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# A Brief Overview of the Financial Industry's Digital Adoption Investor Independent investigation into Operational Alignment

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**ABSTRACT:** Today, businesses across a wide range of sectors are discovering that transitioning to a digital business model is a significant issue. The banking sector has been significantly impacted by the digital revolution, as increased client expectations have necessitated the need to modify strategy, procedures, and information technology. So far, research on digitization in the banking sector have either been conducted at the strategic level, from the viewpoint of the client, or from the standpoint of the institution itself. Using a multiple-stakeholder approach, we were able to bring together the results of past research from each viewpoint in our study. The findings indicate that internal processes and information technology systems are not yet prepared to satisfy the needs of a strategic and customer-centric viewpoint. The digital strategy of the banks is often well-matched with the demands of their customers, but both are poorly linked with the internal structure and information technology. The limited integration of information technology and the low degree of process automation have been cited as major impediments to the implementation of the digital agenda.

**Keywords:** Digital Transformation, Digitalization, Digital Business, Banks, Banking, Strategy, Alignment

## INTRODUCTION

The word "digitalization" is used by the media, businesses, and scientists to describe a "process of transitioning from a traditional business model to a digital one" (Gartner 2016, p. 201). Enterprises across a wide range of sectors are already realizing that achieving this transition will be a significant undertaking with significant implications for their present business strategies (Butler and Hackney 2015; Veit et al. 2014). The banking industry is one that has been debating digitization methods in depth for quite some time now (Cziesla 2014; Graupner et al. 2015).

Companies have been under increasing pressure in recent years as a result of the rapid advancement of technology and the strong competition that exists (Lasi et al. 2014; Scott 2007).

At this point in time, most research on digitization in the banking sector have either been conducted from a strategic standpoint or from a consumer viewpoint. Strategic studies examine and explore the influence of digitalization on corporate strategy and business models at the highest degree of abstraction (Schmidt and Drews 2016). On the level of the consumer, studies based on research and practise attempt to characterize and explain the behavior of customers while choosing and adopting new technologies and services (Aladwani 2001; Bain & Company 2014; Pousttchi and Schurig 2004; Pozza and Texier 2014; Roland Berger and Visa 2015). The internal structure of the bank as well as its information technology systems should be taken into consideration when analyzing the present stage of digitalization, in addition to these two views (Ross et al. 2015; Venkatraman et al. 1993). Business strategy alignment with internal organization and information technology as well as meeting the needs of customers will become more complex (Bygstad 2015). Particularly relevant are the current trends in heavyweight and lightweight IT (Bygstad 2015), as well as the collaboration with digital IT-driven companies such as fintech's (Hanelt and Krüp 2015). These trends emphasize the importance of continuous alignment within the organization as well as with customers and partners. Our research intends to get a deeper understanding of various viewpoints by the use of a multiple stakeholder analysis with a regional emphasis on Germany, which is one of the world's top economies, in order to achieve this goal. Specifically, the following research question guides the investigation: "What are the existing strategic alignment gaps of German banks in the face of the digital transformation?" The following sections of the paper are organized as follows: First, we provide a high-level overview of the general methodological approach as well as the theoretical context. Second, we provide results from all three viewpoints and discuss how they are related to one another. Third, we provide a summary of the strategic fit between the three viewpoints. Fourth, we explore the theoretical and practical ramifications of our findings, as well as provide a view on future study topics.

**Theoretical Foundations and Approaches to Methodological Research**

In response to our study question, we concentrated our attention on strategic alignment gaps in the digitization of the German banking industry's operations. As previously said, the process of digitization involves a number of different parties and players. As a result, we used a stakeholder analysis (Freeman 1984; Gupta 1995; Pouloudi 1999; Sharp et al. 1999) as the overarching research technique for our investigation. Generally speaking, the word "stakeholder" refers to persons who have a stake in an organization's decision-making process and are involved in it in some way (Goodpaster 1991). According to Freeman (1984), a stakeholder in an organization is defined as follows: "A stakeholder in an organization is (by definition) any group or person who has the ability to influence or is impacted by the attainment of the organization's goals." Mallott (1990) developed a framework for analyzing the various stakeholders, which we followed in three phases.

For the purpose of identifying the many stakeholders participating in the strategic alignment process, we utilized the well-established model developed by Venkatraman and colleagues (1993). This model presents four fundamental principles that are intertwined with one another. By drawing on the model, we were able to identify three aspects that are important for the digitization process to consider. The dimensions of "business strategy" and "information technology strategy" (both referred to as "external domains" in the model) are merged to form the dimension of "strategic management." Organizational infrastructure and processes" are joined with information technology infrastructure

and processes to form the term "internal domains," which refers to the dimension of internal end-users in the company. As indicated before, the last of these links guarantees that the internal match between external criteria and deliverability capability is maintained. In order to better understand the customer viewpoint within the context of digitalization, we employed the customer perspective as an addition to the strategic alignment model established by Avison et al (2004). The strategic alignment model served as the foundation for the development of three aspects for further investigation in this paper: Strategic Management (StratDir), Customer Requirements (CustReq), and End-Users of Internal Organization and Information Technology (OrgIT) are the three components of the organisational structure (see Figure 1).

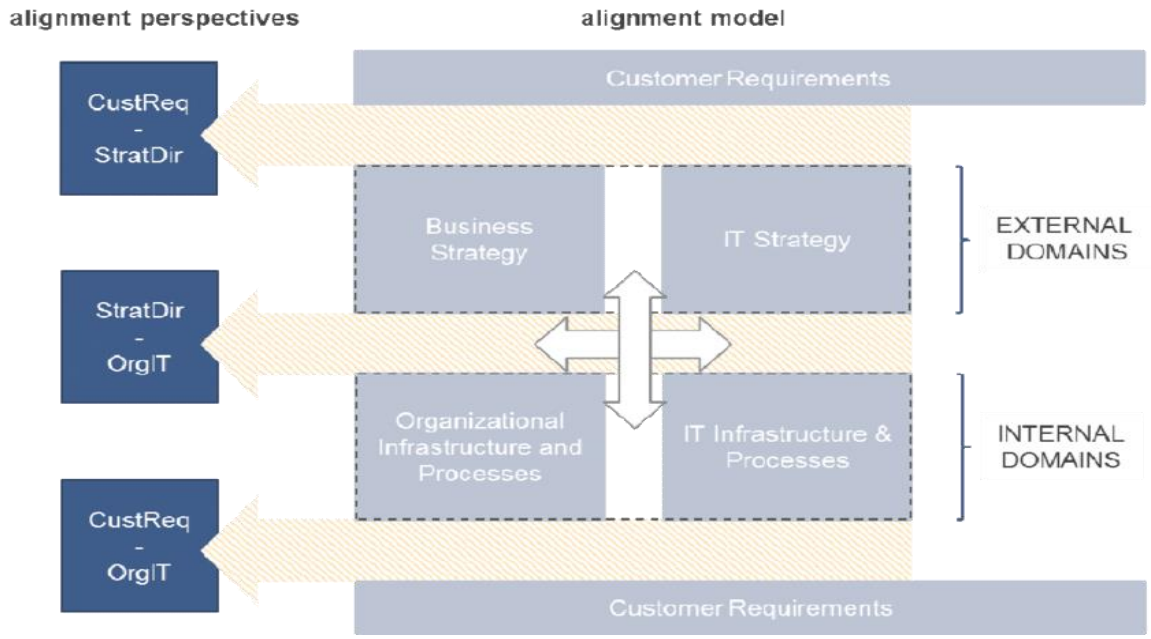


Figure 1. Alignment perspectives according to Venkatraman et al. (1993

Each stakeholder group has its own set of interests and characteristics, which we detailed. Each study was followed by an aggregate of the data, which allowed us to identify the primary interests of each stakeholder group. The relationships between the stakeholders were discovered and articulated in the second and third steps, respectively. A stakeholder map serves as a guide for completing phases two and three of the process (Freeman 1984; Hosseini and Brenner 1992). The stakeholder map is used to determine the worth and impact weights of various stakeholders (Hosseini and Brenner 1992). In our study, we utilized the important features that had been collected to compare and contrast the various viewpoints with one another. We used a distinct methodological approach for each of the stakeholder groups that we worked with. A key discovery was that data is readily accessible from publications for two views (strategic management and customer viewpoint), however data is sparse for one perspective (internal end-user perspective). This understanding guided the choice. Following that, we will provide an outline of the three dimensions that have been investigated.

**Customer Perspective (CustReq):**

Because changing consumer behavior is often cited as a primary driver of digitalization, we undertook a thorough assessment of the literature to get a better understanding of the customer's viewpoint. We went through the steps of doing a literature search, purchasing literature, and using reading (Okoli 2015). First, a non-systematic search was carried out utilizing a range of electronic literature databases, which was followed by a second phase. On the basis of this information, a keyword list has

been developed in order to perform a systematic literature search (Okoli 2015). The systematic literature review was conducted in accordance with the methods of von Brocke et al. (2009), but with both English and German words included. Additional to that, we determined which databases, journals, and conferences should be used in the search. Five electronic databases are being used in the subject of computer science, and they have been chosen based on the amount and quality of material they have available, as well as their portfolio of literature (Knackstedt and Winkelmann 2006). In addition, the eight journals from the Association of Information Sciences (AIS) Basket of Eight, five international conferences, and Google Scholar were included in the literature review. The phrases from the keyword list were used to search for databases, journals, and conferences, among other things. We wanted to find scientific literature as well as papers from the practice world, so that we could integrate both views. After this process was completed, 32 sources related to the subject of customer viewpoint were preselected and retrieved. Extracts for the definition and issues of digitalization were generated as a result of the exploitation of literature in this area. The extracts were utilized to assess the references to banks as well as the relevancy of the information provided by the sources. According to the relevance criteria, the description of one or more customer needs, the description of requirements for distinct target groups, and the number of participants and their requirements for processes, goods, or services were taken into consideration in case of research. Last but not least, 15 of 32 articles were deemed very relevant and were assessed in light of the present requirements and demands of clients in the banking industry's digitization transition.

**Strategic Perspective (StratDir):**

The Strategic Direction (StratDir) is a way of looking at things from a different perspective. It was decided to undertake a comprehensive literature study in order to analyses the present level of knowledge about the strategic viewpoint of digitalization in the financial services business. The three steps of literature search, literature procurement, and literature exploitation were carried out in this process (Okoli 2015). Following the methodology used for the client viewpoint on digitization, we used the same methodology to this perspective as previously outlined. Therefore, only the distinctions are discussed in the remainder of this section. An initial, non-systematic search for the phrase "digitization" was conducted utilizing a range of electronic literature databases in the first part of the investigation. Due to the non-systematic nature of this search, it produced an overview of the definitions, subjects, and case studies of digitalization. On the basis of this information, a keyword list has been developed in order to perform a systematic literature search (Okoli 2015). The phrases digitalization and digital transformation, as well as digital revolution, were used to describe the process. The outcome was the retrieval of 52 materials on the issue of digitization that had been preselected and were not restricted to any one sector. The literature was used to provide extracts for the concept of digitalization as well as the issues of digitalization. The extracts were utilized to assess the references to banks as well as the relevancy of the information provided by the sources. According to the relevance assessment, the description of broad strategic directions within bank digitization and the description of processes, goods, or services for particular strategic directions considering distinct target groups of customers were both included in this assessment. Finally, 28 out of 52 findings were determined to be very relevant. The findings were assessed in terms of their implications for the primary strategic direction of banks, and they were organized using the business model canvas (BMC).

**End-Users of Organization and Information Technology (OrgIT):**

For the third viewpoint, we carried out an empirical research that placed a heavy emphasis on end-users inside the internal organization and on information technology within banks. We opted to utilize an online poll instead of doing a literature review since there are only a few publications that cover

the present status of internal organization and information technology from the viewpoint of end users (Schmidt et al. 2016). We got a total of 130 legitimate answers. A recent study (Schmidt et al. 2016) found that banks suffer from a poor degree of integration of their information technology systems, a lack of business process optimization, unrealized automation potentials, and a deficiency in end-user training (ibid.).

As previously said, consumers are exerting a growing effect on the way businesses function in the age of digital transformation. The present situation is explained in order to better understand the needs and methods of communication between banks and their clients. The current situation is based on scientific and practical literature. Customer loyalty is the first and most important aspect that influences the connection between customers and banks. At the moment, customer loyalty is focused on mobile banking (Bain & Company 2014). The contact between financial institutions and their customers is the second most important issue to consider. In 2013, internet channels, ATMs, and smartphones/tablets were used to conduct over 70% of all contacts with customers. In Germany, 65 percent of interactions take place via online channels, such as smartphones and tablets, 25 percent take place in branch, and 10 percent take place by phone or other means (ibid.). When clients open a bank account, the terms and conditions alter. In this case, up to 45 percent of customers in Germany utilize the channel branch (ibid.).

Pozza and Texier (2014) distinguish between communication channels employed throughout the pre- and post-purchase phases of the purchasing process. Customers' most essential channels throughout the pre-purchase process are primarily the internet, call centers, e-mail, aggregators, and mobile devices, among other things. Therefore, the pre-purchase process is becoming more dependent on the internet, contact centers, e-mail aggregators, mobile devices, social media, and online chats to be successful. From 8 percent in 2014 to 16 percent in 2015, the overall usage of mobile technologies has expanded significantly. Whatever the business model of a bank, consumers who often utilize mobile channels demonstrate stronger customer loyalty than non-frequent mobile users (Bain & Company 2014). Germany's leaders in mobile banking are codirect and Deutsche Bank, both of which are headquartered in Berlin (ibid.). Customers like the convenience of mobile banking since it allows them to purchase goods or services from any location at any time (Carrothers 2015). Between 1989 and 2014, the number of credit and savings bank branches decreased from 16000 to 10000, according to Koye and Auge-Dickhut (2014). High fees, the ease of opening an account, ATM locations, online service and mobile payments, but also branch locations are important factors that influence the decision of customers to choose a specific bank (Bain & Company 2014). Savings banks are the market leaders when it comes to offering their own goods to their current clients (ibid.).

In Germany, the worldwide trend toward unbundling goods has progressed even further, resulting in a highly specialized market with a large number of distinct banks (Roland Berger and Visa 2015). However, it is also noted that the traditional branch of the organization is not extinct (ibid.). Branches are preferred by two-thirds of all clients who want to obtain guidance on difficult items. There are, however, digital advisers who may be accessed as well. Two conclusive statements apply to the described situation: "The greater the perceived information requirements for a particular process, the lower the intended digital process use by the customers," and "The greater the perceived process risk, the lower the intended digital process use by the customers," respectively. (Graupner and colleagues, 2015). As a result, financial institutions must cope with hybrid customer engagements. On the one hand, clients want to communicate with banks via online channels, particularly for the purpose of collecting information and establishing a bank account. Customers, on the other hand, prefer to speak with a real person when they want knowledge on difficult items (Nüesch et al. 2015). To summaries,

we looked at a number of studies that give information on client needs and preferences. We discovered five important client needs as a result of our investigation (see Table 1).

| ID | Short Name | Description |
|---|---|---|
| CustReq 1 | Fast Processes | Customers demand for fast processes with low costs. |
| CustReq 2 | Transparent Products | Customers demand for unbundled and easy understandable products. |
| CustReq 3 | Anywhere Products | Products must be available anywhere at any time on all devices and at branches. |
| CustReq 4 | Preserve Branches | For 30 % to 70 % of the customers, the branch is an important channel. 66% wish to receive advice on complex products at a branch. |
| CustReq 5 | Mobile Banking | Customers want to carry out interactions via online channels, mobile channels, call centers, e-mails and agencies. |

Table 1. Customer Requirements (CustReq)

**Directions of the Strategic Management: Changing Business Models**

As a result of digitalization, banks' strategic management focuses on several aspects of their business models in order to meet the difficulties of digitalization. The findings of our literature study are summarized in the explanations that follow this section. The BMC format was used to organize the literature review. Our findings revealed seven significant strategic avenues for digitization in the banking industry, which we have highlighted as follows: (see Table 2).

**Key Partners:** The digitization has had a tremendous impact on the essential partners in the business. According to IBM (2014), relationships between firms are being re-imagined. Cziesla (2014) reiterates this statement and emphasizes that digital technologies have made it possible to interact with a transnational network of potential partners, a process that has been made possible through digital technologies. Banks combine venture divisions and build so-called innovation labs to explore the feasibility of such possible collaborations with other organizations (Cziesla 2014).

**Key Activities:** The support of digital channels inside the primary activities necessitates modifications in organizational structures and business processes (Brenner et al. 2014). Companies are confronted with the problems of industrialization while also integrating innovative current business processes and structures into their operations at the same time (Auge-Dickhut et al. 2015). Consequently, the optimization of the value chain is still crucial for digitalization initiatives despite the advancement of technology. Variations in business processes are given particular consideration (Gaskin et al. 2012).

**Key Resources:** The corporate culture is a valuable resource in this regard. Only organizations with a strong affinity for innovation, notably those in the technology sector (Scott 2007), would be able to engage actively in the digitalization process. Companies that have been in operation for a long period of time tend to have a limited ability to innovate in the realm of digital technology (Scott 2007). Organizational hierarchies should be decreased by decentralization, and decision procedures should

be kept short in order to respond more swiftly (Lasi et al. 2014). Also required is a well-defined and standardized architecture for the firms' information systems, which should be built on reusable technology (Scott 2007). The digital technology that is being employed must be synchronized with one another (Berman 2012). The proliferation of digital technology has resulted in, and continues to result in, a rising amount of information that must be optimized (Sola et al. 2015).

**Propositions of Value:**

The value proposition of business models is altered as a result of digitalization. One of the most important areas is product differentiation. Product diversification is a result of increasingly dynamic client demands, which need the development of goods that are adequately tailored to meet those needs (Jahn and Pfeiffer 2014). Koye and Auge-Dickhut (2014) describe how behavioral goods, such as those that respond to browsing or user activity, may be tailored in real time to the needs of specific customers. As a result, the market moves from being a seller's market to being a buyer's market (Lasi et al. 2014).

**Customer Relations:**

Customer interactions are negatively impacted on a basic level. Customers' expectations are shifting from being static and predictable to being constantly evolving and surprising (Jahn and Pfeiffer 2014). Because of this changed media consumption pattern, more frequent engagement is required. Many businesses, on the other hand, react rather than taking proactive action. Companies are urged to concentrate on the critical client encounters that make or break their business (Berman 2012). Additional themes, such as big data and analytics, emphasize the need of tools (IBM 2014) for creating exact user profiles, which are then used to develop financial solutions that are tailored to the specific consumer (Koye and Auge-Dickhut 2014). Customer loyalty may be built via the development of new goods and the provision of exceptional service (Bain & Company 2014).

**Customer Segments and Distribution Channels:**

The omni-channel approach (Bain & Company 2014) as well as increased communication and cooperation with customers (Sola et al. 2015) are essential needs for the channel aspect of the BMC, according to the authors. When it comes to customer experience, the purpose of methods in this field is to enhance it when customers connect with businesses via integrated and co-existing communication channels. The interactions with clients are shifting from being regional and personal to being everywhere and impersonal in the context of digitization. Furthermore, banks place a high priority on the usage of client segmentation and organize their business sectors in accordance with this priority (Bain & Company 2014). Because of digitalization, it is possible and necessary to conduct fine-grained analyses of client segments. There are two main groups that emerge: "economy" and "luxury" (Bain & Company 2014).

Sources of Revenue, as well as Cost Structure: In the context of digitization in banks, the themes of cost structure and income sources are less covered than they should be. It is common in the literature to relate to generic subjects from other industries. It is noted that the decrease of production costs (Sola et al. 2015) and the ecological and economic usage of resources (Lasi et al. 2014) are important considerations.

| ID | Short Name | Description |
|---|---|---|
| StratDir 1 | Omni-channel Approach | Banks wants to improve the customer experience by integrating co-existing communication channels. |

| | | |
|---|---|---|
| StratDir 2 | Individual Products | Banks often uses two core segments: “economy” and “premium”. Within these segments, fine grained customer segments are necessary. |
| StratDir 3 | Innovative Products / Out-standing Service | Customer loyalty can be established in banks only by inventing innovative products and outstanding service. |
| StratDir 4 | Reinvention of Partnerships | Digital technologies make it possible to interact in a transnational network with potential partners. Banks integrate venture units and so-called |
| StratDir 5 | Digitalize Business Processes | Companies have to industrialize and to innovate existing business processes and structures. |
| StratDir 6 | Organizational Culture | Companies need to understand their employees as their most valuable asset and to establish an innovation culture. |
| StratDir 7 | Digital Technology | Only companies with a high innovation affinity actively participate in the digitalization. Digital and physical technologies must be integrated. |

Table 2. Strategic Directions (StratDir)

**End-User Perspective on Digitalization: Organization and IT**

The end-users of the internal organization and information technology are an inextricable aspect of the continuous digitization of financial institutions. We did a research in order to have a more in-depth understanding of the present situation of the daily job. The explanations that follow describe the findings of the research that was done. Based on our research into the present state of work order processing in banks from the viewpoint of the end-user, we determined four key results for inclusion in the multi-perspective investigation. Table 3 at the conclusion of this section contains the findings of the study, which are presented in detail.

**Input Data:**

The first domain, "types of input data," is concerned with the various sorts of work orders that are received. 84 percent of those who answered the survey said that even in the digital era, a phone call or a human discussion is still the most common or extremely common trigger for work orders. Each request via this route requires the involvement of at least one employee. 42 percent of respondents report that an organized form such as structured e-mail, structured fax, or structured letter is employed. "Structured" refers to the fact that well specified values arrive at the bank in a predictable sequence. The internet channel, which includes mobile devices, is described by 57 percent of respondents as being either seldom or very uncommon. Unstructured e-mail is the most often utilized method, according to the survey results, which show that 68 percent of respondents get unstructured e-mails on a regular basis or very frequently. Unstructured refers to the fact that undefined values are sent to the bank in a random sequence.

**Distribution of Work Orders:** Incoming work orders are distributed based on their structured and unstructured formats, which are described in detail in the next section. Twelve percent of those who

answered the survey question said that the distribution of work orders is automated. In contrast, 88 percent of respondents believe that incoming work orders are allocated manually rather than automatically. As a result, numerous manual activities are performed by workers as part of the following work order processing. The remaining group of workers believes that a work order that is manually distributed is given directly to a particular employee. According to the final element, 31 percent of those who answered the survey believe that the expertise of a certain employee is required in order to execute an incoming work order.

Work Order Processing: Only 66 percent of those who answered the survey said that their company's work order processing is supported by an information technology system. All of the other respondents said that work orders had to be handled manually at their organizations. The usefulness of the currently in use IT systems is described by 19 percent as being more difficult and time consuming with the IT system than it was in the past when work orders were executed manually. In contrast, 81 percent of those who answered the survey said that the usage of IT systems improved the efficiency with which work orders were processed. The processing of a single work order requires the utilization of at least five different information technology systems in 34% of all incoming work orders. For the majority of situations, three to five information technology systems are required for a single work order.

**Training:**

Another inquiry was regarding the training that workers get before they begin working with information technology systems. 49 percent of the workers said that they were not sufficiently prepared for the task at hand. Six percent received just a guidebook for the information technology system, twenty-seven percent attended an information session, and sixteen percent saw a brief demonstration of the information technology system.

**IT Systems in Use Have Limitations:**

Despite the high complexity of the IT systems used for work order processing, just 62 percent of those who responded said that the IT systems had been optimized during the previous three years, according to the survey. Only a ten-percent improvement, according to 38% of those who responded, was obtained. Furthermore, elements such as insufficient usability (e.g., excessive complexity of user interfaces) and severe performance issues are cited as the primary constraints of today's information technology systems, according to the authors. One responder cited slow reaction times of IT systems as an example of a key concern that needed to be addressed. Even the availability of information technology systems was brought up as a concern. One respondent said that an IT system will not be accessible for three days due to maintenance.

**Improvement:**

The participants were invited to think of ways to increase the efficiency with which work orders were processed, and they came up with many suggestions. Due to the uniqueness of each work order, 21 percent of all participants believe that there are no more opportunities for improvement available. According to the survey results, 45 percent believe that at least 20 percent of the current work order volume will be automated in the future. The participants from the departments of back office, electronic banking/payment, investment/depot, private customer service, accounts and credit believe that there is potential for additional development in the processing of work orders. Electronic banking / payment, as well as the back office, are considered as the most significant departments for attaining development in the organization.

| ID | Short Name | Description |
|---|---|---|
| OrgIT 1 | Low Integration of IT | The integration of existing IT systems is rather low. |
| OrgIT 2 | Low Process Optimization | Current processes have not been optimized to a sufficient degree during the last years. |
| OrgIT 3 | Great Automation Potentials | Great non-realized potentials for automating the processes of work-orders exist. |
| OrgIT 4 | Additional Training Needed | End-users need additional training for being able to fully realize the IS potentials. |

Table 3. Organization and IT (OrgIT)

**Integrating the Three Perspectives: Strategic Fit or Misfit**

In this stage, the strategic alignment of the three stakeholder groups is examined pairwise to see if they are in sync. The strategic fit was evaluated by comparing two views with one another in order to carry out this investigation. In order to do this, we employed the needs from the customer's viewpoint, the strategic orientations, and the problems of the internal organization and information technology, all of which were outlined in the preceding sections. Consider the following example: we examined the alignment of each client need with each strategic viewpoint. There are three levels of alignment that have been identified. The letter "-" indicates a negative alignment, the letter "o" indicates a neutral alignment, and the letter "+" indicates a positive alignment. A "+" is shown in the cell of Table 4 when the omni-channel strategy (StratDir 1) is compatible with mobile banking (CustReq 5), for example. It is written in the cell of the table if there is no dependence between two aspects. An "o" is written in the cell of the table if there is no dependency between two aspects. In any other case, if two features are in conflict with each other, a "-" is typed in the cell. The information in the table was gathered from the previously described findings of the literature review. A cross-check with three workers of a consulting firm in the financial industry was also done to ensure that the findings were legitimate from a practical standpoint.

**Strategic Alignment of CustReq and StratDir:**

The bank's strategy is well-aligned with the needs of its customers in this regard. A minimum of two strategic directions are supported by each customer demand. Twenty-five cells out of thirty-five are recognized as well aligned, while fifteen are designated as neutral. On this level, there are no elements that are in direct conflict with one another. In particular, the availability of goods everywhere, the speed with which operations may be completed, and the use of mobile banking are all strongly supported by the bank's strategy. Consumer needs are mostly met through new and creative goods, new and innovative partnerships, and the digitization of corporate processes. These are the primary opposites to customer requirements. When it comes to the consumer need "preservation of branches," "omni-channel strategy" and "digital technology" are the only things that can help you.

**Organizational and Information Technology (OrgIT) Alignment with CustReq:**

The organization and information technology (IT) are not well aligned with the customer needs of the banks. No customer demand is directly supported by the company or its information technology. A total of 11 cells out of 20 cells were found to be in conflict. That indicates that the strategy is not well-aligned with the organization and information technology. For example, poor IT integration as well as

low process optimization are in direct conflict with rapid procedures, anyplace goods, and mobile banking, among other things. It might also be said that the large unrealized automation potentials are incompatible with the retention of branch offices due to the high expenses associated with processing single work orders. Thus, the internal operations of the relevant bank must be standardized and extensively automated in order to be effective. In contrast, the normal work order input is unstructured, and there is no mechanism to distribute the work order to the appropriate department in an automated manner. Nevertheless, skilled staff are required at branch offices and contact centers, particularly for complex items.

**Inconsistent Strategic Alignment between StratDir and OrgIT:**

The strategy is inconsistently aligned with the organization and information technology. There is no strategic direction that is connected with the organization and information technology. A total of 23 cells out of 28 cells were found to be in conflict. For example, the digitization of corporate processes and the extensive use of digital technology in the organization and information technology dimensions both failed miserably. The key issues are, in particular, a lack of integration of information technology and inadequately qualified staff. Furthermore, due of limited process optimization and unrealized automation potentials, the strategic reinvention of partnerships is unable to be operationalized on a tactical level.

| ID | Cust Req 1 | Cust Req 2 | Cust Req 3 | Cust Req 4 | Cust Req 5 | Strat Dir 1 | Strat Dir 2 | Strat Dir 3 | Strat Dir 4 | Strat Dir 5 | Strat Dir 6 | Strat Dir 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **StratDir 1** | o | o | + | + | + | | | | | | | |
| **StratDir 2** | o | + | o | o | o | | | | | | | |
| **StratDir 3** | o | + | + | o | o | | | | | | | |
| **StratDir 4** | + | o | + | o | + | | | | | | | |
| **StratDir 5** | + | o | + | o | + | | | | | | | |
| **StratDir 6** | + | + | + | o | + | | | | | | | |
| **StratDir 7** | + | o | + | + | + | | | | | | | |
| **OrgIT 1** | - | o | - | o | - | - | o | - | - | - | o | - |
| **OrgIT 2** | - | o | - | o | - | - | - | - | - | - | - | - |
| **OrgIT 3** | - | o | o | - | - | - | o | - | o | - | - | - |
| **OrgIT 4** | - | o | o | - | o | - | o | - | - | - | - | - |

Table 4. Alignment of CustReq, StratDir and OrgIT

Traditional banks should give high emphasis to digitalization strategies because indirect consequences of the financial crisis, changing consumer behavior, and stringent regulatory requirements all need to be included into such a plan, which should be prioritized. As the alignment study demonstrates, conventional banks have their own set of limitations when it comes to the implementation of the digitization plan. Bharadwaj and colleagues (2013) propose that a digital business plan should be implemented to strengthen the alignment of business and information technology strategies with internal domains. It is necessary to integrate the resources and capabilities of the internal domains as closely as possible (Chan and Ahuja 2015). As a result, businesses must develop a digital infrastructure that includes developing information technology, as well as organizational infrastructure and business processes. Companies should be able to break through their conventional borders and operate in new markets as a result of the usage of digital resources (Kim et al. 2015). Businesses are shifting away from traditional partnerships and tightly tied supply chains and toward loosely related company ecosystems. Collaboration with digital IT-driven enterprises, referred to as fintech companies in the

banking sector (Kim et al. 2015), on digital platforms inside new ecosystems (Hanelt and Krüp 2015), will be a critical strategic problem in the future of the banking industry.

**Conclusion and Further Research**

We began by quickly discussing the continuing process of digitization of banks, as well as the many players that are participating in it. In order to address our research question, we concentrated on the strategic alignment gaps and thoroughly examined the opinions of the stakeholders that were participating in the study. Finally, we discovered that the internal structure and information technology are only marginally linked with the needs of consumers and the company's strategic direction. In this regard, it seems that current models such as Peppered 2001, which try to improve the synchronization of business and information technology, have failed to fulfil their objectives. Contrary to this, according to (Bharadwaj et al. 2013), the prevalent perspective of information technology infrastructure and process on the functional level has to be more closely associated with the external domains of the organizations. The organizational structure, as well as the information technology infrastructure and operations, are out of sync with one another. For example, the findings of the end-user survey revealed that the information technology systems do not meet the needs of workers in terms of enabling them to do their everyday tasks in an effective and efficient manner. We came to the conclusion that there is a strategic misalignment between the exterior and internal domains as a result of this.

Using a methodological approach, we defined the stakeholders for the multi-perspective study by using an extension of the strategic alignment model, which was developed by us. The suggestion made by Avision et al. (2004) to broaden the scope of the strategic alignment model to include consideration of the customer proved to be valuable and important for our investigation. We urge that this component be further integrated into the alignment model, since the customer will become an integral player in future strategic alignment procedures as a result. When discussing the synchronization of the internal organization, information technology, and the customer, it is particularly important to keep the consumer in mind even more. A contribution to practice is made by this study as well. In order to compare a bank's condition with the general trends in the banking sector, the identification of essential needs and directions should be carried out in the first instance. Second, the cross-dimensional analysis gives light on the many areas in which stakeholder needs and requirements need to be matched in order to achieve success. Integration, optimization, and automation of business and information technology operations should be given particular consideration.

The scope of our investigation is restricted since we only looked at banks having their headquarters in Germany. On an abstract industry level, we looked at the needs, future trends, and misalignment gaps, among other things. Future research might look into the current state and future goals of digitalization in the banking sector, using a case study method and delving into the many viewpoints that we included into our study. We only spoke about the most important characteristics, which we limited to a maximum of 10 per dimension. In terms of future study, we recommend that we look at developing ecosystems as well as the influence of fintech on company models and business processes.

## CONFLICTS OF INTEREST

There are no conflicts to declare.

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