

Jan 17th, 12:00 AM

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Jonas Busch
FAU Erlangen-Nürnberg, Germany, jonas.busch@fau.de

Timon Sengewald
FAU Erlangen-Nürnberg, Germany, timon.sengewald@fau.de

Steffi Haag
FAU Erlangen-Nürnberg, Germany, steffi.haag@fau.de

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Recommended Citation

Busch, Jonas; Sengewald, Timon; and Haag, Steffi, "Identifying Customer Values of B2C-Fintech Services in the Area of Personal Financial Management" (2022). *Wirtschaftsinformatik 2022 Proceedings*. 16. https://aisel.aisnet.org/wi2022/student_track/student_track/16

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Identifying Customer Values of B2C-Fintech Services in the Area of Personal Financial Management

Jonas Busch¹, Timon Sengewald¹, and Steffi Haag¹

FAU Erlangen-Nürnberg, Nuremberg, Germany
{jonas.busch,timon.sengewald,steffi.haag}@fau.de

Abstract. Banks face the challenge of providing value that consumers are comfortable paying for. Although customer value is essential for fintech services, the scant research exclusively focuses on the technological advantages. This paper applies the *Value-Focused-Thinking* approach to identify which values fintech services regarding personal financial management (PFM) can create for customers. Through 24 qualitative interviews, we identify 14 fundamental objectives and 15 means objectives, which represent the potential customer values of PFM services (PFMS). The relationships of the identified objectives are illustrated in a *Means-Objective-Network*. We prioritized the identified values through a quantitative online survey with 167 potential customers. The results provide insights into the characteristics that PFMSs should have to achieve the highest possible value for customers. Customers see PFMS as valuable if they deem the service trustworthy and give them control over their finances. This paper provides an early exploratory research contribution about the customer values of PFMSs.

Keywords: Personal Financial Management, Fintech Services, Customer Values

1 Introduction

“The challenge for banks isn’t becoming digital - it’s providing value that is perceived to be in line with the cost - or better yet, providing value that consumers are comfortable paying for” [1]. This quote of on Shevlin, a recognized expert in retail banking, underlines the importance of customer value for the whole financial retail sector. In the development of new digital solutions, the generation of values for customers is a major challenge for companies [2]. Financial technology (fintech) services have gained relevance in recent years due to the increasing adoption by customers [3], and media attention [4]. Fintech services are financial services for customers or companies that use new digital technologies [5, 6]. Established players in the financial industry, technology companies, and start-ups have recognized the potential of fintech services. This results in a growing number of fintech solutions and increasing competition [7]. So far, it has not been investigated how companies providing fintech services can differentiate themselves from their competitors and how new digital business models based on fintech should be designed. The concept of customer value is highly relevant as companies only generate a competitive advantage if they succeed in maximizing the value for the customer relative to substitutional solutions. For this purpose, companies need to offer better solutions for the customers than their competitors [8] — especially in the financial sector given

the increasing competition from fintech services [9]. To generate a high customer value and gain a competitive advantage, companies must know the requirements of their customers [10].

Since fintech and services based on fintech are relatively new phenomena, the customer value of digital financial services has not been evaluated in the literature yet. Current literature covers only understanding about the customer value of digital services in general or some specific applications (e.g., [11–13]), but not in the area of financial applications. However, compared to general services, customers have specific requirements when it comes to fintech services because of the sensitive nature of finances [14]. Furthermore, the limited literature on fintech and fintech services focuses on the technological advantages [15], but does not include the customer value [6]. As described above, customer value is a key factor in the success of a service. Thus, a specific study on the customer value of fintech services will help better understand customers' needs and optimize digital financial services [15].

This paper aims to derive a value proposition of Personal Financial Management Services (PFMS) that exactly meets customers' demands by investigating the most relevant values from the customer perspective and how those values can be generated. This paper examines the following **research question**: *Which values do PFMS offer customers in a B2C context, and how can companies improve their digital financial services to create higher customer value and to attract more potential users?*

2 Theoretical Background

2.1 Fintech services

Financial services include banking, investment, insurance, and tax services [16, 17]. Those financial products are made available to consumers by financial service providers. Next to credit institutions or insurance companies, external service providers exist, generally called third-party providers (TPP) (e.g., insurance agents, investment advisors). TPPs focus on the digital aggregation and analysis of data from different financial product suppliers [16].

With the rise of IT, the financial service industry is undergoing a major transformation [17, 18]. In the 1970s and 1980s, the financial industry invested heavily in IT [18] to generate cost savings [15] or to increase customers' benefits [19], becoming one of the most innovative organizational users of IT at that time. However, today's investments in technology go far beyond the advancement of internal processes [17, 20]. Rather, the goal is to improve existing offerings and to develop new digital products, services, and business models [21]. In recent years a large number of new players, such as start-ups (e.g., iZettle [14]) and technology companies (e.g., Google [14]), have entered the financial market and exploited the opportunities offered by new technology [17], demanding the established financial companies to follow.

"Fintech" means new digital technology, which is applied in the area of finance [5, 6, 9]. Fintech does not mean that IT is used in the financial industry, such as ATMs, which exist for many years and are not associated with fintech [22]. Fintech refers to

new digital technology from which completely new products and services can emerge [6, 7, 15, 22] and have the potential to change the financial industry radically [15].

Fintech services refer to a large number of different kinds of digital solutions, which is why they are classified in different categories [16]. In the literature, there are different approaches to classify fintech services (e.g., [21, 23]). Since this paper focuses on services, we use a service-based distinction rather than a technology-based (e.g., [6]) distinction. Especially, this paper applies the segmentation of Dorfleitner et al. [23], as it is very accurate through an additional separation into sub-segments and specifically reflects the fintech market in Germany. Dorfleitner et al. [23] divides the market into four core areas: *financing*, *asset management*, *payment transactions*, and *other fintech's* [23]. The *Financing* segment consists of companies that provide capital to private people or companies. *Asset Management* includes advisory services, services for investment or management of finances, and services for the aggregated presentation of personal financial data. The *Payment* segment refers to fintech services whose digital applications are related to the transaction of payments. The segment *other fintechs* describes services that cannot be assigned to traditional banking activities such as insurtech, comparison platforms, or IT infrastructure.

The *Asset Management* segment includes Personal Finance Management (PFM) as a subcategory, which is the focus of this study. PFM means the ability to manage the own finances includes asset management, insurance planning, savings, investment planning, tax planning, retirement, and estate planning [24]. In the context of this paper, PFMS are defined as digital services that support consumers in the presentation, management, and optimization of their personal finance and insurance situation. Here, fintech services are facing high competition from traditional financial services and must offer significant added value for customers in order to compete with them [22].

2.2 The importance of Customer Value

The traditional understanding of value creation is that businesses create value by transforming input into more valued output [25]. Today the customer value is one of the most fundamental concepts in management research [26]. It is a primary goal of a business to gain an advantage over its competitors. This is the case when companies achieve more economic value than their competitors [25]. The economic value is the difference between the value perceived by the customer and the cost to the company. There are two options for a company to develop a competitive advantage: reduce its costs (cost-advantage) or maximize the value perceived by the customer (differentiation) [27]. The strategy of differentiation receives particular attention and is implemented widely in practice [10]. For this strategy, the company must succeed in offering a product or service with a higher value than substitutional goods. For instance, Keeney [11] studied the difference between online and offline commerce regarding the consumer retail sector. He found that the same service provided over the Internet, instead of in a traditional retail store, has a fundamental impact on the value proposition.

2.3 Service Management literature on fintech services

Advantages of fintech services for the consumers. Current research agrees that the use of fintech can create many benefits for the users [6, 9, 15]. It is mentioned that the accessibility of fintech services is a particular advantage for customers. The service can be accessed via mobile devices independent of time and place [15, 28], which leads to a more frequent use [29]. Furthermore, users of digital financial services save time [30, 31] and money [6, 9]. The technology can also create opportunities for greater personalization. Personalized services like individual recommendations [7, 15] makes it easier for customers to understand their personal finances [3, 30]. However, it should also be mentioned that there is a trade-off between privacy and personalization, and the perceived advantages and disadvantages may differ depending on the user segment [32]. Furthermore, fintech solutions allow personal finances to be simplified. This creates new opportunities for PFM that additionally encourage financial literacy [3]. In this way, even complex financial and insurance instruments become accessible to a broader customer base. These solutions are easy to understand and affordable for everyone. It enables customers to make more self-determined decisions and optimize their financial situation. There is also literature referring specifically to the benefits of PFMSs. These have the potential to increase the users' wealth better in the long term [33].

Adoption of fintech services. The reasons for the adoption of fintech services have also been researched in the academic literature. In most cases, the technology acceptance model (TAM) or a refined version of it is applied [34]. A study about the general acceptance of fintech applications in Germany indicates that people with low levels of trust, good financial education, and a preference for transparency are more likely to adopt fintech [35]. However, they acknowledge that their results are limited due to the many different specific types of fintech applications. Most of the current research contributions refer to a specific area of fintech application, such as mobile payment or digital banking.

Schmidhuber et al. [36], for instance, developed a refined TAM to explain the intention to use mobile payment technology. Based on the results, it can be assumed that perceived usefulness, perceived compatibility, perceived personal innovativeness, and perceived social influence are positive effects. Perceived risk, on the other hand, has a negative influence on the use of technology. Another study confirms the findings that perceived usefulness positively influences the intention to use mobile payment and concludes that responsiveness, smartness, and mobility are characteristics that increase the adoption of the technology [37]. This study also provides first insights into which characteristics fintech should have in the application area of mobile payment so that the technology is accepted by a broader mass [37].

Regarding digital banking technology, which is very closely linked to PFMSs, studies have examined the acceptance of online or mobile payment. Findings of Mangin et al. [38] show that perceived risk impacts the intention to use negatively, while perceived security and trust enhance the adoption of digital banking. Also, perceived usefulness and perceived ease of use are assumed to have a positive influence. The results are consistent with those of other IS, and management research [39–41].

A few papers already deal with the specific application of technology in the field of PFMSs. The results show that PFMSs are generally accepted by customers [42], that ease of use and the perceived usefulness are important [33], and that people who are exposed to high financial pressure or who are particularly confident about finances are more likely to use PFMSs [42, 43]. The benefits for users are that they generally have better control over their finances and are better protected. For example, the users of PFMSs are more likely to make additional savings for old age or to own an emergency fund [42].

The application of the TAM provides insights into the drivers for the acceptance of technology and the customers that are generally more likely to use it. Thereby, conclusions for practice can be drawn from this. For instance, it can help to identify the target group that should be addressed. Results show that ease of use and perceived benefits promote the acceptance of the technologies used in PFMSs [33]. However, it does not show how this can be achieved. It is poorly shown which factors improve ease of use and what the concrete benefits are. This is also generally criticized by Bagozzi [34] about the TAM and its further developments. In this context, there is a lack of research that explains which factors leading to adoption of fintech services.

3 Research design

To answer the research question, we used a mixed-methods approach that combined qualitative and quantitative research. Since fintech, in general, is a relatively new topic, explorative research methods were selected.

In the first step, we identified the values from the users' perspective. To do so, we adopted the *Value-Focused-Thinking* (VFT)-approach of Keeney [11]. The VFT helps to develop a *Means-Objectives-Network* (M-O-Network) that shows the relationships between identified values. However, prioritizing the identified values based on Keeney's VFT-approach is only possible to a limited extent. A quantitative survey subsequently supplements the methodology to assess the relevance of the previously identified values. This allows researchers and practitioners of fintech services to pay more attention to particularly important aspects to users. To create more concrete scenarios for the respondents and thus achieve better results, not all types of fintech services will be included in the study. This paper focuses research exemplarily on PFMSs. Applications of PFMSs are easy for the respondents to understand, as they combine the - for most people highly relevant - topics of money, assets, and insurance [3]. The study is conducted exclusively among German customers, where a broad part of the population already has access to traditional financial services.

3.1 Identifying customer values - Qualitative data collection and analysis.

VFT is designed for decision-makers to focus on the essential activities that must occur before solving a decision problem [44]. VFT has also been used in scientific literature to investigate the application of a variety of emerging technologies and digital services, like blockchain technology or RFID [45–48]. VFT focuses not only on identifying and deciding between present alternatives but also on the values relevant to a decision

situation. It is expected that the customer values of fintech services will not be the same as of traditional financial services because they have different characteristics. For example, since digital services are intangible, value creation is different from traditional goods and services [2]. Fintech services are highly innovative and have the potential to disrupt the financial industry, as they promise more flexibility, efficiency, and opportunities compared to traditional financial services [14].

Through the application of VFT, it is possible to identify the values for customers in terms of different aspects [46]. Dhillon and Torkzadeh [49] indicated that the use of VFT improves the understanding of user-related factors of information systems. In this way, insights are gained beyond the technology’s advantages. As a result, solutions can be developed that offer maximum value for the customer [46].

The concept of VFT can help to provide insights for companies on how they should design their digital financial services [46]. Thus, recommendations can be developed that providers of fintech services can follow to enhance service quality. The aim of this paper is to identify and prioritize all possible values that occur for the customer when using fintech services. By applying the concept of VFT, it is important to identify and understand the values that are relevant [50]. Therefore, we conducted open interviews with existing or potential customers. Open questions allow the identification of new, unknown values. Keeney [11] applied the concept of VFT, especially to the needs of customers, to identify the potential values that customers have in using or not using online shopping.

Interviews have been conducted with 24 potential users of PFMS using the approach of VFT. The interviews were done individually or in groups, as suggested by Keeney [11]. Eight of 14 conducted interviews were done in groups. Participants were primarily recruited through personal contacts and prospective customers of a suitable startup project. The participants were between 20 and 59 years old (Table 1). A large part of the respondents did already use digital financial services, such as online banking. Only a small number of respondents did already use PFMSs. The process of data collection and analysis according to Keeney [11] is described below.

Table 1. Demographic data about interview participants

Gender / age group	20–29 years	30–39 years	40–49 years	50–59 years	Sum
m	12	2	2	1	17
w	4	1	1	1	7
Sum	14	3	3	2	24

First a list of customer values has been developed within the interviews. During the interviews, the participants were introduced to the topic of PFMSs. It was clearly defined what PFMSs are and how they differ from traditional financial services and other fintech services. After the introduction, we asked the people about the aspects they care about when using financial services. They should write down all the values that he or she thought would influence the use of PFMSs. To get more data, we stimulated additional thinking by introducing specific situations to the participants. For example, by asking how a PFMS should affect managing insurance, building up wealth, or making large spending decisions. After the interviews were conducted, the results were brought together into one list. In the process, different terms with the same meaning were standardized.

Secondly, each value was converted into an objective. According to Keeney [11], an objective is characterized by three features: a decision context, an object, and a direction of preference. The decision context of this study is to use or not to use a PFMS. Object and direction of preference together reflect a value that should arise from the users' point of view.

Thirdly, the list of objectives was structured. First, similar objectives were grouped into categories, and general objectives were derived from this. Then a distinction was made between fundamental objectives (FOs) and means objectives (MOs). The latter thus represent fundamental reasons for use (FOs), while the former indicates how these goals can be achieved (MOs). The question "why is that important?" was asked for each objective. According to Keeney [11], the two possible answers are that it helps to achieve one or more other objectives or that it is a fundamental reason for using a PFMS. By questioning the importance, not only was a distinction made between FOs and MOs, but relationships between each goal were also derived. If, for example, an objective A is important to achieve another objective B, the objectives are dependent. Objective A thus contributes to achieving objective B.

Finally, an *M-O-Network* was formed from these connections (see figure 1). The FOs are on the right side of the *M-O-Network*. Together, these represent an optimal value proposition of a PFMS. On the left side, there are the MOs, which can pay off on each other and on the value proposition. These relationships are represented by arrows. The connections of the MOs to the specific FOs are not shown to reduce the complexity of the illustration. The M-O-Network presented in figure 1 demonstrates how the desired value proposition can be achieved.

3.2 Prioritizing customer values - Quantitative data collection and analysis.

The fundamental values identified through the interviews were assessed through a questionnaire. The respondents were asked to rate the importance of each FO on a scale from 1 to 10. To avoid misinterpretation by the participants, the FOs were specified by examples. The online survey was open for 3 weeks and distributed through different social media channels. During this period, 167 responses from people of different ages were collected (Table 2). We used the mean value of the importance rating as the decisive criterion for the evaluation to prioritize the results. For this purpose, the mean value was calculated by adding up the ratings given for each objective and then dividing by the number of votes cast. The results were then sorted in descending order. This ends in the order of prioritization of the FOs.

Table 2. Demographic data about online survey participants

Gender / age group	<20 years	20–29 years	30–39 years	40–49 years	50–59 years	>60 years	Sum
m	7	59	14	4	3	5	92
w	5	49	4	3	9	1	71
not specified	1	3	0	0	0	0	4
Sum	13	111	18	7	12	6	167

4 Results

Through the interviews, 14 FOs and 15 MOs were identified which represent potential customer values of PFMSs. The findings result in the *M-O-Network*, presented in Figure 1, which shows how the individual MOs pay off on each other and on the value proposition. For reasons of space, only the FOs are described in detail here. Since all FOs

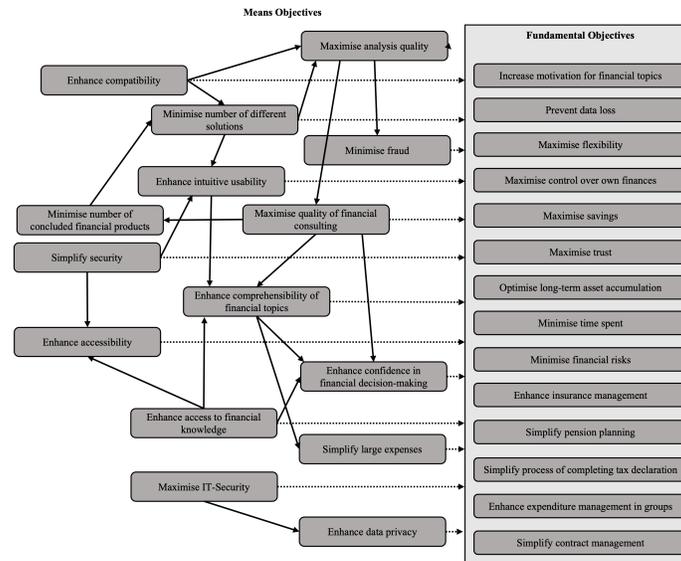


Figure 1. Means-Objectives-Network for PFMSs

together represent the complete value proposition of a PFMS to the customer, they are especially important to answer the research question.

Increase Motivation for financial topics: This includes, for example, an increased motivation to save or deal with financial topics in general. The MOs enhance access to financial knowledge and simplify security contribute to this FO. In the respondents' opinion, providing information for laypersons and presenting financial topics in a comprehensible way makes it easier to overcome a hurdle to deal with finances. A demotivator mentioned that security precautions, e.g., authentication for online portals, are perceived as too complicated. From the interviewees' point of view, these should be secure and as simple as possible.

Prevent data loss: The interviewees mentioned high data security as an essential reason for using a PFMS. There should be no risk of data loss, or the risk should be minimized by automatic cloud backups. The MO *maximize IT-security* pays off on this FO. Interviewees indicate that they expect the provider of a PFMS to take appropriate IT security measures to prevent data loss. Companies should also communicate these externally so that potential customers can notice them.

Maximize flexibility: The interviewed users expect that a PFMS enables them to react quickly and flexibly to changing conditions, e.g. if they unexpectedly face major expenses.

The MOs *enhance accessibility* and *simplify security* pay off on this FO. Interviewees hope that device-, time- and location-independent access gives them greater flexibility in managing their finances. Simplified security mechanisms such as authentication via fingerprint or facial recognition would ideally further increase this flexibility by simplifying the access to the service.

Maximize control over own finances: Consumers expect to have improved control over their finances through a PFMS. Customers wish that the solution presents one's financial situation in an understandable way for everyone. In addition, complex financial topics should be made comprehensible to them to act in a self-determined way. Thus, the MOs *simplify large expenses*, *enhance the comprehensibility of financial topics* and *minimize the number of different solutions* contributes to this FO.

Maximize savings: Interviewees want a PFMS that helps them to reduce costs. This can be done by making costs transparent, e.g., by identifying and listing fixed costs. In addition, it is requested that a PFMS should show concrete savings potential to the user, for example, by automatically comparing existing contracts with up-to-date offers. This FO is addressed by the MO *maximize analysis quality*. The users expect that through a high analysis, quality saving potential and customized products can be uncovered. For example, a detailed analysis can identify duplicate services in insurance contracts. The corresponding contracts can then be adjusted to save costs.

Maximize trust: In this context, it is important to the interviewees that the provider is transparent. This includes a convincing website, third-party audits, and certifications. In addition, interviewees demand that the provider is transparent about how money is earned to maximize trust. If IT security and data protection standards are given, the users' trust in service increases. In addition, action should be taken to prevent fraud. Users want their data to be protected from access by unauthorized third parties. Accordingly, *maximize IT security*, *enhance data privacy*, and *minimize fraud* are important MOs to achieve this FO.

Optimize long-term asset accumulation: In this context, interviewees are mainly referring to maximizing returns and reducing investment risk. Exemplarily, interviewees mentioned the identification of long-term investment opportunities and the support in dealing with capital inflows.

Minimize time spent: Through simple and partly automated data collection, users expect to shorten or even save appointments with their advisor. In addition, the digital availability of data should save time when searching for information. This FO is supported by the MOs *enhance intuitive usability*, *enhance accessibility*, and *simplify security*. Users state that the simple usability of the service through a clear structure leads to time savings. Also, easy access to the service is important here. This means that the service is protected by simple and time-saving security mechanisms, such as facial recognition or fingerprint recognition.

Minimize financial risks: Simplified and - in the best case - even automated monitoring of account transactions make it easy to identify fraudulent debits. Users also expect to be better prepared for financial challenges through PFMSs. For example, they would like to receive recommendations on how to invest safely and how to take out the necessary insurance policies. Consequently, the two MOs *maximize analysis quality* and *maximize quality of financial consulting* contribute to this FO.

Enhance insurance management: Customers need to see improved and simplified insurance management. Costs and benefits of existing and offered insurances should be presented more transparently. This includes an overall view of the existing insurances. Via the service, it should also be possible to cancel or change insurance contracts and process insurance claims. The MOs *maximize analysis quality*, *enhance compatibility*, *minimize number of different solutions* and *enhance accessibility* pay off on this FO. The latter enables users to quickly retrieve information and manage their insurance policies regardless of device, time, and location. Good analysis quality means that insurance policies can be reliably identified. Respondents hope that this will provide them with an overview and recommendations on their insurance policies without entering data manually. A high level of compatibility enables the exchange of data with insurance providers. This makes it possible to take out and change insurance policies and to process insurance claims very easily.

Simplify pension planning: For most of the interviewees, planning for old age is a topic they do not like to deal with because it is very complex, they are looking forward to a PFMS that simplifies this. Accordingly, the MOs *enhance compatibility*, *maximize quality of financial consulting* and *enhance comprehensibility of financial topics* pay off on this FO. Interviewees hope that a PFMS enables easy exchange of data on their savings with their financial advisor, who advises them on the topic of old-age provision. PFMSs would thus improve the quality of financial advisors. Recommendations can be tracked more transparently, and the actual needs of the users can be identified even better.

Simplify process of completing tax declaration: Another complex topic is the tax declaration preparation. Here, the interviewees want tax-relevant information to be automatically recognized from the existing data and stored centrally. Ideally, this gives them a central overview of all necessary information for the preparation. The MOs *maximize analysis quality* and *simplify large expenses* contribute to this FO. An automated financial analysis could efficiently identify and provide relevant information for the tax declaration. According to the interviewees, tax issues are often a challenge in the context of large expenses, such as housing modernization.

Enhance expenditure management in groups: PFMSs should improve the management of shared expenses. This includes sharing expenses within a household or group, for example, during a holiday. Specifically, interviewees want a shared overview of payments and support in paying debts between group members.

Simplify contract management: The interviewees want contracts to be identified automatically based on the account turnover and presented in an overview. In addition, interviewees want a reminder for important deadlines, such as expiring a contract's cancellation deadline. This FO benefits from the MOs *maximize analysis quality* and *enhance accessibility*. In this way, the manual effort for data input can be reduced to a minimum. Another benefit is the easy digital accessibility, as searching for the right information in printed and filed contracts is cumbersome.

Table 3 shows the results of the quantitative survey - a ranking of the most important values for the customers in descending order.

Table 3. Prioritization of the Fundamental Objectives

Fundamental Objective	mean	median
<i>Maximize control over own finances</i>	9,25	10
<i>Maximize trust</i>	8,76	9
<i>Minimize time spent</i>	8,49	9
<i>Prevent data loss</i>	8,32	9
<i>Maximize flexibility</i>	7,90	8
<i>Minimize financial risks</i>	7,64	8
<i>Optimize long-term asset accumulation</i>	7,59	8
<i>Maximize savings</i>	7,51	8
<i>Simplify process of completing tax declaration</i>	7,28	8
<i>Increase motivation for financial topics</i>	7,21	8
<i>Enhance insurance management</i>	6,99	7
<i>Simplify pension planning</i>	6,93	7
<i>Simplify contract management</i>	6,93	7
<i>Enhance expenditure management in groups</i>	5,75	6

5 Discussion

We identified FOs and MOs representing values that can emerge from PFMSs from the user's point of view. According to Keeney's VFT-approach, the FOs represent the fundamental reasons for using a service. The ideal value proposition for the customer, therefore, results from the sum of the FOs [11]. This value proposition covers all possible customer values of a PFMS and thus creates a potential maximum value for the customer. The *M-O-Network* shows relationships of the found objectives, which shows how this optimal value proposition can be achieved. The quantitative survey results provide a prioritization of the values from the users' point of view, which can be used in combination with the *M-O-Network* to improve fintech services and attract more users.

The identified FOs are fundamental values [50], which means that companies offering PFMSs should create these values to generate value for their customers. The FOs are thus the central source for creating a competitive advantage [46]. The *M-O-Network* demonstrates how this value proposition can be achieved [51]. It shows which prerequisites are needed in the company to develop the best possible solutions for the customers. For instance, maximize control over own finances and maximize trust are the FOs rated highest by the customers. Providers of PFMSs should therefore place this at the center of their value proposition. The results indicate that providers who manage to give users as much control as possible over their finances and at the same time gain the trust of users have a greater chance of being successful on the market. Financial companies and service providers can use this knowledge to focus on fintech service features that contribute to these values to build a brand that addresses customers' needs better. Providers that succeed in creating high perceived value for customers by integrating many values and designing a good value proposition have a competitive advantage over providers that offer customers an inferior proposition [52, 53]. This enables them to achieve a higher price than the competition or to obtain a higher market share [25].

The results can be used to determine which core competencies and technologies are fundamental prerequisites for success as a provider of PFMSs. These basic prerequisites are derived primarily from the MOs [11]. For example, a stable and secure IT infrastructure is a good basis for creating competitive advantages. Besides, high quality of analysis forms the foundation for possible differentiation in the market. Companies that, e.g., invest strongly in technologies in Data Analytics and AI can develop technological leadership in this area. In the example of Data Analytics, the know-how can be used to create services that differentiate themselves from competing for offers through better financial advice, higher savings potential, and simplified contract management. Ultimately, it can be said that the identified objectives represent market opportunities for the companies. It was furthermore possible to show how providers of fintech services can succeed in gaining the trust of customers - a major challenge in the existing academic literature [7]. For instance, a large trust advantage of traditional financial services can be seen [5]. At the same time, the results show how smaller, unknown companies also have opportunities to gain the trust of potential users through open communication and a high customer focus. Ultimately, each of the FOs mentioned has the potential to deliver significant value to users. By achieving one or more of the objectives, companies can therefore create opportunities for differentiation. Even realizing just one or a few objectives can be sufficient for the service to be attractive to some users. Nevertheless, the more FOs are part of a value proposition, the more potential benefits are created for users, and the solution supposedly addresses the more potential customers.

Providers should consider the potential values for their customers and develop fintech solutions that bring added value. Otherwise, there is a risk that they will not remain competitive in the market and will be displaced by new companies with superior digital solutions [54]. New fintech companies should also take these insights into account because, as the "product/service offering" can have a significant impact on the company's success [55]. This study is limited as the quantitative data collection mainly includes digital native users between the ages of 20 and 29 from Germany. Further research could validate our results for other regions, age groups, or fintech segments besides PFMS.

6 Conclusion

This paper provides an early exploratory research contribution to the values of fintech services for customers. For this purpose, the segment of PFMSs was examined with interviews and a survey. In total, we identified 14 FOs that all represent fundamental reasons for customers to use a PFMS. From the results, an optimal value proposition of a PFMS was derived. The results suggest that customers especially see added value in PFMSs if they recognize them as a trustworthy solution and if the service enables users to improve their control over their finances. The results of this work are an important contribution to the research in fintech services and help financial services providers develop innovative solutions for their customers to remain competitive or gain market share. While the TAM can be used as a general explanation for the acceptance of PFM fintech, this study provides concrete characteristics of how benefits of PFMS [33] can be achieved. Therefore it contributes to the IS knowledge base as it gives guidance how PFMS can be designed to meet customer demands.

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