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Dynamic Capabilities in the German financial services industry

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Purpose. The purpose of this work is to investigate processes constituting to Dynamic Capabilities in companies of the German financial services industry.

Design/Method/Approach. Exploratory with a qualitative approach and a multiple case study method.

Findings. The results indicate a connection of Dynamic Capabilities and the dynamism of the environment. The actual Dynamic Capabilities seem to operate in business model related activities, such as distribution channels, but not in product development.

Theoretical implications. Suggestions are given for the development of a comparative measurement concept for Dynamic Capabilities. furthermore, the inclusion of environmental dynamism in the research is emphasized.

Practical implications. Firms can use the structure of sensing, seizing and reconfiguration and apply the dimensions for the relational measurement to evaluate their innovation activities.

Originality/Value. Connections of Dynamic Capabilities to the environmental dynamism were found. Furthermore, the process lens of this research makes the theoretical concept of dynamic capabilities

more graspable and gives suggestions for an operationalization.

Paper type – empirical.

Keywords: Dynamic Capabilities; innovation; financial services; industry dynamism.

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Динамічні здібності в німецьких фінансових компаніях

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Мета роботи – дослідити процеси, що утворюють динамічні здатності в німецьких фінансових компаніях.

Дизайн/Метод/Підхід дослідження. Експлоративний якісний аналіз емпіричних даних методом множинного ситуаційного аналізу (multiple case study)..

Результати дослідження. Результати свідчать про взаємозв'язок динамічних здібностей з динамікою зовнішнього середовища компанії. На даний момент динамічні здібності виявляються в операціях, пов'язаних з основною бізнес моделлю. Наприклад, вони присутні в розвитку каналів поставки послуг, але не виявлені в розвитку продуктів.

 Теоретичне
 значення
 дослідження.
 Запропоновано рекомендації

 рекомендації
 з розвитку концепції
 порівняльного вимірювання динамічних здібностей.
 Підтверджено взаємозв'язок з динамікою зовнішнього середовища компанії.

Практичне значення дослідження. Компанії можуть використовувати структуру sensing -> seizing -> reconfiguration і використовувати дані виміри (dimensions) для порівняльної оцінки своїх інноваційних операцій.

Оригінальність/Цінність/наукова новізна дослідження.
Підтверджено взаємозв'язок динамічних здібностей з динамікою зовнішнього середовища компанії.
Процесуальний підхід зробив теоретичний конструкт динамічних здібностей більш зрозумілим для вимірювання.
Запропоновано шляхи операціоналізації конструкту динамічних здібностей..

Тип статті – емпірична.

Ключові слова: динамічні здібності; інновація; фінансові послуги; динаміка зовнішнього середовища.

Динамические способности в немецких финансовых компаниях

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Цель работы – исследовать процессы, образующие динамические способности в немецких финансовых компаниях.

Дизайн/Метод/Подход исследования. Эксплоративный качественный анализ эмпирических данных методом множественного ситуационного анализа (multiple case study).

Результаты исследования. Результаты свидетельствуют о взаимосвязи динамических способностей с динамикой внешней среды компании. На данный момент динамические способности проявляются в операциях, связанных с основной бизнес моделью. Например, они присутствуют в развитии каналов поставки услуг, но не обнаружены в развитии продуктов.

Теоретическое значение исследования. Предложены рекомендации по развитию концепции сравнительного измерения динамических способностей. Подтверждена взаимосвязь с динамикой внешней среды компании.

Практическое значение исследования. Компании могут использовать структуру sensing -> seizing -> reconfiguration и использовать данные измерения (dimensions) для сравнительной оценки своих инновационных операций.

Оригинальность/Ценность/Научная новизна исследования. Подтверждена взаимосвязь динамических способностей с динамикой внешней среды компании. Процессуальный подход сделал теоретический конструкт динамических способностей более понятным для измерения. Предложены пути операционализации конструкта динамических способностей.

Тип статьи – эмпирическая.

Ключевые слова: динамические способности, инновация, финансовые услуги, динамика внешней среды.



Introduction

ne of the essential questions in strategy literature is how firms create a sustainable competitive advantage. At the heart of this question is the generation of future cash flows which are the foundation for corporate valuation (*Teece*, 2014). The search for an answer proves to be extremely difficult and has fittingly been compared to the quest for the Holy Grail (*Helfat*, & *Peteraf*, 2009). It is further strained by depictions of a dynamic economic environment where long-term success might stem from a firm's ability to constantly reinvent its sources of wealth creation (*McGrath*, 2013). But what constitutes to such an ability?

The Dynamic Capabilities approach shall provide an explanation for sustainable success of firms especially in dynamic market environments (*Teece et al., 1997*). Dynamic Capabilities are argued to enable a firm to modify or renew its resources to address market changes and can thus explain intra-industry differences in firm performances. They supposedly reside with managerial and organizational processes which comprise sensing, seizing and reconfiguration (*Teece, 2014*). Yet the research remains mostly conceptual and output-oriented without sufficient explanations of the mechanisms behind these three clusters (Ambrosini, & Bowman, 2009).

This paper investigates how Dynamic Capabilities look like in the German financial services sector. Qualitative case-based methods are applied to identify processes which underlie sensing, seizing and reconfiguration in multiple financial services firms under consideration of the market environment. Thus this paper is an attempt to open the lid of "the Elusive Black Box of Dynamic Capabilities" (Pavlou, & El Sawy, 2011, p. 239) in order to facilitate operationalization and give graspable guidance for practitioners.

Research question

his paper endeavors to answer the research question How do Dynamic Capabilities look like in the financial services sector? In particular, processes of banks and insurers in Germany which underlie the clusters sensing, seizing and reconfiguration are investigated in order to substantiate Dynamic Capabilities (Eriksson, 2014). Multiple firms are explored to identify commonalities, as researchers were urged to do (Wang, & Ahmed, 2007).

Theoretical background

Origins and development of Dynamic Capabilities concepts

he early works develop the Dynamic Capabilities approach to explain sustainable competitive advantage especially in highvelocity environments characterized by rapid technological change (Teece, & Pisano, 1994; Teece et al., 1997). Accordingly, capabilities embody a firm's potential for a competitive advantage. They are embedded in managerial and organizational processes which are shaped by asset positions and available future paths. Sustainability of a competitive advantage stems from the potential idiosyncrasy of capabilities (Teece et al., 1997). Dynamic Capabilities, the "ability to achieve new and innovative forms of competitive advantage given path dependencies and market positions" (Teece et al., 1997, p. 516), can thus be a source of sustainable competitive advantage (Teece, 2014). They are initially defined as "the firm's ability to integrate, build, and reconfigure internal and external competences" (Teece et al., 1997, p. 516), i.e. processes and routines (Teece, & Pisano, 1994; Barreto, 2010).

Several definitions arose as well as discussions about the potential of Dynamic Capabilities to create a sustainable competitive advantage (Eisenhardt, & Martin, 2000). An attempt to integrate and unify the different viewpoints was made by Helfat et al. (2007)

who define a Dynamic Capability as "the capacity of an organization to purposefully create, extend, or modify its resource base" (Helfat et al. 2007, p.4). The authors explicate the role of managers and organizational processes. Asset-orchestration is emphasized as an especially relevant managerial function in dynamic markets, besides traditional coordination and adaptation functions of managers. This asset-orchestration includes the design of business models, configuration, orchestration and coordination of co-specialized assets, selection of investments in situations of uncertainty, selection of structures (organization, governance, incentives), and nurturing of processes for change and innovation. Antecedents to these managerial functions are information gathering and analysis, possibly by organizational routines (Helfat et al., 2007).

To understand Dynamic Capabilities it is argued that processes which relate to the firm's resource position must be understood since not the capability itself is observable, but rather the constituting processes. These comprise both managerial and organizational processes which support change in the firm, explicated as processes for search, decision-making and changemanagement. This process lens effects research: The focus shifts from content-oriented 'what'-questions (e.g. what defines Dynamic Capabilities, what is their outcome) to process-oriented 'how'-questions (e.g. how does change occur, how are decisions implemented) (Helfat et al., 2007). Teece (2007) built a framework which disaggregates Dynamic Capabilities into the capacities "(1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets" (Teece, 2007, p. 1319).

Wang and Ahmed (2007) emphasize a recurring character of Dynamic Capabilities. Furthermore, they claim that Dynamic Capabilities might display common features across firms at a general level. Similarly, Ambrosini and Bowman (2009) acknowledge that the routines of Dynamic Capabilities might resemble one another from firm to firm, but that "the dynamic capability in practice, would display subtle but important differences across firms" (Ambrosini, & Bowman, 2009, p. 44).

Helfat and Winter (2011) reemphasize to consider market dynamism in the research and suggest to include markets without rapid change. Since capabilities can be built, firms that operate in dynamic environments might be more prone to develop Dynamic Capabilities than firms in more stable markets. Conceptualizations of industry dynamics still display "serious deficiencies" (Hauschild et al., 2011, p. 438). A possible definition includes technological changes, changing customer preferences, and varying demand for products or supply of production material (Jansen et al., 2006). Hauschild et al. (2011) developed a measurement concept which captures frequency, magnitude and irregularity of changes in customer preferences, competitive situation and technology.

An attempt to reconcile the research on Dynamic Capabilities and integrate the different perspectives acknowledges that Dynamic Capabilities alone will not ensure superior firm performance but that "the joint presence of strong Dynamic Capabilities, VRIN resources, and good strategy is necessary and sufficient for long-run enterprise financial success" (Teece, 2014, p. 334). Whilst strategy should identify and determine ways to deploy VRIN resources, Dynamic Capabilities allow the firm to perform these activities repeatedly and thus serve as an enabler for strategy by providing the firm with the necessary flexibility (Teece, 2014).

Understanding of Dynamic Capabilities in this paper

ynamic Capabilities are regarded as the firm's capability to react to or create changes in the market. Their input is an opportunity or threat and their output the firm's reaction, possibly including a change of its resource base. As capabilities, they can be a source of a sustainable competitive advantage if they





work effectively and display idiosyncratic elements. Especially but not exclusively in highly dynamic markets they are likely to be relevant for firm success.

Regardless of the degree of environmental dynamism, Dynamic Capabilities might be an enabler for the firm's strategy. This is recognized by the disaggregation into sensing, seizing and transformation/ reconfiguration: Dynamic Capabilities can enable the firm to sense opportunities and threats in the market environment, to seize these opportunities, and to transform firm resources if required. As capabilities themselves, these three clusters are likely to be created and put into use through processes. In order to investigate Dynamic Capabilities, it is thus necessary to observe processes that constitute to sensing, seizing, and reconfiguration.

For sensing, the input is an opportunity or threat that exists in the market environment. The output are options for the firm, i.e. the sensed opportunities or threats. These options are the input for seizing. The output is an option that is seized through a decision, a modified business plan, or the like. This decision or formalized plan of action is the input for reconfiguration. The output is a transformed or reconfigured resource, i.e. a changed process, a new technology, a new location, an innovative product, a modified governance, and so on. Dynamic Capabilities deal with change in a firm and should not be understood as static entities. The underlying processes are also prone to change as the firm develops. Thus their observation is always contemporary.

It seems possible that the observed processes display commonalities between firms, especially in the same industry. Managerial skills and the actual integration of the clusters sensing, seizing and reconfiguration still allow for idiosyncrasy, even in the hypothetical case that the underlying processes were completely identical. Thus it is necessary to examine multiple firms of an industry.

Methodology

Research design

his paper answers requests from scholars for more qualitative field investigations on Dynamic Capabilities (Ambrosini, & Bowman, 2009; Wang, & Ahmed, 2007; Helfat et al., 2007). The chosen industry is the German financial services industry, which has been described as interesting for research on innovation (Jansen et al., 2006). The investigation is twofold: Industry characteristics are considered, and at firm level activities and processes of the three clusters identified.

Methodologies used for process research are applied, as suggested by e.g. Helfat et al. (2007). An aim of process research is to gain an understanding of the temporal evolvement of things ('how') as well as to provide an explanation for such an evolvement ('why') (Langley, 1999). In line with this, this study's purpose is exploratory and descriptive. The use of the three clusters adds a deductive element. However, since no a priori hypotheses are drawn and tested this paper remains mainly inductive (Saunders et al., 2009).

"To get a feel of what was going on" (Saunders et al., 2009, p. 126), case-based research is applied (Eisenhardt, 1989; Yin, 2009). A phenomenon of contemporary nature is investigated in its real-life context and it is possible that the boundaries between the observed phenomenon and its context are blurred. For process research and its focus on 'how'-questions, case studies are an applicable and prevalent methodology (Helfat et al., 2007; Yin, 2009).

Dynamic Capabilities can be an enabler for a firm's strategy. Thus the research is conducted on firm level, in contrast to e.g. examining single departments. To identify commonalities multiple firms are included. This results in a holistic multiple-case design (Yin, 2009).

(Semi-structured) interviews with experts are used as a major source to collect case study evidence (Yin, 2009; Gioia et al., 2013). Observation at the site of the firms, a standardized questionnaire and documentation, either publicly available or handed out by the interview participants are further used for data triangulation (Yin, 2009).

The questionnaire aims at identifying the participants' assessment of the market dynamism on a 7-point Likert scale. The questions concerning dynamism were guided by the matrix customers, competition, and technology; as well as frequency, magnitude, and predictability of change. Regulation was added since several regulatory measures influence the German financial system (IMF, 2016).

Two strategies are used to theorize from the process data: Narrative strategy to give a feel for the context in which the respective firms operate; and synthetic strategy to allow for cross-case comparisons (Langley, 1999).

Population and sample selection

ingle organizations serve as cases. The sample should resemble characteristics of the German financial services industry (Behr, & Schmidt, 2015). In 2015, around 70% of the institutions were banks, 15% insurances, and the remaining companies were funds (IMF, 2016). The German Central Bank lists 1.689 reporting banks which are divided into three so called pillars, namely commercial banks, savings banks, and cooperative banks which differ in their legal ownership structure. Different business models operate in all three categories (Koetter, 2013; IMF, 2016). Savings and cooperative banks represent more than three quarters of institutions and their business models often require a dense regional coverage. However, direct banking plays an increasingly important role (Deutsche Bundesbank, 2015).

The cases were selected for the following criteria: Resemblance of banks from all three pillars, resemblance of the variety of business models, resemblance of different sizes of banks, focus on cooperative and savings banks, and inclusion of at least one direct bank. For further comparison an insurance company was included.

Since firms are the cases, the interview partners must be in a position which allows them to gain an understanding of the processes at firm level. Directors, first and second level management of certain departments were identified as suitable informants. Promising departments comprised strategy, innovation, market research, in-house consulting, business development, product development, organization and operations.¹

Sample

ight companies were selected as the cases. This sample comprises four cooperatives banks, two commercials and one savings bank as well as one insurance company. In each company at least one of the interviewees was a member of first or second level management with regular contact to the directors. Wherever possible, multiple interviews per firm were conducted.

[&]quot;many discussions of operations strategy drift into what I think of as dynamic capabilities" (p. 331).



¹ Operations might seem surprising. However, as one interview partner put it, in an industry such as banking operations might serve as the main intelligence of a company. Furthermore, Teece (2014) recognizes that



Research procedure

 $\langle A \rangle$

guide was prepared for the semi-structured interviews. After each interview, a protocol was completed to capture the environment and any occurrences during the appointment. The interviews were led with open questions. In the progress of the interview phase, information from the already conducted interviews were used when appropriate, e.g. an example to keep the flow of the interview when participants struggled with a question.

Table 1

Selected cases

| Institution | Pillar | Business model specifics (simplified) | Rank in this research (largest = 1, smallest = 7) | |
|-------------|--------------|---|---|---------------------|
| | | | Balance sheet total | Number of employees |
| Bank A* | Cooperatives | Provides basically one product | 6 | 6 |
| Bank B | Commercials | Connected to manufacturer | 2 | 1 |
| Bank C* | Cooperatives | Building association | 3 | 4 |
| Bank D | Cooperatives | Focused on occupational group | 5 | 5 |
| Bank E | Cooperatives | Regional retail bank | 7 | 7 |
| Bank F | Commercials | Direct bank | 1 | 3 |
| Bank G | Savings | Regional savings bank | 4 | 2 |
| Insurance A | (n/a) | All-sector insurer (life and non-life) | (n/a) medium-sized firm | |

^{*} Note that these two institutions do not have the legal form of cooperatives ("eG") but are part of a cooperatives' group structure in which the institutions act independently.

13 interviews were conducted. Six participants requested telephone interviews, the other seven took place face-to-face at the site of the firm. All interviews were conducted by the author during three weeks in July and August 2017. 11 participants gave their permission to record the interview, and for two participants extensive field notes were crafted. The appointments lasted on average one hour, with an average interview time of 50 minutes. After the interview, the participants were asked to fill in the questionnaire. 11 participants returned the questionnaire, including all face-to-face participants. Further data was collected from company publications and secondary literature. Transcripts were prepared by the author. All interview data was analyzed following the procedure laid out by Gioia et al. (2013). A basic structure for codification was already laid out by the three clusters. Further identified themes include industry and company characteristics. The above mentioned narrative and synthetic strategies were applied to draw conclusions.

Limitations

ince this paper applies case-based methods it is inherently not meant to be representative, but shall give a look and feel of what is going on. However the validity of the findings might be further limited. Case-based data are prone to subjectivity from the researcher. This might occur in the design of questions and in the interpretation of findings. To overcome this limitation, the interview guide was based on a rich theoretical foundation and the questions designed in a non-specific way. Interpretations are rarely used in the presentation of the findings to allow for a neutral assessment by the reader. For discussion, the strategies to theorize from process data allowed for a step-by-step interpretation of the transcripts.

Another limitation might stem from the limited sources of data. This paper did not aim at getting the finest-grained process data of a single firm, but to find out how Dynamic Capabilities look like in an industry. The selection of cases and the collected data appeared suitable for this endeavor. Additionally the interview partners have a rather high seniority which might increase the data validity.

Results

Industry characteristics and dynamism

decline of more than 50% in the number of banks took place in the last two decades, mostly due to mergers and acquisitions (Koetter, 2013). The participant from a banking association reports a "high cost pressure" on banks, and the industry is characterized as efficiency-driven with an "OPEX-tradition". Prevailing business models of banks and insurance companies are vulnerable to the monetary policy of low interest rates which adds to an overall low profitability (IMF, 2016). The increased M&A-activity as well as the still high number of firms, the low profitability and efficiency orientation indicate strong competition and saturated markets (Jansen, 2006). A decline in the number of branches points to a shift of business models towards activities that do not require a dense network of local agents, e.g. by nurturing other distribution channels such as online-presence (Deutsche Bundesbank, 2017; Koetter, 2013).

The responses to the questionnaire indicate an ongoing dynamism of the market environment. Especially the magnitude of changes is perceived as strong. Whilst the frequency of changes also indicates a dynamic environment, all changes seem to appear rather predictably. Statements by the participants underline the changes which currently stir the German financial services industry and might lead to a future where "banking will be needed. But not banks". The traditional role of banks as a "risk intermediary for financial allocation" might no longer be a differentiator but a prerequisite. The actual success will stem from the banks' ability for "relationship management" for which it will be key to make the "intangible financial services" comprehensible.

The main reported drivers for dynamism are technological changes. In line with this, all interviewees mentioned digitization initiatives which are either efficiency-oriented or aim at "chances related to the customer interface". Interestingly, changes in customer preferences for products and services are perceived comparatively small.

² OPEX stands for 'operational excellence'. For the chapter '4. Findings', quotation marks indicate direct quotation from a participant.





This might either indicate a well-functioning customer centricity which was mentioned as a key decision making parameter by several participants, or that the customer needs are misperceived. As one participant put it, financial services providers "believe to know what the customers think. Without actually asking them".

Another explanation might be that the actual financial products and services remain rather stable, whilst the channels to distribute and provide these services change: An app or online loan application is not a new product, but a technological change. This observation is even more apparent for insurers: The "home and content insurance did not change for 115 years. This product survived the First, the Second World War, the 'Wirtschaftswunder', the hippie period, the 'Generation Golf', September 11, it survived everything". Thus innovation might not be found in products and services, but in the underlying infrastructure (technology, processes, etc.) to provide and distribute these services.

Regulatory changes have a high frequency of occurrence and a strong impact but a rather high predictability. Yet, their implementation seems very capacity-intensive as these topics "certainly need the most in terms of resource management". Competitor-induced changes add to a dynamic environment for financial services but only rank third, despite the competitive environment.

Case Bank A

ank A is a deposit-taking credit institution of the cooperatives sector and belongs to a holding. The bank distributes a narrow range of retail products through the branch network of other cooperative banks in Germany and online channels. In terms of balance sheet total and headcount it is a smaller bank and the second smallest institute in this research. The assessment of the environmental dynamism was the highest of all cases. Bank A experiences a growing market for its core product with strong competition in which the bank was able to increase its market share.

The structure for future development is laid out in strategic guidelines by the directors which are reviewed on a yearly basis. Several channels carry stimuli for changes into the bank. This is somewhat unstructured and ideas "are coming from everyone". However, in order to be recognized for implementation a project profile must be created. This is "no scorecard, therefore not quantified".

The first selection is carried out by a transformation management unit and includes checks for a strategy-fit and an IT-fit. Afterwards the idea is proposed to a management circle of "all those who report directly" for further discussion. The final decision remains with the directors.

For realization, formal planning of the implementation and different formats for employee participation shall ensure a formal and cultural stabilization of the changes. The formal planning involves the identification of required employees of the affected departments and providing required documents and guidelines. Standards include a change of the organization manual and other governance-related documentation. Transformation management serves as a knowledge memory and provider in all these activities.

Involvement of the concerned parties shall increase the willingness to change. Every project must have a target which consists of a problem and the solution to encourage the employees, e.g. "to look forward to a new CRM system which will facilitate your work". A high employee participation is intended: For example, to spread the strategy the employees were asked to propose slogans that they connect with the current target vision for a company-wide poll. Furthermore, the most heavily affected department usually acts as sponsor in the steering committee to "reduce surprises" and also "establish commitment within the departments".

Case Bank B

ank B (group) comprises several financial service providers that belong to a world leading manufacturing group (parent). It aims at sales promotion of the parent's products by offering financing and insurance solutions. The bank in the group is a deposit-taking credit institution and belongs to the commercial sector. It is the second largest in this research in terms of balance sheet total and largest in headcount.

The assessment of the market dynamism yielded the second lowest perception of all cases, possibly due to the connection to the parent. Changes mainly stem from regulations. Bank B is characterized as not very agile and has a low grade of digitization with "IT that is 50 years old". Ideas for initiatives are mainly developed on top management level. This results in an idea development which mostly derives "from its own terms".

Initiatives can be divided into strategic projects from the parent and others. Projects of the former are pushed into the organization top down but the actual completion involves the internal or external customer. In a digitization initiative, for example, "the prioritization of the order of products was developed together with the customer".

Discussion and prioritization of all other initiatives take place every four to six weeks in a "decision-making circle" of managers from different departments. Decisions are generally reached rather flexible, "sometimes formalized in a business case, with all the trimmings, and sometimes from a gut feeling". The final decision remains with the directors.

Participation and engagement are central to create a willingness to change. Yet in large projects "participate maybe two, three employees, but it affects 500". This shall be mitigated through different communication formats but to "reach an extensive willingness to change at project start is rather not the case". In a large and successful restructuring project which started last year, involvement of the management levels in "every detailed process" proved as a success factor. On employee level a willingness to change exists at least with regard to technology due to the old IT. Customer feedback plays an integral role for the employees to accept a change or not. If an external customer signalizes support for an idea, the implementation and stabilization at employee level are more likely. Vice versa, negative external feedback results in blaming the management: "They have decided it".

Case Bank C

ank C is a deposit-taking credit institution of the cooperatives sector. As one of the largest German building associations Bank C is specialized on building society savings and real estate financing for retail clients. Its products are distributed via branches. In terms of employees it is the fourth largest bank in this research, and third in balance sheet total.

Bank C reports a challenging market environment, especially driven by the low interest rate environment. However, the perceived market dynamism was lower than the average of all banks. The bank is rather traditional and did not experience many changes in the past decades due to ongoing success and a strong market position. Yet the bank currently has to undergo a cultural "change in thinking and procedure" towards a more agile organization: An ongoing strategic re-orientation into a field of business with fiercer competition requires quicker responses.

"No concrete channel exists" where ideas enter the bank and "no standardized process exists to pour these in". The responsibility remains with the line managers "to collect and channel" ideas. In order to identify needs and discuss ideas, two circles come together every month. Furthermore, a department for innovation management was set up two years ago to actively look for new technological solutions and increase acceptance from the business department by "pre-thinking solutions".



Whilst every department has their own budget for smaller initiatives, larger scale decision making remains with the directors. The yearly strategy process develops strategic guidelines. During the year ideas require a proposal to the directors.

For prioritization, the promised benefit is central. Key questions for its evaluation are "do we need this, do we want this, or does the customer want this?" The bank "rather tends to take too long than to be too fast" to make decisions.

Changes concerning the business model are embedded into a standardized and established "new product development process". Smaller ideas are "cut up small, tested, and if they work out well many arguments exist for scaling". This shall ensure that multiple ideas can be tested at once without overstretching budgets.

The tardiness to change originated on management level. Success factors for the ongoing transformation are an awareness of the necessity to change in all managers, and to make new initiatives graspable. On employee level transparency is important and a higher degree of personal responsibility. Tools such as "creative zones", design thinking workshops, and the like are regarded ineffective. It is believed that "today's organizations are not yet made for such freedoms" and thus stimuli from the outside are important.

Knowledge management remains heterogeneous across the departments which act quite independent in "their own small princedoms" once the budget is allocated. Whilst certain degrees of freedom are important for an entrepreneurial spirit, the current situation is considered negative since company-wide interests seem to be neglected.

Case Bank D

ank D is a deposit-taking credit institution and one of the largest banks in the cooperatives sector. Unlike other cooperatives the bank does not have a regional footprint but operates more than 80 branches all over Germany. It is specialized in banking for an occupational group and regards its business model as unique in Germany. The offering comprises solutions for retail and wholesale clients. It is the fifth largest bank in terms of headcount and balance sheet total in this research.

Band D reports a strong market position and favorable business environment of its target group. The assessment of the environmental dynamism was the lowest of all banks. Still, technological and regulatory changes are the most frequent and have the strongest magnitude. All changes seem to appear predictably, and the bank is able to "purposefully gather information" from its environment and also to evaluate these information, but the realization is often hampered by unavailable capacities which are bound by regulatory topics.

The main initiatives stem from the bank's directors and top management who "notice what is going on in other houses, or in FinTechs". Ideas concerning new fields of business derive from the departments as these have the deepest knowledge of their respective market.

The directors are the main decision-making body. Strategic guidelines are reviewed and developed on a yearly basis. "Project portfolio circles" in the bank "evaluate and prioritize strategic-structural projects on a quarterly basis". The participant calls this procedure "the classical, bureaucratic way".

Perfectionism appears inherent in the bank's culture. A low error rate persists and traditionally the whole industry has a low tolerance for mistakes. This perfectionism is not regarded as positive as "possibly things need a little longer or chances are

seldom seized". Therefore, "the directors sent out the clear message" that the employees should more actively test out ideas with pilot projects, e.g. in single branches.

Ideas for changes are realized in projects. The project structure is usually "very classical" which shows a rather centralized approach, confirmed by the participant with regard to politics which emerge in the headquarters.

Case Bank E

ank E is a deposit-taking credit institution and part of the cooperatives' sector. It is a retail bank with a strong regional footprint and has retail as well as corporate clients. It is the smallest bank in this research. Besides its network of more than 20 branches, the bank is accessible for customers through online channels and regards itself as a pioneer in online banking.

The assessment of the market dynamism yielded one of the highest results in this research. Main drivers are technological changes. Interestingly, Bank E is the only bank that does not regard the occurring changes as predictable.³ In line with this, the participant mentioned that "nowhere happens this teasing out, this hunting for good ideas".

The search for new ideas is "distributed among the shoulders of the management". This supposedly results in a pre-filter since every idea is evaluated under consideration of the impact for the respective manager's department. However, the participant described the relationship between the department heads and also the directors as trustful and a weekly exchange takes place across all management levels. Large ideas and strategic changes such as massive changes of the business model usually originate on director's level. The participant exemplified the concentration on "media channels for customer sales" that was triggered by one director.

An idea must promise some kind of measurable benefit in order to be decided upon. "Operands" for measurability can be monetary or qualitative. All projects are reviewed, the operands measured and the project declared successful or not.

The decision-making speed is evaluated as part of a yearly poll on management level and always "yields values better than 2 in the school grading system". Furthermore, the poll assesses project realization and the crucial success factor appears to be resource availability.

For project staffing, the person responsible publishes the required knowhow and all employees can apply to participate. Thus "a project organizes itself in an appropriate structure". Rejected candidates are frequently integrated into quality assurance tasks. This leads to employee involvement which is regarded as the central success factor for the implementation of changes. Besides involvement, another success factor for the implementation of changes is transparency as "I can only participate if I know what's going on". Furthermore, the participant regards it as essential that each employee must have the feeling that autonomous work is desired by the superiors: A basic attitude that "at our place, everything is always in progress" must be initiated by the directors and communicated "mantra-like" over all hierarchical levels.

A public forum for discussion on employee level does not generate much participation and rather serves as an informational tool. Similarly, attempts to establish the collection of best practices were not successful. A central department as a knowledge provider e.g. for project methods is therefore regarded as important.

 $^{^4}$ The German grading system ranges from 1 to 6 with 1 being the best possible grade.



 $^{^{\}rm 3}$ Only changes in customer preferences are regarded as predictable.



Case Bank F

ank F is a deposit-taking credit institution that belongs to the commercial banks sector and operates as a direct bank which means that it does not have any branches. It is one of the largest retail banks in Germany and has a wholesale offering for corporate clients. In terms of balance sheet total, it is the largest bank in this paper and third largest in headcount.

The assessed market dynamism yielded above average frequency and magnitude of changes. Main drivers of both categories are technology and regulations. However, all changes are regarded as rather predictably.

Organizational agility appears as a key factor for the success of the bank. This topic is specified as the collaboration between business development units that operate in each department and the bank's IT. On a cultural level, an encouragement of personal responsibility and autonomy are regarded as central elements. Such agile elements are contradictory to the bank's original operations that derive from a "hard, or very stringent model, guided by Tayloristic principles" with "many small process sections". Yet the bank was able to establish a culture where changes "are almost always successful".

The classical entrance channel for ideas is that "some manager, director comes along, gets a stimulus, and carries that stimulus into the organization". Noteworthy is an organized "learning journey" in which companies of different industries and sizes visit each other, following a specific procedure, and take a look at certain solutions. The participant exemplified that Bank F received ideas for handling their call centers from a food logistics company.

Employees are another important entrance channel. The participant appraises that "a whole lot of employees wake up every morning with the thought what could be improved today". In order to achieve such a "self-supporting process with its own dynamics" it is important for the management to set an example of commitment.

Ideas from employees are captured by the respective manager or by an "idea management" platform. The former needs a level of trust and is inspired by regular visits from the manager. The latter is a tool to position an idea at an organizational level, followed by the necessity to find supporters. If enough colleagues "like" the idea, it is transferred to the business development unit of the affected department.

The bank tries to delegate the decision-making away from the top management levels. Three categories are differentiated according to their "impact on the overall development": Decisions on (1) large changes of the business model, (2) the business policy, and (3) products and services. The first might be that the bank opens up branches. In this case, the directors and probably the holding of the bank would make the decision. The second could be the introduction of an account maintenance charge, decided by the local directors. Considering these two categories "something of this kind only happens in very few moments".

Changes concerning products and services, such as the introduction of a new app to assess the value of real estate, are decided on a running basis by the "people responsible from the respective departments" and the directors are only informed, albeit possessing a veto power. For "all necessary decisions remaining" which mainly comprise changes with IT-impact or requiring larger-scale implementation efforts a "prioritization committee" meets every month. This committee consists of experts from business departments, process owners and people responsible for IT, "thus everyone having a stake in this game".

Prioritization criteria are "always the same topics: Employee satisfaction, customer satisfaction, costs, and efficiency" as the main drivers. Moreover, the effort needed for realization is considered and guidance is available to prepare a business case. The participant characterizes these criteria "very simple, but very clear".

The realization of an idea "is basically a part of the process intelligence: No matter what kind of change we have, the same mechanism must be triggered every time". This mechanism includes implementing the idea and monitoring its practicality. The participant evaluates that the realization of changes "works out extremely well".

Especially autonomy and personal responsibility constitute to a willingness to change. On management level this requires trust and tolerance for mistakes. Furthermore, the bank's structure is traditionally rather decentral with a lot of autonomy for the individual department heads. As for knowledge management, no "clean institutional approach" exists.

Case Bank G

ank G is a deposit-taking credit institution and one of the biggest German savings banks. It is focused on retail customers and small and medium sized firms. Bank G operates in an economically strong region with a dense branch network of more than 150 physical access points. It is the fourth largest bank in this research in terms of balance sheet total, and the second largest in headcount.

The evaluation of the market dynamism is in line with the other banks. Yet, the magnitude of technological changes is higher, as well as of competitors' product offering and customer preferences. Furthermore, it is noteworthy that technological changes are regarded as rather unpredictable. The bank currently finds itself faced with changes "induced by the so-called digitization" that is regarded as less technical but as a "cultural or social development". This pressures the bank which "functions according to classical hierarchical processes". Thus it requires "an organizational development on management level which is running, smoothly, but in total too slow for the existing requirements of change".

The yearly strategy process is "the main gateway" to "identify needs of changes" and to decide on different options. Environmental analyses and "simply the intuition of managers" are the two main entrance channels for ideas into the organization. The latter is considered the stronger factor and mostly takes place on director's level in the strategy process as "the lower level managers carry a more operative responsibility". Employees' ideas are usually captured by their line managers. However, the bank does not have adequate systems and processes to unlock "many hidden potentials" in the workforce and ideas "develop from the strategic work of a handful of staff".

Depending on the assumed impact decisions are carried out by the directors or department heads. Minor changes of the business model, e.g. to target certain customer segments, or slight alterations of the product portfolio usually follow an informal decision-making process "where the success factor is simply a good culture of discussion". All other initiatives require board proposals which "used to be exclusively closed-job meetings", but are gradually opened up by including on-topic employees.

The aforementioned tardiness to change on management level is accompanied by a "protection mentality" on organizational level: In order to pursue induced changes, "many basic conditions must be very transparent and clearly described", indicating a low propensity to take individual responsibility. Additionally, the management struggles with giving up responsibility and does not yet have the ability to cope with "high uncertainty in processes, such as new services and so on, high uncertainty concerning market requirements, versus high certainty in project topics like a IT-migration". Once all parameters are clarified the bank is described as "highly energetic", indicating that an overall willingness to change exists.

Realization of changes is mostly conducted in projects. Success factors are directors' backing, unambiguous responsibilities, early involvement of the affected people, and cross-functional interhierarchical teams.



The rather centralized sensing and seizing of ideas is reflected in the organizational structure that is more hierarchical than processoriented. This "silo way of thinking" also affects knowledge sharing with a prevailing "knowledge is power" attitude. Besides this cultural aspect another hindrance is supposedly the lack of an adequate central platform: At present, in order to access certain resources "you have to know the people". Thus it is assumed that many knowledge resources remain isolated in the departments.

Case Insurance A

he insurance company is part of a foreign international insurance group. Private individuals and small and medium sized firms form the customer group. Excluding the home market, Germany is roughly the second largest market in terms of business volume. One participant classified the company as a medium-sized firm.

The assessment of the market dynamism was lower than for all banks. It appears that the insurance industry is less affected by changes in the market environment than banking and that technological innovations did not have a huge "impact on the insurance industry yet".

Larger changes in the company are usually induced by the parent, including a centralized search for new fields of business. These stimuli enter the German subsidiary in form of guidelines. Initiatives originating from the German subsidiary mostly affect business policies such as new distribution channels and processing.

In the German subsidiary, sensing ideas rests with individuals of the firm and usually originates on management level. Internal changes such as process improvements sometimes stem from employees, yet the largest impact have the directors.

The directors are also the main decision-making body but the underlying process is "somewhat less than perfect". Decisions are often induced informally and not always transparent. However, approachability induced by the rather small company size and an informal conversional culture are regarded as positive but the lack of formalization sometimes results in ambiguity of decisions.

The company is considered to be not very prone to changes. It is reported that the company is in very good shape which adds to the typical risk aversion of the insurance industry where "as of January 1st, 70 per cent of the earnings are already ensured" due to annual premium payments. As a result, "no one wants to float something which turns out to be a nonstarter" and the decision-making process tends to take long due to hedging behavior.

In order to increase the willingness to change it is important that the respective manager sets an example. Communication plays an essential role, especially validity of argument and speed. Employee participation and reduction of uncertainty were success factors in past changes, i.e. a post-merger integration.

Processes for the realization of changes are "average". The company appears hierarchical and top management backing is important, underlined by the statement that "if the boss says turn left, the employees turn left". The focus on individuals also applies to knowledge carriers. One participant exemplified that "if I am on holidays, education and training, I return and they say 'all knowledge was gone".

Discussion and Conclusions

he findings suggest that customer preferences for financial products seem to remain rather stable, but change with regard to the provision and distribution of these products. Thus, changes in German financial services companies mainly occur in the distribution of products and operations. Product

development processes appear not to be an integral part of Dynamic Capabilities. Rather, Dynamic Capabilities operate in the integration of technology-related solutions and the adaptation of processes in the firm.

Environmental factors seem to influence Dynamic Capabilities. Banks in this research which are not as exposed to market changes or competition appear to have more difficulties to deal with changes than their peers: The manufacturer's bank is "not very agile", the building association reports that the company is too slow for the new field of business, the occupational bank reports resistance to change. The large savings bank also indicates difficulties in changes: An ongoing transformation might be hampered by the economically strong region in which the bank operates and past success of the business model. In contrast, the direct bank reports that changes are almost always successful, and the bank with the narrow retail product focus as well as the small regional retail bank report a high willingness to change. The insurance company generally reports a lower dynamism and also lower willingness to change.

Directors play an important role in the observed firms and Dynamic Capabilities seem to originate on top management level: Search, decision-making, and change processes are at least steered by managers, if not conducted discretely. Constituting organizational processes for search and decision-making are directed by strategic guidelines and strategy processes.

Processes underlying the clusters sensing, seizing and reconfiguration display commonalities in their basic structure, but are tuned to the specifics of the individual companies. This complicates an evaluation of the performance of these processes: Perhaps the occupational bank might not have an advanced employee suggestion scheme, but still senses all information relevant for its business. Maybe the manufacturer's bank does not need a huge employee participation to effectively implement its initiatives. Exemplary, the insurer stated that it does not need a huge radar to observe market changes, but that it needs effective decision-making to capture the right chances as it is too small to allow for too much experimentation.

However, certain common characteristics and goals might facilitate a comparative measurement. Sensing is mostly described as an unstructured and possibly discrete activity. Units for market research seem to surveil only defined areas. But the evidence suggests that a connection between the predictability of changes and the verbal assessment of the companies' sensing capabilities exists. Thus predictability might be one dimension for sensing. Additionally it is reported that ideas might get lost or do not even enter the firm as channels are not clear or not accessible. Thus unambiguity and accessibility of entrance channels could serve as further objects for an evaluation of sensing activities.

Seizing activities happen informally every day, as depicted by the direct bank, but are also embedded in formal structures such as strategy processes. They include decision-making in the firm where speed, validity, and clarity seem important. Again, these categories should not be regarded in absolute terms, as for example Bank A states that four weeks are too long, whilst the insurer reports that three months "are nothing". Thus an indication of perceived speed of decision-making is more promising. For validity, it is important to consider if the taken decisions are fruitful in the eyes of the participants, i.e. if they were right in retrospectivity. This will not ensure the effective functioning of future decision-making but could be used as a proxy to evaluate contemporary capabilities. Clarity is another factor: At the direct bank, the criteria are said to be simple and clear which ensures effective decision-making, whilst the insurer reports that sometimes decisions are reached but it remains unclear what should happen afterwards.5 Thus clarity of decisions might be another component of a seizing capability. In addition to decision-making, resource availability is important for

goal, such as customer satisfaction and define the details during the implementation. Rather, a decision should not leave ambiguity.



⁵ Note that this does not mean that every decision needs all possible influence factors. It even seems favorable to take decisions on a broader



seizing. Regulatory requirements reportedly use up many capacities of the firms and to have available resources in terms of skill and manpower at the right moment seems to be a factor.

Reconfiguration in the investigated firms takes place in parallel to line activities or in projects. For larger changes, the latter is exclusively used. An assessment if decisions are actually realized can be used as a proxy for this category: Whilst the direct bank reports that decisions are realized very rigorously and successful, other banks report that realization is hampered.

Besides these possibilities for comparison the findings suggest success factors that can give guidance to practitioners. Firm culture and especially the role of leadership are emphasized again: Success of initiatives seems to originate on management level and is broken down the firm.

Sensing activities are divided in managerial sensing and employees' sensing. The former can firstly be reinforced if managers have room beside operational tasks. Second, an active exchange on management level, both formal and informal, has a positive effect. A common understanding of the future direction of the firm and trust are enablers, open space solutions and meeting points facilitate their development. Third, external stimuli should be gathered: This starts in internal units, e.g. service centers for customer feedback and market research for environmental analyses, and can be expanded by activities with e.g. startups, competitors, or companies from other industries. Sensing on employee level heavily depends on trust in the superior: The workforce must feel comfortable to express ideas and confident that their ideas might be implemented. Just as for the management levels, exchange intensifies ideas generation and can be nurtured by the premise design and the deployment of crossfunctional teams: "Suddenly the right process experts sit together".

For seizing opportunities, it is promising to lead the decision-making or at least prequalification away from top management. Various strategies might be applied: Department heads might receive higher autonomy, templates for the input of ideas could be provided, or regular expert circles established. To ensure effective realization a description of the first steps after the decision should be included in prioritization. Reconfiguration is mostly conducted in projects, requiring methodological knowhow. To implement an initiative inside the firm the participants reported that it is especially relevant to include all affected stakeholders and to consider formal demands, such as regulatory requirements. Guides can provide orientation for these integrative and formal requirements.

Cultural factors affect all clusters. Participation and involvement are recurring themes on employee and management level, connected to personal responsibility. They start in sensing, e.g. to create teams with a semi-concrete task such as improved customer satisfaction, continue in seizing, e.g. by using a knowhow tender for project staffing, and carry on in the realization, e.g. through the use of agile methods. Personal responsibility is connected to feedback. The findings suggest that ascribing success and responsibility to employees is important for acceptance. This might be external through transparent production numbers, customer feedback, or the like, or internal, e.g. through integration of employees in top management meetings to present results. In terms of communication, speed and validity of argument are central elements. Directors' backing is once more important and should underpin these approaches.

In various firms of this research it proved successful to establish particular teams to deal with perceived difficulties in changes: The direct bank employs units in every department to connect IT with business, the building association has an innovation team to carry solutions into the departments, and Bank A deploys a transformation management unit to establish changes in the bank. In order to develop certain capabilities that do not yet function as required it seems promising to mandate units with specific tasks.

These teams serve as a knowledge accumulator and provider. Especially in their initiation a strong mandate from the directors is required. Regular exchange can expand the knowledge inside the organization. Tools for knowledge management such as a Wiki seem to be only supportive in the investigated firms. This also applies for employee suggestion schemes and forums for internal exchange: A cultural development appears to be a prerequisite for technological facilitators.

Further research could pick up the discussed categories and apply statistical methods. The survey for the perceived environmental dynamism can function as a tool to include market factors. Furthermore, an inclusion of a measurement of competition in the industry can be another section to test against. A more rigorous assessment of the companies' financial performance than conducted in this paper is advisable. Interviews appeared adequate to get a feel for the functioning of Dynamic Capabilities inside the firms but also for factors that are important in the industry. Thus a mixed method with an identification phase based on qualitative data and a phase for relative measurements appears promising to converge towards an operationalization of Dynamic Capabilities.

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