v.	1	2
	Max	n.v.	n.v.	n.v.	5	5	5	-0,04	5	5	10	5	n.v.	n.v.	n.v.	557	66000
	N	58	66	32	170	169	169	149	171	171	168	155	175	175	175	159	174

With the Pearson correlation matrix, we identified suitable correlations for further regression analyses of both strategic fit and organizational ambidexterity. Using the profile deviation perspective for assessing strategic fit as adherence to an externally specified profile and stepwise regression analysis, three models were then estimated. Model 1 includes only the control variables while in model 2 industry specialization is added. In model 3, the main effect of the variable "strategic fit" was added. All models are not significant. Results hardly change across the various model specifications suggesting that our findings can be regarded as quite robust. Table 2 shows the three step regression model in detail. Thus, the results of the present study support hypothesis 1.

TABLE II Regression Analysis using Strategic Fit as Independent and Firm Performance as Dependent Variable

Standardized coefficients (ß)	**Model 1**	**Model 2**	**Model 3**
Firm Age	-,061	-0,75	-0,57
Firm Size	,070	,030	,036
Construction Industry		,242*	,252**
Manufacturing Industry		,113	,097
Service Industry		,116	,113
FIT			,121
R^2	,007	,062	,076
ΔR^2		,055	,014
Adjusted R^2	-,010	,023	,029
Level of significance	,671	,174	,150

**p < .01; * p <.05.

To test our second hypothesis we used the same setup regarding the regression analysis model as used for our first hypothesis. While model 1 includes only the control variables, in

model 2 the industry specialization is added. In model 3, the main effect of the variable "organizational ambidexterity" was additionally included. Here, a significant and positive coefficient interaction towards the firm´s performance ($p < .05$) is found. In the model itself the r-square value increased as well as the level of significance with every single step; especially model 3 reaches a significance level of ($p < .05$). Table 3 shows the three step regression model in more detail.

TABLE III Regression Analysis using Organizational Ambidexterity as Independent and Firm Performance as Dependent Variable

Standardized coefficients (ß)	**Model 1**	**Model 2**	**Model 3**
Firm Age	-0,92	-,103	-,103
Firm Size	,065	0,23	-,001
Construction Industry		,254**	,240**
Manufacturing Industry		,115	0,97
Service Industry		,127	,116
Organizational Ambidexterity			,183*
R^2	0,010	0,071	0,103
ΔR^2		0,061	0,032
Adjusted R^2	-,005	0,036	0,062
Level of significance	0,520	0,080+	0,024*

**p < .01; * p <.05.

In summary, the correlation between performance and all control variables is not significant, thus it is likely that no intervening processes exist. Additionally, some correlations among explanatory variables are significant. But we left them out of the analyses as they were not within the focus of this paper. Additional tests show that the requirements of

homoscedasticity and normal distribution were met for all three models and that no collinearity was observed.

DISCUSSION AND INTERPRETATION

Ambidexterity research has recently gained increasing attention from researchers (Raisch et al., 2008; Simsek et al., 2009). The main argumentation within ambidexterity proposes that organizations perform better, when they succeed to create both a high level of exploitative capabilities as well as a high level of explorative capabilities (He et al., 2004). In the strategic management literature, in contrast, one of the dominant theories is the concept of fit which poses a different line of thought. Within this research stream the importance of a fit between the strategic orientation of an organization and its behavior has been discussed (Govindahajan, 1986; Venkatraman et al., 1990).

We build on the literature on ambidexterity and transfer it to a strategic management setting. We do this as we see the need for a discussion in this context. More precisely, we argue that decisions regarding ambidexterity address the behavior of an organization in the market place and its strategy, structure and processes. Thus, such decisions are task of the top management of an organization (Lyles et al., 1992) and should be assessed from a strategic management perspective. So far, this has only seldom been done (e.g. Lubatkin et al., 2006). Furthermore, we believe that the contrary argumentation of ambidexterity and the concept of fit need further analysis. While both have found support in empirical studies, we believe that especially in current research the concept of ambidexterity will have a bigger explanatory power on performance of an organization.

Specifically, we have developed hypotheses to investigate two aspects: a) the impact of a fit between strategic orientation and the behavior of the organization on performance and b) the impact of ambidexterity on performance. Overall, we find support for our hypotheses. These

findings indicate that the concept of fit has no explanatory power on firm performance and that ambidexterity is better suited to explain performance in a current study. Thus, these findings correspond with our argumentation that a fit between strategic orientation and the behavior of the organization will not lead to conclusive results in a current study.

(a) Influence of Fit on Firm Performance

Our results show that the model we use to assess the fit-performance relation is non-significant, and we cannot find any results for an influence of fit on performance. This finding supports our first hypothesis as we argued that the concept of fit will have no explanatory power for firm performance. We also looked specifically at the fits between the singular strategy types which confirmed the finding for the full model.

However, especially the confirmatory assessment of the singular strategy types could be impacted by the small sample size within each sub-group. Potentially an analysis with more data points would lead to more significant results for the fit-performance relation. This is especially true for the analyzer strategy type, as it reflects the strategic orientation which most likely would lead to ambidextrous behavior. Yet, our results could even then be confirmed, especially because it might be that organizations identify themselves as being an analyzer, but conversely implement different behaviors.

(b) Influence of Organizational Ambidexterity on Firm Performance

With our model we can also confirm our second hypothesis. A higher degree of ambidexterity results in better firm performance. This finding supports our argumentation that organizations need to develop capabilities for exploitation as well as exploration.

CONCLUSION

As strategic fit is one of the major concepts in the strategic management literature (Venkatraman, 1989), a variety of studies have assessed and used it in different contexts. In general, these studies have supported the argumentation behind this concept of fit. However, recent research in the ambidexterity literature has developed a reasoning which is in contrast to the concept of fit. While fit literature argues for the benefits of a clear focus in the organization, in ambidexterity support is found for a more balanced behavior between the two dimensions of exploitation and exploration. In our argumentation we follow the notion of ambidexterity and posit that a changing environment might have lead to a different set of capabilities that organizations need to have to be successful in the marketplace. Our results show that the model we use to assess these hypotheses is highly significant, and that it confirms our hypotheses that there is no significant relation of fit on performance. In addition, the relation between ambidexterity and performance is significant and thus we can conclude that our argumentation is supported.

With our study we add to literature in both the area of ambidexterity and strategic management. For ambidexterity research we deliver an argumentation of its significance and confirm findings of prior studies that showed a positive impact of ambidexterity on firm performance. Furthermore, we advance the research stream with an argumentation that claims for more research in the context of strategic management (Lubatkin et al., 2006) and with empirical results that highlight an important contradiction in the understanding of success factors between ambidexterity and strategic management literature. Our results also have implications for strategic management research as we show that the commonly accepted concept of fit has possibly lost its explanatory power. We are aware that our study

can only be a starting point for more elaborate discussions about ambidexterity in a strategic management context. Future research should thus also address some of the limitations we see in our own study. One main aspect here is the enlargement of the sample size as a larger, maybe cross-regional sample size might lead to even better results. Additionally, a longitudinal study could increase our understanding of the changes in environment that might have lead to the different findings of our study on the fit-performance relation than prior research has done. Regarding variables, we did only deliver a theoretical argumentation for the expected decline in explanatory power but have not included respective variables in our model. Future studies should thus include measures on the change of industry dynamics that might force organizations to act more ambidextrous. And also the inclusion of other organizational measures should be evaluated. Finally, we see the need to reassess our main variables. We have used commonly accepted constructs for our different main variables which have been used in similar contexts before. Still, it might be that these are not suitable for our research question and that other, especially more fine-grained variables, are better suited to analyze an organizations orientation and behavior. For example, future studies should analyze whether the measurement of fit and especially the aspect of behavior needs to be changed, potentially even introducing ambidexterity into the fit construct itself. Such a reassessment of variables should then also allow for an additional analysis of the antecedents that lead to certain fit configurations and allow for a better understanding of how organizations can achieve ambidexterity and thus a higher performance.

Besides avenues for further research, our study also offers some implications for corporate practice. Specifically, our results indicate that top management should defer from a too focused alignment of the organization on either efficiency or flexibility. Instead they should

aim to develop capabilities for ambidexterity to ensure firm performance. Or, in other words show that top management should make sure that the organization does not neglect certain capabilities because they focus too much on one dimension.

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