

Trust in the FinTech sector: An analysis of existing challenges on building customer trust in financial sector

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Abstract

Nowadays the economy, including the financial sector are growing very fast. This is possible primarily due to the increasingly developed technology, which provides tools and innovations that are able to affect various industries. In the case of the financial sector, this is most visible in the area known as Fin-Tech. Entities offering various financial services, including banking, are increasingly basing most of their operations on modern technology. In some areas, they are competing with traditional financial institutions. Customer trust is one of the main challenges for these new companies. Main objective of the study will be to examine how the factor that is defined as "customer trust" affects the way FinTech companies function within the financial sector. For this purpose, the theoretical review was made in the paper, which addressed the key issues in this topic. It also conducted 2 studies - a quantitative survey with customers and qualitative interviews with experts to answer key research questions. At the very end, it was found, that the aversion of some users to technology and innovation will block their attitude to FinTech. According to experts, it will be a long time before young financial entities relying fully on technology will be able to gain the trust of customers at a level similar to traditional financial institutions. The paper offers recommendations on how traditional financial institutions should prepare for the technological transformation, as well as methods that FinTechs can use to accelerate building customer trust.

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Abstrato

Atualmente, a economia, incluindo o sector financeiro, está a crescer muito rapidamente. Isto é possível principalmente devido à tecnologia cada vez mais desenvolvida, que fornece ferramentas e inovações capazes de afetar várias indústrias. No caso do sector financeiro, isto é mais visível na área conhecida como Fin-Tech. As entidades que oferecem vários serviços financeiros, incluindo a banca, estão cada vez mais a basear a maior parte das suas operações em tecnologia moderna. Em algumas áreas, estão a competir com as instituições financeiras tradicionais. A confiança dos clientes é um dos principais desafios para estas novas empresas. O principal objetivo do estudo será examinar de que forma o fator definido como “confiança do cliente” afecta a forma como as empresas FinTech funcionam no sector financeiro. Para o efeito, foi feita a revisão teórica no artigo, que abordou as questões-chave neste tópico. No final, verificou-se que a aversão de alguns utilizadores à tecnologia e à inovação irá bloquear a sua atitude em relação à FinTech. De acordo com os peritos, demorará muito tempo até que as jovens entidades financeiras que dependem totalmente da tecnologia consigam ganhar a confiança dos clientes a um nível semelhante ao das instituições financeiras tradicionais. O documento apresenta recomendações sobre a forma como as instituições financeiras tradicionais se devem preparar para a transformação tecnológica, bem como sobre os métodos que as FinTech podem utilizar para acelerar a construção da confiança dos clientes.

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Título da tese: Confiança no sector FinTech: Uma análise dos desafios existentes na construção da confiança do cliente no sector financeiro

Palavras-Chave: Confiança do cliente, Setor FinTech, Construção da confiança do cliente, Vantagem competitiva, Comportamento do cliente, Indústria bancária

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Introduction

Financial sector is an extremely expansive part of the economy. When it comes to the banking sector, there are over 10,000 financial institutions in the world. Many of them operate on an international or global scale. This makes customers uniquely diverse when selecting an entity for their financial services and the entities themselves are determined to gain a competitive advantage over each other. (IBIS World, 2023)

Particularly FinTech is noteworthy part of this sector in the recent years. It is estimated that in 2022 the global FinTech market was worth about \$310 billion. Largest number of players is in South, North America, Europe and Asia. FinTech often dominate markets in which traditional banks and financial institutions are unable to meet customer needs. (Rakowski, 2020)

Analyzing the various areas that determine customer choices regarding a financial institution, we can point phenomenon of customer trust. This element, in many cases, is responsible for the selection of the entity to which customers are willing to entrust their funds. This trust can be the result of many different factors, which will be the subject of this work. The most important thing here, however, will be to see how customer trust is created in relation to FinTech. (Cojoianu, Clark, Hoepner, Pazitka i Wójcik, 2020)

These entities are relatively smaller, young financial institutions and do not have as long and extensive a history as traditional banks. In addition, they operate on basis of modern technologies, which do not convince all customers. For these reasons the degree of customer trust is on average lower than that of traditional banks. This applies only to certain customers groups. Some appreciate developed technological offerings and innovative approaches. (Margaroli, 2023)

Study area of research proposal presented below will be to see what the key factors and challenges are responsible for the problems of building and maintaining customer trust. Goal here, then, will be to see what the elements are responsible for the difficulties FinTech have in building and maintaining this trust, and what actions companies can take to minimize these limitations. Research addresses a currently occurring research gap and its additional purpose is to identify an area for further research and to suggest first actions that can be used by FinTech.

Work consists of 3 specific parts, the purpose of which is to examine the research problem as thoroughly as possible and also to formulate answers to the research questions posed:

First theoretical chapter focuses on presenting the theoretical side of the various concepts. There it is possible to find definitions of FinTech, Customer Trust and models describing the relationship between those concepts. This part also cites studies made by other researchers. Main purpose of this part is to present the essence of topic and also to point out the conclusions and results made by other researchers studying it. Thus, this section will include, not only theoretical definitions and models, but also an overview of research and studies by other authors. All of these are intended to provide an in-depth understanding and serve as an introduction to the author's research section.

Second chapter presents the methodology of the research conducted by the author. There, again, the purpose of the work and the research problem are formulated. Research questions that are to lead to the realization of the goal also appear there. In that section it is also possible to find the structure of the survey questionnaire and the interview scenario that was used in this work. There is also information about the main limitations of the study. This part is intended to better present the selected research tools. Proper understanding of them is to enable a better understanding of the presentation of the results and the conclusions obtained from them.

Presentation of the results follows in the next, third practical chapter. It is divided into smaller parts. First of the is a discussion of the results of the customer survey. In the appendices, you can find charts showing the exact answers to the questions posed in the survey. In the second section, you can find a discussion of key sections and quotes from interviews with experts. Finally, the chapter concludes with a discussion based on a synthesis of the results obtained from the survey and interviews and the data presented in the theoretical section. Based on this synthesis, answers to the key research questions are formulated.

At the very end of the paper one can find the final conclusions and practical recommendations. In this part the theoretical conclusions are indicated, which can form the basis of research for subsequent researchers and also practical recommendations that can be used by currently existing companies. In this part, the research gap is indicated and a general summary of the research. This is also the part with the most important elements and findings of this thesis.

1. Literature review

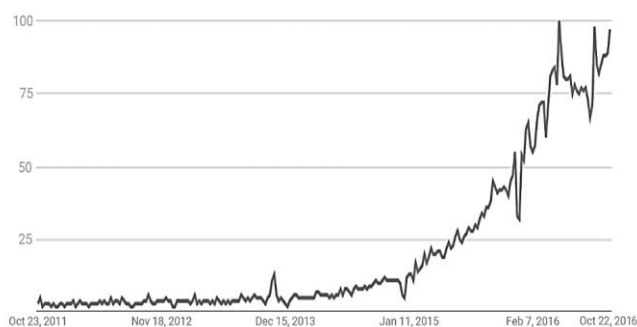
1.1. Definition of FinTech

When we want to define the FinTech phenomenon in the most general way it is necessary to point out that it is a combination of two words. To be precise, it is an abbreviation of Financial and Technology which means that the term describes innovative tools, processes, applications, business models operating in the financial services sector. These elements are innovations based on automation, technology, artificial intelligence, and other forms of disruptive innovation. Companies using FinTech solutions operate primarily in the banking, investment, insurance, savings, and many other sectors. In many situations these services are offering highly effective and convenient developments that can be defined as disruptive innovations compared to other traditional tools. It is possible thank to the usage of the high technology solutions. (Lynn, Mooney, Rosati i Cummins, 2019)

Concept has been gaining popularity since 2014, when it was first introduced to a wider public. Utilization of technology related to the internet and its combination with the financial sector was something completely new at the time. Technology as well as the innovation tools, technology solutions and financial platforms quickly became an attractive direction for major market players. This was due to greater efficiency, and attractiveness for end users - customers. Technology solutions was identified by that time as a potential source for reducing operating costs, increasing efficiency, and attractiveness of the financial sector. (Giglio, 2021)

Confirmation of the occurrence of the previously discussed growth of interest in the FinTech sector in a broader environment is presentation of the number of google searches on topic.

Figure 1 Popularity of the search term “FinTech” at Google



Source: Schueffe, P. (2016). Taming the Beast: A Scientific Definition of FinTech. Fribourg: Journal of Innovation Management.

Graph above shows on a scale of 0 to 100 the popularity of searches for the term FinTech on the most popular search engine. As we can see, until 2014 the score oscillated around 0. In 2015 we can see a gradual increase (that was pushed by the business interest in such solutions). In 2016 shows a very rapid increase in interest due to the popularization of such technologies and solutions in the market (individual customers started to be more interested about the technology). Since then, this interest has been growing steadily until today.

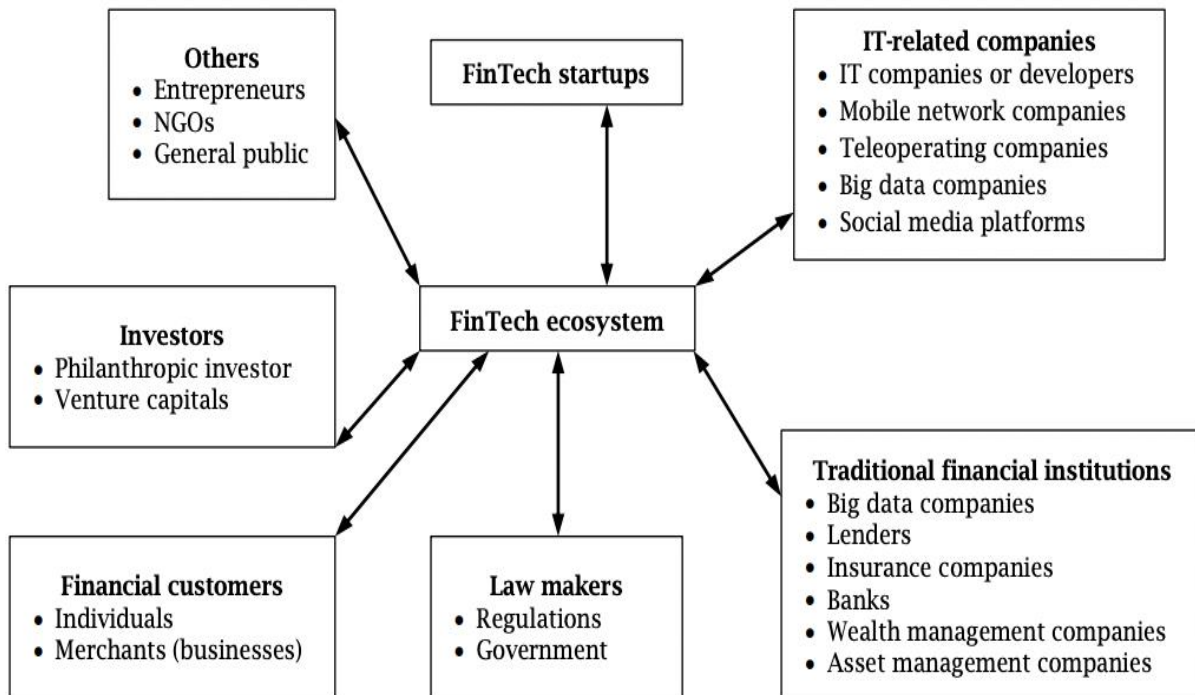
An excellent understanding of how people perceived the FinTech sector at the time is provided by a 2016 up-to-date definition from Investopedia, a widely available portal with economic information. According to it, FinTech is: "FinTech is a portmanteau of financial technology that describes an emerging financial services sector in the 21st century." (Giglio, 2021) This definition makes it clear that at the time FinTech solutions were considered disruptive innovations that would change the market picture.

Growing interest in the concept has made the FinTech sector an object of research and consideration for many researchers at that time. Numerous studies identifying the phenomenon and providing diverse definitions of the rapidly growing FinTech sector have appeared in rapid succession. If, we look at a broader definition then we understand that FinTech is not only about the banking sector, but all kinds of activities provided by the traditional financial services sector. FinTech in this sense is not, therefore, about a specific sector, range of services or business model, but about the entire range of financial services provided supported by modern technology. (Arner, Buckley i Barberis, 2016) According to consulting firm Ernst & Young, the organization's utilization of FinTech meant combining an innovative business model along with innovative technology to strengthen performance and break the current status quo in the financial services market. (Ernst & Young, 2016)

At the time, most researchers analyzing the importance of FinTech to the financial sector pointed primarily to its above average ability to achieve high efficiency. Thus, the FinTech sector was called a group of companies operating in the financial sector, which, by using new technology, were able to develop new solutions in a short period of time, providing significantly higher efficiency. Through this, they were, able to gain a significant competitive advantage over players offering traditional financial services solutions. (Varga, 2017)

To understand a model FinTech's sector structure, it is necessary to get an overview of the group of members involved in its functioning. A diagram of these relationships and key actors is shown in the figure below:

Figure 2 FinTech ecosystem



Source: Siddiqui, Z., & Rivera, C. (2022). FinTech and FinTech Ecosystem: A review of literature. Riga: Risk Governance and Control: Financial Markets & Institutions. p. 68

Interrelationships between the various stakeholders outlined above show that this is a kind of co-interacting circuit in which all members have influence. Result of their actions is the creation of a flexible system that represents the current digital future of the financial services sector. For a better illustration, it is useful to look at the participation of IT companies in this ecosystem. Software and technology they create enables the development of the rest of the FinTech players, but at the same time the existence of this market creates demand and sets trends for developers. Large financial institutions face a threat from FinTech start-ups, but at the same time, newly created solutions from this sector are an opportunity to increase their own efficiency. For customers, the sector represents a kind of alternative to traditional financial services, and their inebriation will fuel the growth and development of the entire sector. For the regulator, this is a challenge, in terms of creating an appropriate law, but also an opportunity to improve the performance of the economy. (Siddiqui i Rivera, 2022)

Definition created by two global financial supervisory organizations is worth to analyze. In 2018, the International Monetary Fund (IMF) and World Bank Group (WBG) conducted the Bali FinTech Agenda (BFA), the main objective of which was to determine the long-term effects of FinTech development on the stability and situation of the financial services sector. It was within the framework of this summit that the definition of FinTech, recognized by these organizations to this day, "the advances in technology that have the potential to transform the provision of financial services spurring the development of new business models, applications, processes, and products". (IMF, 2018)

This shows that over a period of several years, the area of FinTech activity and its significance has become one of the most important topics of discussion in the global financial market. In order to better understand it, it is worthwhile to analyze the structure of this industry in more detail. As already presented, FinTech is a very broad concept. Since it is difficult to analyze the full scope of this sector, specific typologies have been created to allow its division into smaller components. An example of such typology can be found in the figure below:

Figure 3 FinTech classification by functions and innovation clusters

Payments	<ul style="list-style-type: none"> •Cashless world: Mobile Payments, Streamlined Payments, Integrated Billing, Next Generation Security •Emerging Payment Rails: Cryptographic Protocols, P2P Transfers
Insurance	<ul style="list-style-type: none"> •Insurance Disaggregation: Disaggregated Distribution, Sharing Economy, Self-Driving Cars, 3rd Party Capital •Connected Insurance: Smarter, cheaper sensors, Internet-of-Things, Wearables, standardised Platforms
Deposits & Lending	<ul style="list-style-type: none"> •Alternative Lending: P2P Lend, Automated Processes, Alternative Adjudication •Shifting Customer Preferences: Virtual Banking 2.0, Banking as Platform (API), Evolution of Mobile Banking
Capital Raising	<ul style="list-style-type: none"> •Crowd-funding: Empowered Angel Investors, Alternative Adjudication
Investment Management	<ul style="list-style-type: none"> •Empowered Investors: Social Trading, Automated Advice & Wealth Management, Retail Algorithmic Trading •Process Externalisation: Advanced Analytics, Natural Language, Process-as-a-Service, Capability Sharing
Market Provisioning	<ul style="list-style-type: none"> •Smarter, Faster Machines: Machine Accessible Data, Artificial Intelligence /Machine Learning, Big Data •New Market Platforms: Fixed Income, Funds, Private Equity/VCS, PC Shares, C & D Contracts

Source: Rupeika-Apoga, R., & Thalassinou, E. (2020). Ideas for a Regulatory Definition of FinTech . International Journal of Economics and Business Administration. p.140

This classification was created in 2015 based on a World Economic Forum report titled "The Future of Financial Sector." It shows that already in those years major companies and economists saw the potential from the combination of technology and financial services.

As it can be seen in the figure above at that time, experts identified 11 innovation clusters divided into 6 categories of financial services. Over the years, the scope of these individual clusters has become even more mixed, and new applications of the technology have been discovered. Originally prepared classification only shows us how, at the very beginning of this sector's development, the industry was able to identify and place its potential. (Rupeika-Apoga i Thalassinos, 2020) In fact, most of the solutions already identified at the beginning of this transformation of the financial services market have been developed to this day. Expanding scope of FinTech is forcing an attempt to limit research in one area. To this thesis, we will focus on the FinTech sub-sector of digital banks and FinTech start-ups. These are financial institutions that operate primarily in the online sphere (they are called internet banks or neobanks), and thus operate without the use of traditional financial infrastructure such as bank branches, ATMs, physical payment cards. All services of these banks such as transactions, investing, saving, customer service are carried out digitally through mobile applications or websites. (Fisher, 2021)

By using FinTech solutions, these companies can offer unique value to their customers. These include high quality products (which offer value not offered by traditional entities), such as artificial intelligence-based investment tools, lower cost of ownership (possible to offer thanks to reduce operating costs - no physical assets) and improvements to the most popular services offered by traditional banks. Nonetheless, it should be emphasized that the FinTech business model is very often focused on finding a market gap and operating in a space neglected by traditional banks (offering flexible services for small businesses, low account opening requirements, a customized approach when creating an account service portfolio). (Eickhoff, Muntermann i Weinrich, 2017) Public often equates the term FinTech with new digital banks. It should also be born in mind that traditional banks are also able to implement financial technology into their processes thereby partially becoming FinTechs as well. Of course, in colloquial speech the term is associated primarily with new, start-up, digital banks offering products based on new technology. However, it should not be forgotten that FinTech solutions are now a source of increasing the competitiveness of banks and of implementing innovations. Therefore, this should be remembered that its concept is more wide-ranging than it appears. (Lee i Shin, 2018)

FinTech is an innovation in the 21st century finance sector. This sector relies on the use of the latest technology to enhance traditional financial products and services. Within FinTech, financial products, processes for providing certain services, ways of analyzing data and all other key functions of banks are being modified. It is safe to say that FinTech represents the digital transformation of the financial sector. A few years ago, a similar process took place in traditional media and in information delivery systems. Now, these changes are affecting the more sensitive financial sector. Naturally, it is important to remember that in every society there are individuals who are interested in change and those who are negative towards it. For this reason, FinTech currently represents a very limited financial sector. It is mainly smaller institutions that specialize in offering some kind of financial service. This can range from a payment service, an investment platform or a financial data analysis tool. Examples of the most developed FinTechs are probably digital banks. Nevertheless, it should also be emphasized that, through certain activities, also traditional banks and financial institutions can join this industry. Admittedly, since they have not been established in this sector they will never be identified as a full FinTech, but based on their strengths they will be able to compete among the customers of these services. (Roh, Yang, Xiao i Park, 2021)

As already indicated, FinTech represents a kind of diversification, a newer version of financial processes familiar to most customers. For this reason, it is rightly regarded by many as an alternative to traditional financial services. Therefore, it is a method of handling this key area of people's lives with a very high use of technology. FinTech can be understood as a more specialized part of the financial system. As studies show, this part will steadily grow over time gaining more and more interest from customers. That means that it is now worth comparing the FinTech industry to traditional banks in the light of the research. This is since they are currently still fulfilling similar needs of their customers. It is, however, not out of the question that this will change over time. There is a possibility of a certain division in the future in which traditional financial institutions will offer services different from those of FinTech. This is when a stratification of the categorization of these sectors may occur. For the time being, however, FinTechs are the more innovative players operating within the financial sector. As a result, they are naturally subject to the same structures, laws and regulations. This mean that in the future it is expected that there will be a new dedicated for the FinTech sector law and the regulation institutions. (Hu, Ding, Li, Chen i Yang, 2019)

Whole economies were impacted by the COVID-19 pandemic. It was one of the most important, disruptive events in recent years. In fact, it affected every industry. Importance of this period on the financial sector must be emphasized. It was a period of declining customer confidence in large institutions, which were often unable to provide security for their clients. Such industries were negatively affected by this pandemic. In the case of the financial industry, this resulted in a kind of transformation. This change is discussed in this chapter and manifested itself in the popularization of FinTech. Customers who were often unable to use the services of traditional financial entities (staff shortages, closed branches, organizational chaos) began to look for more alternative solutions. This is when digital banks and other FinTech entities gained popularity. They offered more specialized, technology-based solutions that responded to customer needs. Additionally, because of their often small size, they were able to react much more proactively to pandemic-induced changes. This was, therefore, a period when traditional banks lost one of their competitive advantages, namely customer trust. Many people decided to give FinTechs a chance. It can be said, therefore, that the Covid-19 pandemic and the accompanying decline in trust in the traditional financial sector was the driving force behind the FinTech sector. Of course, as time went on and the pandemic ended, customers switched back to their previous providers. Nonetheless, some of them chose to stay by building a FinTech position. It is noticeable that these changes were initiated by a significant change in the level of trust. That factor is an important element throughout the financial sector. The next chapter will outline the essence of this concept also its impact on the way customers behaves. (Beirne, Villafuerte i Zhang, 2022)

1.2. Definition of Customer Trust

Analysis of the phenomenon of customer trust in this paper should begin by determining how we will define a customer for the purposes of this thesis. Based on the Investopedia definition customer is: “an individual or business that purchases another company's goods or services. Customers are important because they drive revenues. Without them, businesses can neither survive nor thrive.”. (Investopedia, 2023) This definition is showing that the customer and their perception of the businesses and the markets are crucial element that drive the economy. Every company needs to put the effort and resources into creating and retaining the strong and positive relationship to success in the long-term perspective.

Classical sources also point to the place of the customer in the entire sales and buying process. According to them, a customer in economics is the recipient of a good, service or product received from a seller, manufacturer, or supplier as part of a financial transaction or monetary exchange or other type of two-way contract. It is the end- user of the value generated by the seller, the user of the manufactured product who is responsible for acquiring and utilization of product. Based on its behavior, an entrepreneur can build predictions and business models to achieve profitability and long-term business value enhancement. (Kendall, 2007) Taking into consideration this approach it is worth to notice that the customer should be identified by the company, not only as a market for its product, but also as a negotiation partner that has a direct impact on the quality and volume of its sales.

Customer perceptions and attitudes are definitely important elements when planning business strategy. Individual experience and attitude toward a particular industry or product can therefore have a direct impact on a company's performance. Company should, therefore, include elements such as the customer journey and customer service as key elements of its business model. At the end of the day, even the highest quality product will not ensure the company's prosperity unless there is a customer interested in buying it. (Suriaty, 2021) Therefore, customer should be treated as the integral part of the business model of the company. It is important element for the internal sale and production strategy as well as the key stakeholder for the external environment. Customers might also differ based on the personal preferences and other factors. It is however possible to create some segments, groups of the customers that are typical for some sectors.

As presented earlier, under the term customer is not always defined as an individual. It can include institutions, companies and other legal entities. In order to accurately understand the essence of customer FinTech, it is necessary to point out the existence of 4 main groups of customers of this technology: (Investopedia, 2023)

- Business-to-business (B2B) for banks
- Clients of B2B banks
- Business-to-consumer (B2C) for small businesses
- Consumers (Individuals)

Again, for the purpose of this paper we will limit definition and focus primarily on individual customers, consumers as it is their degree of trust that can be studied. For this purpose, it is useful to zoom in on the model of the average customer using FinTech solutions.

Initially, the average FinTech user was associated with a technology enthusiast living in a large city with an above-average income. Such a person was expected to be distinguished by higher education and a higher preference for innovation. The biggest discrepancies among researchers were related to such a user's knowledge of financial markets and services. At first it was thought that such a person must be characterized by above-average knowledge of these types of services with time, however, it was shown that through the simplicity and ease of use of FinTech products, this element is not necessary. (Buckley i Webster, 2016)

Over time, with the increasing adoption of FinTech, adopters have realized that they need to target their services to as wide a group of customers as possible. For this reason, emphasis has been placed on transparency and ease of use. This has made FinTech solutions extremely easy to use for those with at least an elementary knowledge of the Internet and digital technology. This lowering of the barrier to entry has resulted in a far greater percentage of customers being able to take advantage of such services. As the result originally specialized products and services have been adapted for use by a larger group of customers. (Suriaty, 2021) Over time, the typical definition and service user model of the FinTech sector has become blurred. Currently, in fact, users of these solutions can be found in all social groups. Admittedly, as research shows, people with higher education and higher income are still statistically more active users of this technology. It can be seen that the entry barrier are being limited but still the basic understating of technology and finance is required. (Rico, 2022)

Concept of trust is present both in interpersonal, social relations and also in the business field. It is a concept that greatly influences the type of bonds and relationships that bind the customer to the company. Some of the most popular definitions of customer trust can be found in the table below:

Table 1 Scope of Customer Trust Definition

Definition	Author
Customer trust defined as a generalized expectancy held by an individual that the word of another can be relied on.	(Rotter, 1967)
Customer trust as thoughts, feelings, emotions, or behaviors manifested when customers feel that a provider can be relied upon to act in their best interest when they give up direct control.	(Patrick 2002)
Customer trust as confidence that one party has on another because of honesty and reliability of the other partner.	(Morgan and Hunt 1994)

Source: Leninkumar, V. (2017). The Relationship between Customer Satisfaction and Customer Trust on Customer Loyalty. Sri Lanka: international Journal of Academic Research in Business and Social Sciences. p. 450 - 454

According to the researchers, customer trust is a concept directly related to two other important ones for business - customer satisfaction and customer loyalty. All these 3 concepts form a kind of triangle of interacting dimensions of the customer-enterprise relationship. Customer trust, therefore, tells us about the degree and level of emotion and proximity the customer has for a given enterprise. This element can be used by an enterprise as a source of competitive advantage in case it is able to transform these relationships into concrete actions and decisions on the part of the customer.

It can be defined as a state in which the customer has the belief that the company whose service or products, they use is reliable, competent and acts in their best interests. Researchers place customer trust as the next stage after meeting customer expectations regarding product quality. This concept is, therefore, closely related to the way the company is perceived and the added value that is offered to him by these entities. At the same time, this trust cannot be defined as a material asset, but rather as a continuous process of improving the relationship created between the customer and the company. (Bozic i Kuppelwieser, 2019)

Customer trust can be described as one of the key elements in the process of building long-term relationships with customers. Again, it is worth noting here the constant and continuous nature of working to maintain this element. It does not rely on obtaining it singly but requires taking regular actions and sticking to certain standards in order to maintain it. Thus, this relationship, which is responsible for building brand loyalty, can be one of the main sources of a company's competitive advantage and, as a result, business success. (Johnson i Auh, 1998)

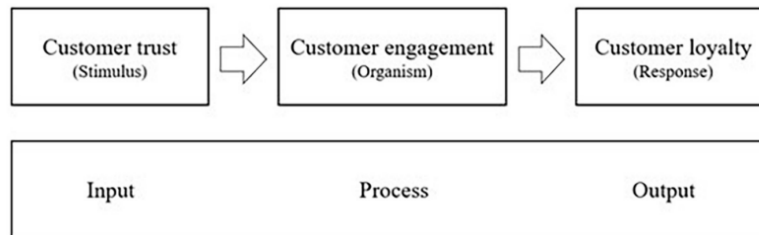
In the case of customer trust, there is a deepening state of building a close relationship with a particular enterprise. Over time, this trust transforms into a certain expectation of performance and behavior on the part of the company. In the simplest terms, customer trust, on the other hand, is the degree of trust that a company will be able to fulfill its declared promises. It is worth, so here, emphasizing that usually trust is a gradually built and developed relationship, based on specific factors and evidence from experience. With time it results in the creation of an awareness of the possibility of trust in declarations and promises on the part of the other party. (Nguyen, Leclerc i LeBlanc, 2013)

As researchers point out, customer trust is a basic essential condition for building customer loyalty to a brand. It can be defined that loyalty represents a certain higher level of trust. Concept of customer loyalty is already more developed concept in marketing and management. Thus, it can be said that a customer's trust in a brand is an indicator of the degree to which customer is attached to the brand. Enhancing this trust over the long term can create loyalty. In the short term, on the other hand, fulfilling the expectations resulting from the trust built will have a positive effect on increasing satisfaction with the services experienced by the customer. (Leninkumar, 2017)

Study also indicates that customer trust is not built only through their direct interactions with a particular company. Elements such as recognition, public opinion or ratings from the immediate environment also affect the level of that trust. This means that a customer may have a negative or positive indicator of trust in a particular company even before any contact with the company. This indicates to companies the need to take care of their reputation, as the creation of a negative impression can cause a customer to be discouraged from contacting even before any interaction has taken place. Such a situation can be caused by a negative opinion of the company in the public space and can result in a large reduction in the pool of customers who choose to test the company's products. (Swan, Bowers i Richardson, 2013)

To better illustrate the importance of the customer trust indicator on the total relationship with the company, it is worth presenting the framework. Model that perfectly captures the importance of this element is "Stimulus Organism Response" (SOR). It includes 3 specific elements to which we include (stimulus - data) output), Organism (internal processes), and response (constituting output). Structure of this framework is shown in the figure below:

Figure 4 Extended SOR Model on Customer Relationship



Source: Chen, Y., Prentice, C., Weaven, S. i Hisao, A. (2022). The influence of customer trust and artificial intelligence on customer engagement and loyalty – The case of the home-sharing industry. *Organizational Psychology*. p. 3

This figure illustrates that company-led activities can serve as important triggers or signals that affect how individuals respond or react. Consider these triggers as inputs or stimuli that initiate a process. In particular, the way in which a company behaves, or acts plays a key role in building trust among customers. This trust-building is a critical stimulus, prompting customers to behave in certain ways. Basically, trust becomes the primary element that generates interest and encourages customers to engage more deeply with the company.

Moreover, customer engagement is described as an organic, or natural, process. This process is ongoing and plays a significant role in developing a strong relationship between customers and the company. Through continuous engagement, a sense of loyalty towards the brand emerges among customers. This loyalty is not just a byproduct of engagement; it also acts as the initial spark for the entire cycle to begin. In other words, when customers feel engaged and connected to a brand, they are more likely to develop a loyal relationship with it. This loyalty, in turn, feeds back into the cycle, enhancing customer engagement and deepening the relationship further. This cycle is fundamental in shaping the depth and strength of the relationship between customers and the company. As trust and engagement grow, so does loyalty, which then acts as a catalyst for further engagement and a stronger relationship, creating a virtuous circle of positive interactions. (Chen, Prentice, Weaven i Hisao, 2022)

During the next era of technological transformation, previously prevailing patterns of customer trust needed to change. This included both internal (between employees) and external (between customers) trust. During this digital era, customer trust is increasingly based on digital technology. On the other hand, trust is becoming increasingly dependent on acceptance by regulators. Dynamic technological changes make it impossible for both organizations and customers to keep up with the complexity of the entities they work with. For this reason, they choose to interact with entities they trust. Sources of this trust may be their own experience of working with that company, recommendations from other bodies, or confirmation of reliability from the regulatory apparatus. Importance and strength of these individual elements will differ for other entities. Nevertheless, customer trust can, as above, be divided into personal, social or systemic. Today, trust is also gaining a new function. In the past, it was based above all on the feeling that the institution or entity was fulfilling its obligations as well as possible. Currently, trust is becoming an important factor even before an offer is selected. Inability to make a rational decision (to fully understand and compare options) forces customers to rely on the concept of trust. (Lumineau, Schilke i Wang, 2023)

Customer trust has historically been the basis for building customer loyalty. It was one of the factors responsible for the lower retention rate. Instead, it was a feature of an organization that allowed it to keep its current customers with it. In those days, customer trust was, therefore, a source of competitive advantage and primarily influenced existing customers. This was due to limited access to information. As a result, customers very often had no way of verifying the reliability and effectiveness of a company before using its services. Today, with the development of information technology, access to such data has changed. Rapid flow of information and numerous sources mean that clients are now able to verify the quality of a company even before deciding. For this reason, trust is no longer an element that influences customer retention, but a decisive factor in customer choice. This can be seen perfectly in the case of completely new technologies and financial instruments such as block chain. Wide range of information, articles develop influences the perception of the consumer. He can determine his attitude towards such technologies even if he has never used them. Precisely because of the widespread access to knowledge and experiences of other customers. Finally, it is also worth pointing out that greater access to information makes customers more likely to perceive that there is a better alternative on the market. As a result, organizations must work even harder to maintain customer loyalty. At the same time, this should be done both by influencing public trust (general reputation) and by specifically addressing individual trust (addressing the concerns of specific customers). (Utz i Roth, 2023)

Customer trust as an important factor for innovative technological solutions was already present during the popularization of the first IT-related services and products. This was since there is a kind of breakdown in society between those who actively seek innovative solutions, those who are willing to adapt attractive solutions tested by others and those who are negative towards innovation and change. Depending on the industry and the type of innovation, the distribution of these groups may vary. Nevertheless, companies analyzing their strategies and adjusting solutions should always focus on this middle group. This is because these early adopters (innovation seekers) will lose interest in the product over time. This will happen when it becomes something popularly mediocre. Convincing the negative ones, on the other hand, is very difficult and costly. Middle group of users, however, is the most numerous communities. Once a company/industry/product has succeeded in proving its attractiveness, they are willing to use the service. Customer trust can precisely be built on this social distribution of users. Technology cannot only be recommended and accepted by those with a high degree of acceptance of technological innovation, as this will not convince the average user. When formulating the presentation and guiding the direction of change, companies should try to target just such users. Based on their convictions, it is possible to build extensive customer trust in the brand. (Akhter, Hobbs i Maamar, 2004)

Customer trust is particularly important in industries that are critical to the customer. This refers to companies and industries that are important to the customer. One reason for this is that some products have a higher tolerance for customer problems. For others, however, the customer is extremely distrustful of change and wants a high degree of security. Some examples of this are financial service providers (dealing with whole wealth management), platforms selling high-value products (high risk of loss) or industries offering unique products. Customer trust is a dynamic value that can change rapidly. For most customers, however, it is characteristic that trust increases very slowly, while it decreases very quickly. This is due to the fact that the sense of stability has to be long-term and over time it starts to become noticeable to me by the customer (it is treated as something normal). In contrast, problems affecting the client, affecting his or her sense of stability and security, remain in the client's memory for a long time. From a business point of view, this is a clear signal that building customer trust is a long-term process that can be destroyed in the very short term. This means that short-term actions cannot effectively strengthen customer trust. An excellent example of a sector reflecting this relationship is the financial and banking sector. (Tasin, 2017)

1.3. Role of customer trust in FinTech sector

Customer Trust plays a particularly important role in the case of innovations and new products on the market. Utilization of a new technology brings both advantages related to the potential benefits of its implementation and previously unknown risks for the customer. This is why depending on customer trust makes it possible to provide guarantees about the positive balance.

Customers' attitudes toward chatbots used in customer service can serve as a perfect example. During the implementation of solutions based on this technology, their efficiency and accuracy were far from perfection. These machine learning-based algorithms needed sufficient time and information to recalibrate their systems and improve their responsiveness to customer needs. At first, for the most part, they generated responses that were not entirely effective. This caused a lot of dissatisfaction among some customers, for whom not being able to contact a human caused them to lose trust in the company. Over time, however, with the improvement in the quality of chatbots, the feedback coming from customers has changed a lot. Advantages in terms of full availability, speed of response, and accuracy surpassed the previous human customer service. Using this example, we can see, ideally, how the initial risks and disadvantages, over time turned into an attractive solution. (Huang, Markovitch i Stough, 2024)

Technology closely related to the FinTech sector is blockchain-based solutions. Blockchain is, in a very simple way, a distributed registry of data that operate on a peer-to-peer network. Therefore, they can be replicated and passed on very easily. This dispersion makes it easier to track and prevents influence from changing the code stored in the chain. As a result, actions performed via the blockchain are not only characterized by high speed, but also a very high degree of security. This reduces complexity, maintaining a universally shared truth, as well as the necessary transparency, without revealing information that should not or cannot be accessed. With this method, it is possible to transfer payments and execute forward contracts. In the age of growing online threats and increasing digital attacks, the solution seems perfect. The aspect of customer trust should be revisited here. Due to the low level of public awareness of solutions of this type, many individual and business customers do not want to use this type of solution. Their attachment to the traditional form of payment and contract fulfillment makes them reluctant to test the innovative method. Despite the presented advantages of using this measure, they have severely limited trust in this solution. As a result, blockchain-based financial shares continue to account for a smaller portion of all transactions. (Utz i Roth, 2023)

Analyzing the topic of customer trust, it is worth mentioning one more, very important element. Nowadays, more and more institutions using advanced technology (not necessarily FinTech solutions), are not able to create and manage it on their own. More and more corporations and companies are relying on the use of third parties. It is companies providing software or other IT services that supply companies with innovative solutions. As a result, they very often gain access to the data and information covered by this technology. In the case of customer-facing product solutions, such a situation raises questions of privacy and data security. Customers need to be aware that their data is not only passed on to the company from which they purchase the product or from which they use the service, but also to software providers and other third companies. In many customers such a large number of entities with access to their data, funds in their account very strongly limit the degree of trust in this type of activity. (Lumineau, Schilke i Wang, 2023)

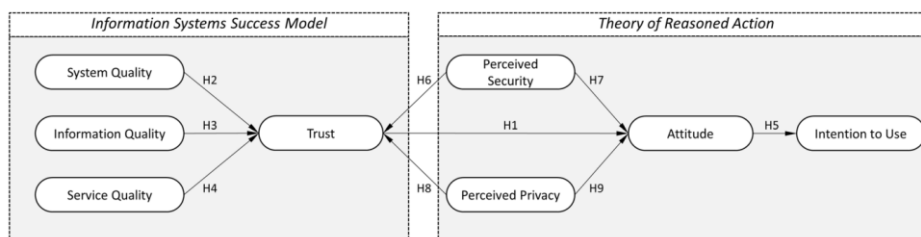
When we talk about customer trust towards FinTechs, it is important to emphasize how important it is. In this area, companies operate with sensitive data of their users (personal, financial data) and operate on the funds of these people. For this reason, obtaining and strengthening trust is an essential element. Customers care about the security of their data and funds and are confident that their financial institution will operate in an ethical and legal manner. This is where the previously described factors such as transparency, ethics and security are particularly evident. Bank, as the administrator responsible for processing data and handling funds, must absolutely have the trust of the customer. This task stands both on the side of the banks caring for a good reputation and the control bodies responsible for the control and selection of only reliable entities. (Nangin, Barus i Wahyoedi, 2020)

It should be noted that FinTechs use innovation solutions based on new technologies in large numbers. They operate in the digital sphere, and it is there that they concentrate their activities. For this reason, they limit physical contact with customers to a large extent. Precisely, because of this, their presence in the physical space (branch offices, billboards) is often limited and they focus on the online space. For this reason, some customers perceive these companies as distant and are unable to properly gain trust in them. The obstacles here become fear of losing data, funds and a sense of lack of relationship with such entities. These elements make it hard for these organizations to gain trust with certain groups of customers accustomed to traditional solutions and physical contact in the financial services area. (Stewart i Jurjens, 2018)

1.4. Factors determining customer trust

Regarding customer trust in technology-based solutions, this is quite a complicated component. Researchers from all over the world are trying to determine how individual factors are responsible for creating this trust as well as strengthening it. An example of this is the trust-based technology solution implementation model presented below. It will provide an excellent example of what role trust can play in the implementation of new innovative solutions:

Figure 5 Research model on trust-based FinTech adoption



Source: Roh, T., Yang, Y., Xiao, S. i Park, B. (2021). What makes consumers trust and adopt FinTech? An empirical investigation in China. *Electronic Commerce Research*. p.14

This model illustrated above is a combination of 2 theoretical aspects - the Information Systems Success Model and the Theory of Reasoned Action. The first one (left) tries to determine the key aspects of technology that affect customer trust. Within the framework of this model, 3 hypotheses are tested verifying the relationship between system quality (H2), information quality (H3) and service quality (H4). In the research conducted, it was possible to show the most significant relationship between H2 and H4, indicating that it is these two elements that are more important for the formation of customer trust. According to the study, it is the convenience of the solution and its general usefulness to the user that are responsible for the growing trust in it. On the right, in contrast, the importance of the perception of privacy (H8 and H9) and security (H6 and H7) were studied as components affecting the customer's attitude toward technology. The elements also interact with customer trust, and before that, they are the component indicators influencing the final attitude (H1).

However, as the model shows, this attitude (which can also be considered as commitment), according to the researchers, can also influence intentions to use technology (H5). As the results of this study showed in the whole model, H1 and H5 had the strongest results, which clearly confirms the fact that there is a relationship between customer trust, pledge (commitment) and final intention to use the technology solution. (Roh, Yang, Xiao i Park, 2021) This 3-phase element is a kind of reference to the previously discussed SOR model but expands it with more elements influencing the whole framework.

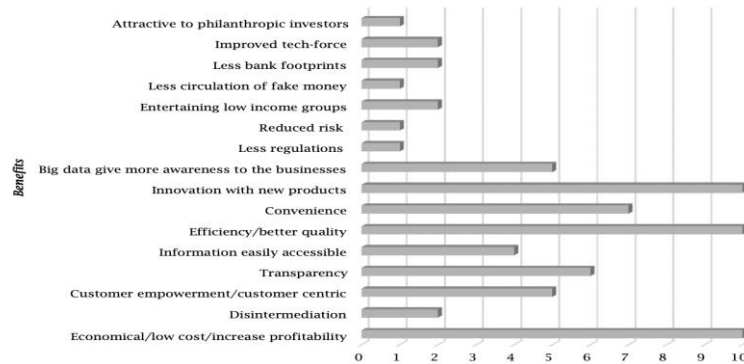
Above conclusions and considerations are based on the author's proposed synthesis of 2 theoretical concepts of the theory of reasoned action and the information systems success model. To interpret them properly, it is worthwhile to become more familiar with them in order to understand the significance of the conclusions:

- **Theory of Reasoned Action** assumes that people (customers) behave rationally and consider possible outcomes when making decisions. When making a choice, they analyse possible alternatives in terms of their usefulness in relation to their own goals and needs. To this end, the decision is based on context (possible decisions), intent (intention, expected outcome) and knowledge and experience (source of evaluation of alternatives). This theory indicates less importance of following the majority (the customer is driven by individual needs and utility) and more attention to a structured (thoughtful) way of making choices. In the case of the topic under consideration, this means that consumers, recognizing the advantages and attractiveness of FinTechs, may choose their services despite the lower overall trust of society, towards these institutions. (Roh, Yang, Xiao i Park, 2021)
- **Information Systems Success Model** is an elaborate framework used to evaluate the success of information systems in various industries. It allows the success of these systems in a specific area to be broken down into dimensions such as system quality, usability, satisfaction, net profit gain, , transparency. Using this model makes it possible to verify the key indicators responsible for the effectiveness and effectivity of these models. In the topic under study, information systems are the backbone of FinTech activity. They are evaluated by both companies and consumers in the categories classified by this model. For this reason, its use in this area enables a better understanding of the key elements of success in building trust. This model provides a framework that can be used when considering the role of IT in building customer trust.

As it can be seen, both models have close links to the FinTech sector. Using their combination, the author was able to conduct research into the relationship between customer trust and the role of technology in the FinTech sector. With the models cited, it is possible to better understand what inspires trust, interest in customers. In view of this, the presented results are an important contribution to the work and the author's research carried out further.

To understand the factors responsible for the rise or fall of customer trust towards FinTech innovations, it is first necessary to outline the main benefits and challenges of such solutions. Careful analysis of these will then help to better navigate the rest of the study. To this end, the results of research in both areas will be presented:

Figure 6 Benefits of the FinTech



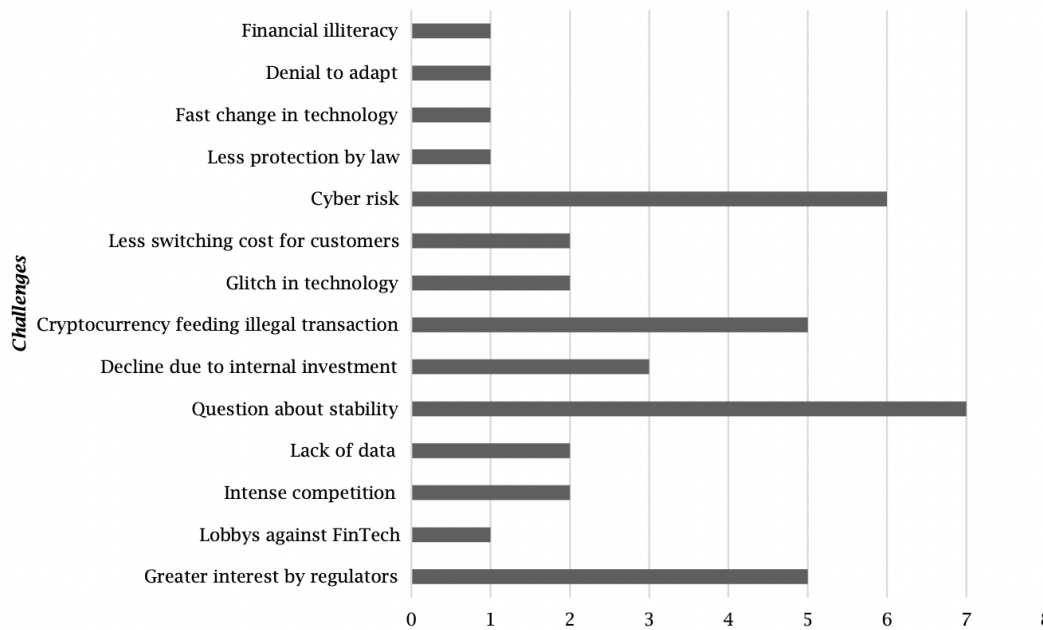
Source: Siddiqui, Z., & Rivera, C. (2022). *FinTech and FinTech Ecosystem: A review of literature*. Riga: Risk Governance and Control: Financial Markets & Institutions. p. 70

As we can see, the main advantages associated with FinTech-based products are primarily related to the quality and efficiency of services. As previously described, the combination of technology along with financial services opens new possibilities for effective and efficient solutions with low application costs. This demonstrates that among customers, these very elements are the most important advantages for them. Utilization of artificial intelligence, automation of processes and other innovative solutions are delivering far superior results to traditional financial services. (Fisher, 2021)

Nowadays, we live in an environment full of information. Ability to use solutions that will be able to collect and appropriately use this data gives a definite advantage over the competition. Customers also appreciate the ability to take advantage of new solutions. In times of such rapidly developing technology, the implementation of new tools and products is something that convinces most customers. As it can be seen in the result of the survey, customers perceive FinTech products to be cheaper and of higher quality. This represents their main arguments in favor of choosing these solutions. Of course, it should be remembered that for some customers it takes more time to get such results and effects of using these solutions. It is based on their trust that it may be possible to get through this transition/implementation period of the new technology. On the other hand, however, nowadays going out to the customer with such an attractive new solution can be the basis for a FinTech to gain their trust and establish a longer cooperation. (Rico, 2022)

Since we have presented the advantages of finch solutions, which can arouse satisfaction in customers and build their trust and loyalty, it is worth looking also at the negative aspects of this technology, according to respondents. Indicated elements were selected by respondents as sources of potential threats, challenges for people using FinTech:

Figure 7 Challenges of FinTech

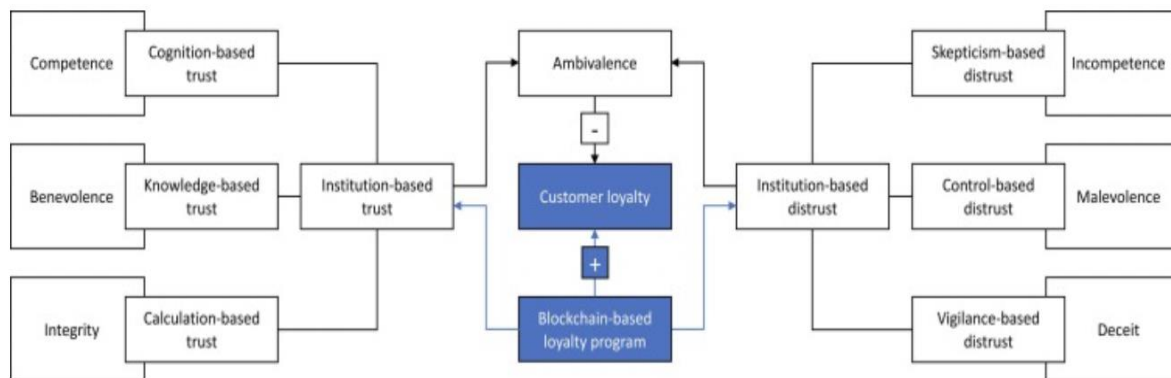


Source: Siddiqui, Z., & Rivera, C. (2022). FinTech and FinTech Ecosystem: A review of literature. Riga: Risk Governance and Control: Financial Markets & Institutions. p. 71

As it can be seen, the main problem and complaint about what is FinTech is its stability. Respondents clearly point to the risks of disruption of solutions and also the risk of cyber-attacks. It is important to remember that with solutions so advanced in technology, our operations depend heavily on software and on its stability. In the event of hacker attacks or temporary technical problems, the entire product or service may be blocked. In addition, it is worth noting the growing interest in these solutions from market regulators. States and international institutions have not yet managed to develop laws that would properly restrict such solutions. As a result, it is difficult, it is difficult to determine what regulations and laws regarding this technology will enter in the next few years. Given the gray area that has developed because of cryptocurrency trading as well as blockchain technology, there is a risk that states will decide to introduce regulations that will hinder the activities of FinTech. This volatility and uncertainty mean that customers have limited trust in such solutions. Even though in the short term the lower price and higher efficiency are attractive, many players are abandoning these solutions for fear of long-term negative effects. (Giglio, 2021)

Researchers are trying to create models that aim to rank and identify the factors responsible for triggering customer trust, or lack of it. Here we will find the presentation of one of such models. In the model we can see the utilization of loyalty programs based on the blockchain, but it is possible to use other example of FinTech innovations:

Figure 8 Overview of the positive effects of our blockchain-based loyalty program on institution-based trust, institution-based distrust, and ambivalence.



Source: Utz, M., & Roth, T. (2023). From ambivalence to trust: Using blockchain in customer loyalty programs. *International Journal of Information Management*. p. 9

Model clearly demonstrates that the introduction of new technologies (in this case blockchain) has both positive and negative effects on customer trust. This means that when a new solution is implemented, there are both positive and negative factors towards customer trust. In the diagram, you can point out the positive ones on the left. These are the factors responsible for building trust towards the new initiative. These include trust based on perception (of the solution as effective), trust based on knowledge (familiarity with the solution), trust based on calculation (belief in the solution's ability to bring profit), which combines into total trust in the institution introducing the solution. On the other side we have negative factors, i.e. those introducing distrust.

Here we can mention distrust based on skepticism (aversion to change), distrust based on control (opposition to imposing solutions), Distrust based on vigilance (potential perception of attempted fraud). These two opposing groups of factors pressure each other and the one that obtains a stronger attitude toward the customer will have the ultimate influence on the customer's perception of the newly implemented solution. (Utz i Roth, 2023)

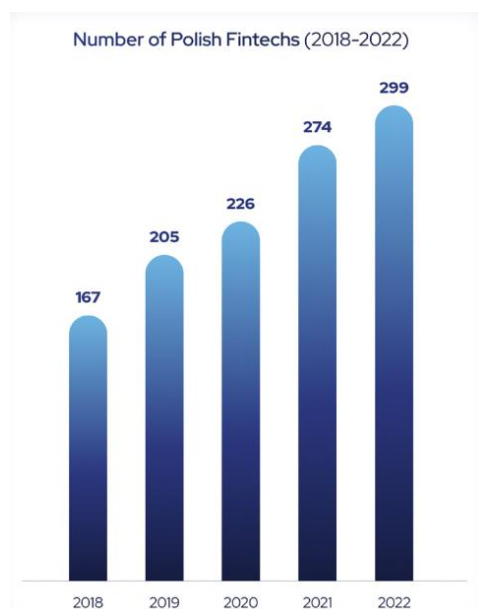
There are some factors responsible for building and maintaining customer trust:

- **Transparency** - customers care about having complete information regarding the company whose services or products they decide to use. Providing false information or hiding inconvenient facts results in the formation of a negative, aggressive relationship on the part of customers towards the organization. (Tasin, 2017)
- **Brand, reputation and history** - reputation obtained by the company in society can be, one of the main sources of obtaining trust. Customers find it easier to establish relationships with well-known entities. Awareness that a large group of customers use the services of these companies creates a sense of trust associated with the trust that such entities cannot fail. (Jarvenpaa, Tractinsky i Vitale, 2000)
- **Feedback** - companies that choose to create relationships and communicate with their customers are more easily able to build trust. By responding to customers' needs, they are able to present a commitment to them and thus prove that they are operating in a trustworthy manner. (Akhter, Hobbs i Maamar, 2004)
- **Security** - in era of data protection and numerous scandals especially related to cyber-attacks, it is important for companies to be able to ensure the protection of their customers' sensitive data. Systems and tools are currently indispensable elements to operate in a way that will be able to build trust among customers. (iLab, 2023)
- **Quality and customer service** - as research shows, customer trust is often built on negative experiences. This means that when the product is good and the service is done correctly the customer does not pay as much attention to the relationship with the company as when unexpected events occur. Precisely, therefore, it is through customer service and processes such as complaints, after-sales support and other additional customer support elements that companies are able to build and maintain customer trust. Importantly, the experiences of individual customers can be transferred to others and thus influence trust building even without direct contact with the company. (The CX Academy, 2023)

1.5. Research Overview – FinTech and Customer trust in Poland

Analysis of the FinTech sector in Poland must be started by understanding the size of the industry. For this reason, it is necessary to look at the number of FinTechs and growth rate of such financial institutions in Poland.

Figure 9 Number of Polish FinTechs (2018-2022)



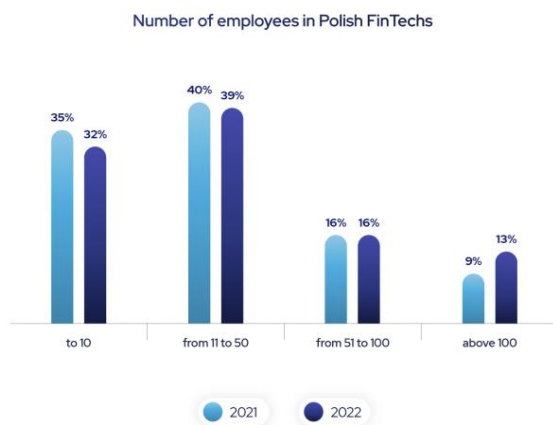
Source: FinTech Poland. (2023). How to do FinTech in Poland. FinTech Poland.

As it can be seen on figure 9 in 5 years the number of FinTechs in Poland has been almost doubled. Researchers point to the following as factors determining such rapid growth:

- Digital society, understood as a high degree of digitization in the business sector and high degree of Internet access
- Prosperous condition of the finance sector, understood as the general high development of the financial industry and the prospering, growing economy
- Strong ecosystem, understood as well-established partners system, especially among incumbent banks and wide access to the qualified employees.

As the result it is expected that number of FinTech's will grow in the coming years. In addition, growth rate will be probably higher than in the most EU countries. This might lead Polish FinTech sector to the position of the European leader in the nearly future. (FinTech Poland, 2023). To better understand at which phase of the sector formation we are it is important to look at more specified information about the Polish FinTechs.

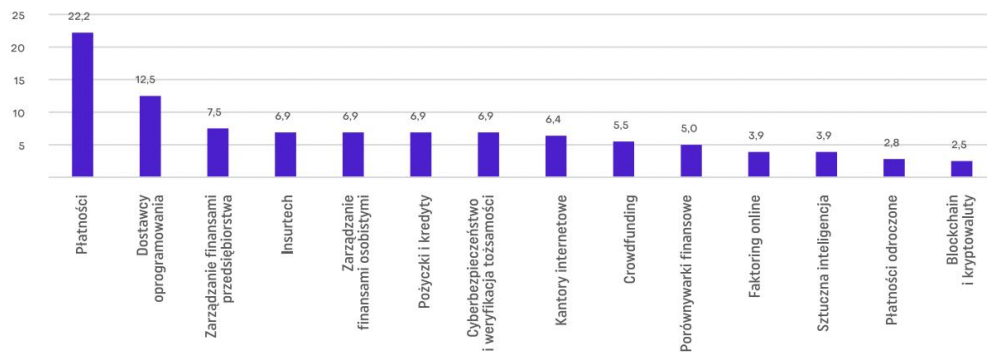
Figure 10 Average size of FinTechs in Poland (2021-2022)



Source: FinTech Poland. (2023). How to do FinTech in Poland. FinTech Poland.

On the figure 10 it can be seen the average size of the FinTech companies in Poland. It can be identified that most of them are qualified as the micro or small companies. Only around 10% of them have more than 100 employees. What is important here is the visible tendency in the average size change. Only for 1 year (2021-2022) the number of biggest FinTechs increase by around 40%. This clearly shows that the trend in the Polish market is toward FinTechs growing and scaling their operations.

Figure 11 Share of each FinTechs operations category in 2023

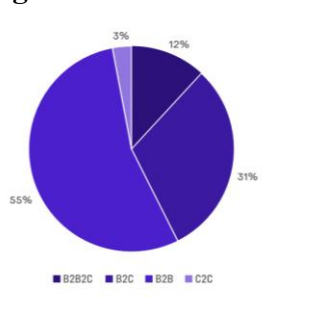


Source: Cashless.pl. (2023). Mapa Polskiego FinTechu 2023.

As it can be seen from the figure 11, the largest number of operations of Polish FinTechs are focused on payment processing. Among the structure of operations, it can be found other operations similar to the traditional banking - insurance, loans, credits, personal finance management. This shows that FinTechs institutions are gradually entering the existing operational scope of traditional banks. FinTechs very often offer well-known, traditional banking products in a far more innovative way (thanks to the use of technology).

Noteworthy, it is indicated by the second largest part of operations, which is based on software providing. This clearly indicates that FinTechs in Poland largely focus their operations on offering products to companies. Therefore, it is important to better understand the type of the business model that are being introduced by most of the FinTechs.

Figure 12 Structure of customer profile in polish FinTech sector



Source: Cashless.pl. (2023). Mapa Polskiego FinTechu 2023.

As shown on Figure 12, in Poland 31% of FinTechs focus on offering their services and products to individual customers. More importantly, the category is on an upward trend compared to previous years. In comparison, currently more than half (55%) of FinTechs focus on offering services to business customers. noteworthy here is the fact that 12% of FinTechs offer their services through other institutions (e.g. FinTech service offered in a traditional bank). In the perspective of recent years, the greatest growth can be observed in FinTech services directed to the individual customer.

Figure 13 Structure of investor types

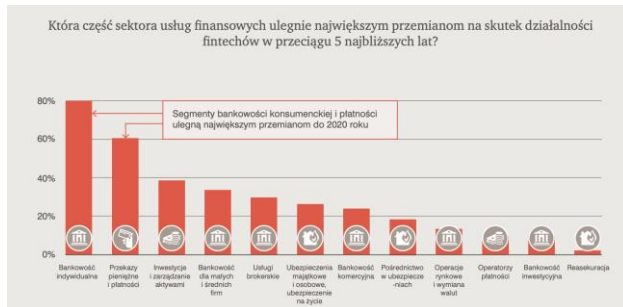


Source: Cashless.pl. (2023). Mapa Polskiego FinTechu 2023.

It is also worth analyzing who is currently investing in FinTechs in Poland. As Figure 13 shows, these are primarily individuals from Poland (63%). They are responsible for more than half of all investments. In second place with 14% are companies with foreign capital. In third place are companies with Polish capital (10%). The remaining financing comes from various sources or is also undetermined. These statistics show the strong interest of private investors in the FinTech sector and the still low activity of Polish companies.

Predictions from leading consulting companies are also worthy of consideration. They are very often able to set market trends through their recommendations. For this purpose, a 2016 report by PwC on the future of the financial sector was analyzed.

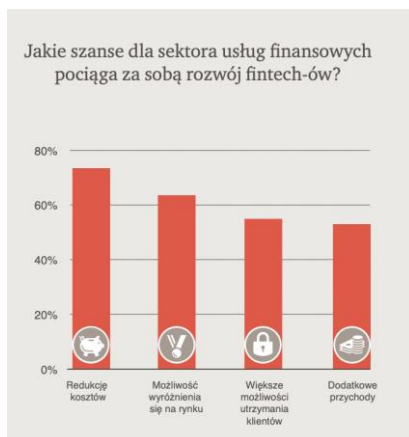
Figure 14 Main expected changes in FinTech sector (2016)



Source: PwC. (2016). Sektor finansowy coraz bardziej #FinTech. PwC.

In 2016, as shown in Figure 14, PwC predicted that FinTech would have the greatest impact on personal banking, payment systems and investment methods. Banking for small and medium-sized businesses, brokerage services and insurance were also expected to change. From the perspective of time and in view of previous studies, it can be said that these predictions have been confirmed for 2024.

Figure 15 Main chances for FinTech sector development (2016)



Source: PwC. (2016). Sektor finansowy coraz bardziej #FinTech. PwC.

In the same report, PwC indicated that the strengths of using technology in the world of finance would be the opportunity to reduce costs, the ability to stand out in the market (gain a competitive advantage), the ability to maintain customer interest and the creation of new revenue channels. Observing the key applications of today's FinTech solutions, this prediction was again validated.

One of the largest think tanks operating in this area, FinTech Poland, has prepared a report on opportunities and barriers to FinTech development in the coming years.

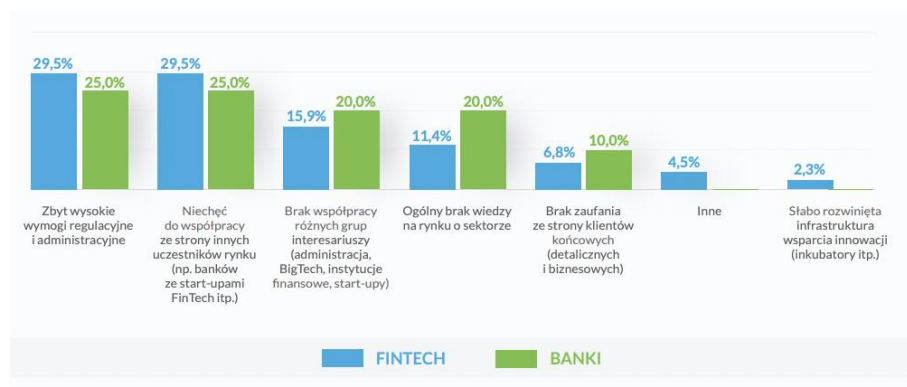
Figure 16 Regulation Mechanism required change



Source: FinTech Poland. (2022). FinTech w Polsce Bariery i Szanse Rozwoju. FinTech Poland.

Figure 16 shows the barriers resulting from current regulations affecting the banking and FinTech sectors. It can be seen here that in the case of FinTech, the most frequently cited elements are the creation of a space for testing financial products (19.2%), a freer dialogue between regulators and players (17.3%), differentiation of regulations for small and medium-sized players (17.3%), and reduction of formalization related to the license to operate (13.5%).

Figure 17 Barriers to development of the FinTech sector

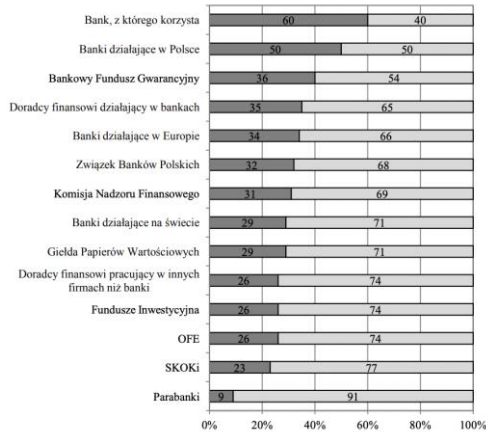


Source: FinTech Poland. (2022). FinTech w Polsce Bariery i Szanse Rozwoju. FinTech Poland.

Another Figure 17 summarizes the biggest barriers to the development of the FinTech sector and the banking sector. In the case of FinTech, the most serious barriers are excessive regulatory and administrative requirements (29.5%), unwillingness to cooperate on the part of other market participants (29.5%), lack of cooperation between different stakeholder groups (15.9%), and lack of knowledge about the market (11.4%). In that report, lack of trust on the part of the customer was placed only in 5th place with a score of 6.8%.

To understand how the financial system in Poland currently functions and also how customer trust is being formed, it is necessary to understand how that trust is directed to various institutions.

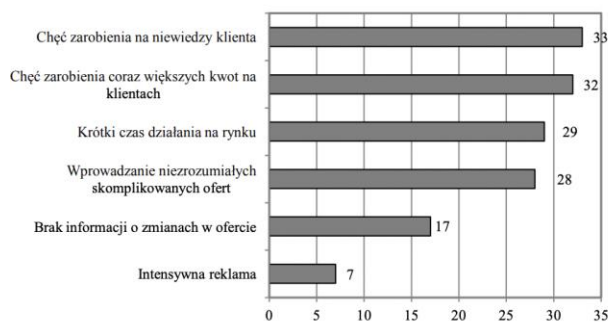
Figure 18 Customer Trust towards different Financial Institutions



Source: Świeszczak, M. (2016). Zaufanie do sektora bankowego. Repozytorium Uniwersytetu Łódzkiego

Figure 18 above shows the 2016 survey with the results. Admittedly, it does not include FinTech institutions yet, but it indicates how high a level of trust customer direct toward their established bank. In addition, a high level of trust is placed in public institutions such as the BFG, the ZBP, and the KNF. This shows that customers trust their own banks and financial supervisory institutions the most.

Figure 19 Factors decreasing the customer trust level toward banks



Source: Świeszczak, M. (2016). Zaufanie do sektora bankowego. Repozytorium Uniwersytetu Łódzkiego

Figure 19 shows the elements that most affect the decline in customer trust in financial institutions. In first place here is a willingness to monetize the lack of knowledge of customers, followed by an attempt to raise the cost of service. In the case of FinTech, the key item is the 3rd, i.e. short duration of operation in the market. It is this, this element that poses the main challenge for new financial players such as most of the FinTechs.

To get more reliable results on the current level of trust, we will pull the results from the 2020 report. It presents more up-to-date data updated with market changes.

Figure 20 Customer trust toward banks in 2007-2020



Source: Idzik, M. i Giorgica, J. (2020). Reputacja Sektora Bankowego 2020 - kluczowe czynniki i wnioski badania. Bezpieczny Bank.

As it can be seen, the period of the financial crisis also coincided with a significant drop in trust on the part of customers. With its extinction, this level of customer trust gradually began to increase. This shows that the stability of the absence of scandals, crises allow to steadily build trust among customers. This process is difficult to accelerate, as it is based on a subjectively created sense of security on the part of customers.

Figure 21 Customer Trust level toward financial institutions in Poland



Source: Idzik, M. i Giorgica, J. (2020). Reputacja Sektora Bankowego 2020 - kluczowe czynniki i wnioski badania. Bezpieczny Bank.

In the 2016 survey, FinTech institutions were not yet included because the term itself was not yet widely used. In this survey, FinTech financial institutions were already included. As of 2020, the distribution of people who trusted and distrusted them was almost even. Thus, these types of financial institutions ranked almost at the bottom of the above-mentioned list. Further down the list, Polish banks with a long tradition and financial supervisory institutions enjoyed a much higher level of trust.

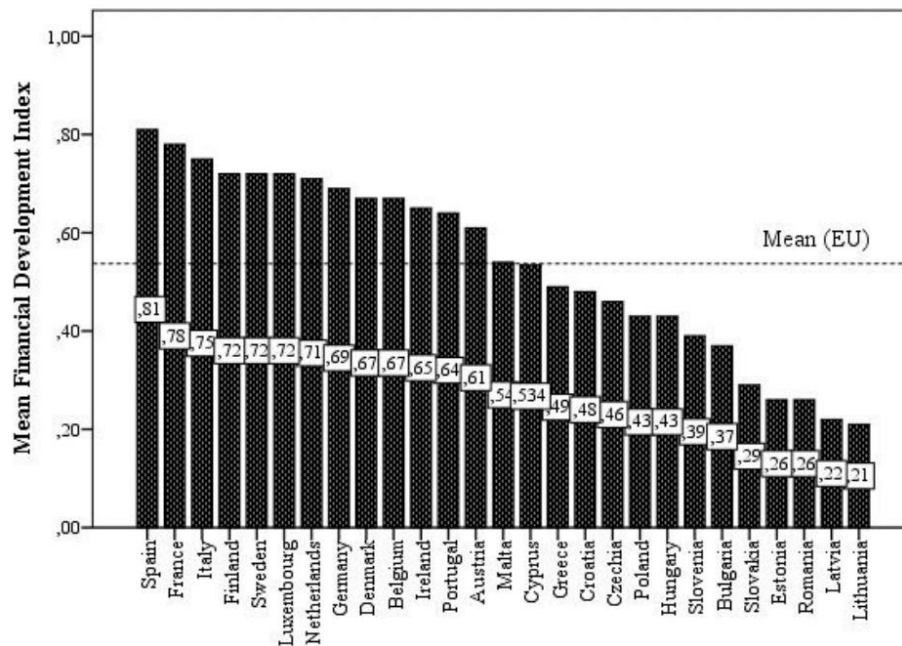
1.6. Research Gap

When it comes to the research gap there are some crucial reasons for conducting this study and at further stages of writing the thesis, three key aspects can be distinguished:

1. As presented at the beginning of this chapter, the concept of FinTech and organizations of this type are relatively young phenomena. For this reason, both among researchers, representatives of the business world and average citizens, there is a lack of consistency about this sector. The research I have conducted will provide a better understanding of the current situation and how FinTechs are currently perceived in various social groups. This will allow to better classify their position and separate them from the traditional financial sector. (Restoy, 2020)
2. FinTechs recorded a very dynamic period due to the COVID-19 pandemic. As we know, recent years have been a time when companies focused primarily on responding to the effects of the pandemic and minimizing its negative effects. Because of this, the sector and the economy did not have time to conduct research and reports on market developments. This has not been a priority activity, and for this reason there is a lack of reliable research and studies analyzing new opportunities and challenges for the sector. At this point, we do not have enough data to determine what the position of FinTechs in the financial market really is. My research will aim to facilitate the assessment of this situation. (Beirne, Villafuerte i Zhang, 2022)
3. Next element is the connection between the FinTech sector and customer trust. This is another underdeveloped sector in Poland (in terms of its relation to the financial sector). It can be also presented based on the EU average. It is important to say that financial service development is not always connected with the FinTech development. (FinTech Poland, 2022)
4. There is also a lack of practical implications on how FinTech's can leverage customer trust (that is, how they can reduce negative emotions and maximize positive ones) so as to gain a competitive advantage based on loyalty and long-term customer satisfaction.

At the very end, it is worth outlining how the performance of the FinTech sector differs from the development of the general financial services market. Understanding the differences between these two industries of yours will allow to better identify areas and potentially distinguish variables found in different countries.

Figure 21 Financial Development Index in the EU countries in 2020.



Source: Lavrinenko, O., Cižo, E., Ignatjeva, S., & Krukowski, K. (2023). Financial Technology (FinTech) as a Financial Development Factor in the EU Countries. *Journal Economies*. p.6

As it can be seen, the Financial Development Index coincides with the distribution of each country's domestic product. In the ranking, the first positions are occupied by the so-called Western countries. Due to historical aspects and a larger amount of capital, they have a more developed and diversified financial services market. Many of these countries have a well-organized system of these services, which was established long before the first such entities were launched in other countries. A clear division can be seen here between Western and Eastern European countries.

In this ranking, Poland is only in 19th place and is far below the average for the entire European Union. This shows that the current condition of the financial system in Poland is not ideal and there is still room for improvement. Nature of this distribution is also determined by the direction of international capital. Geographical localization is not supporting investment in the East Europe. Most of the American funds prefer to make the big investment in the Western Europe with already better developed finance infrastructure.

Moving to a similar indicator focused on the FinTech sector, one can see interesting conclusions. In this ranking, we see some reversal of trends and no clear division of the EU.

Table 2 Global FinTech Index in the EU countries, 2020

Case Summaries		
	Country	Global Fintech Index
1	Austria	5.23
2	Belgium	4.61
3	Bulgaria	3.65
4	Croatia	1.70
5	Czech Republic	3.58
6	Denmark	6.08
7	Estonia	10.45
8	Finland	8.30
9	France	5.93
10	Germany	11.12
11	Greece	1.42
12	Hungary	2.53
13	Ireland	6.36
14	Italy	4.15
15	Cyprus	4.11
16	Latvia	4.41
17	Lithuania	11.11
18	Luxembourg	5.33
19	Malta	3.39
20	Netherlands	11.87
21	Poland	4.17
22	Portugal	4.33
23	Romania	2.01
24	Slovakia	1.24
25	Slovenia	2.53
26	Spain	7.67
27	Sweden	13.14

Source: Lavrinenko, O., Čižo, E., Ignatjeva, S., & Krukowski, K. (2023). Financial Technology (FinTech) as a Financial Development Factor in the EU Countries. *Journal Economies*. p. 5

Although Germany, the Netherlands and Sweden top the ranking, the high position of Lithuania and Estonia is noteworthy. As it can be seen, the relatively new FinTech market still leaves room for development for countries with an inferior traditional financial system. Technology can develop in countries where there is not too much pressure from the regulator and there is enough specialists. Considering these elements, Poland seems an excellent country in Eastern Europe for further development in this area. Undoubtedly, however, one of the main obstacles to faster development is the attitude of Poles towards this type of technology. For this reason customer trust surveys can point way to forward for companies operating in this industry.

As it can be noted, the topic I have chosen will undoubtedly partially answer the existing research gap on the Polish market. It is a gap that is both theoretical in nature, which means that it limits further academic research, and practical in nature, which means that it affects the uncertainty of specific actions taken by companies.

2. Methodology

2.1. Goal and Research Questions

Research carried out for this paper will aim to analyze the area of customer trust in the FinTech sector in Poland. Therefore, the basic research problem can be defined as: "Customer trust in FinTechs". Main objective of the study will be to examine on how the factor defined as "customer trust" affects the way FinTech companies function within the financial sector.

This research will examine how customer trust affects the way FinTechs are perceived, as well as analyze how these companies incorporate this factor into their strategy. For this reason, the area of study will primarily be focused on 2 perspectives: the perspective of customers (understood as the area of their trust towards FinTechs as financial institutions) and the perspective of FinTechs (understood as approach of companies to managing customer trust).

To further specify the work, the main idea will be to find answers to the following research questions (pointed out subsidiary supporting questions that will make it easier to find answers to the fundamental research questions.):

1) What is the current level of customer trust toward FinTechs?

- a) What is the role of customer trust in the financial sector?
- b) What is the current role of technology in building customer trust?
- c) What are the elements influencing customer trust toward FinTechs?

2) How is customer trust incorporated into FinTechs' strategy?

- a) What are the current metrics for measuring customer trust in the FinTech sector?
- b) What impact does customer trust have on FinTech strategy today?
- c) What is the role of customer trust in the FinTech sector?

3) How can FinTechs increase the degree of customer trust?

- a) How in the future FinTechs can affect customer trust?
- b) What actions can FinTech companies take to increase customer trust?
- c) What are the main obstacles to building customer trust toward FinTechs?

To answer the questions effectively, it was needed to use research methods that highlight and explore the research problem from two distinct perspectives. Consequently, I choose a quantitative approach with a survey focused on the customer perspective and a qualitative approach by conducting interviews with finance (FinTech + banking) perspective.

In empirical part, I presented results that represent a synthesis of both elements. It is important to mention that results of survey were also presented during interviews.

2.2. Research Methods

Quantitative method – In this study, quantitative research tool played a supporting role. Survey was not the main research tool here. It was only as a source for obtaining some exploratory information about the topic. For this reason, I did not focus on testing hypotheses (they were not even set up), nor on obtaining results consistent for the whole society. (Shorten i Smith, 2017) I was concerned with obtaining general information and trends that I could discuss in more depth with my interviewees. Results were intended to verify, to some extent, the information obtained in the review of studies and reports in the theoretical part. During the interviews, they were used to start a discussion with the interviewee. Despite the specific advantages of a quantitative survey such as the ability to statistically verify hypotheses and also to perform mathematical analysis, the full focus of the survey was on obtaining more preliminary results. (Nardi, 2018)

Qualitative Method - Interview is a method of delving deeper into the subject under study. It is a method that involves the acquisition of knowledge and information through interaction and manufactured relationships between the researcher and the interviewee. An interview can have a clearly defined script that allows for a structured (planned detailed interview) or it can take a more casual unstructured format. Source of information acquisition in this method is direct contact and the elaborate responses obtained from the interviewee. (Zhang i Wildemuth, 2021). In the case of my study, this method was to better understand the FinTech perspective. Goal here was to gain a deeper understanding of the role customer trust plays in how financial institutions form their strategies. Obtained in-depth information was required to provide a basis for forming final recommendations. It is also worth noting here that as part of the interview conducted, there was also a discussion of the information and conclusions obtained in the quantitative survey described earlier. In the case of unstructured interviews, it is crucial to properly guide the conversation to obtain information relevant to the research problem under investigation. Appropriate coding and adaptation of subsequent questions is the key to success. The ability to adapt the dynamically changing interview scenario to the guest's characteristics is a hallmark of this form of research. (Aspers i Corte, 2019) Importance of this method concerned interpreting the interviews and obtaining the information necessary to deepen the research problem (research question 2) and creating added value - practical recommendations for the whole work. (research question 3)

2.3. Research Tools

Developed survey (Quantitative method) was consisted of 29 questions. It was completed by 102 respondents. Tool was created in Google Forms. Respondents' answers were collected over a period of 7 days (April 5-11). Survey was distributed with social channels (Instagram, LinkedIn, Facebook) and open social media groups. For this reason, the respondents to survey included both friends and strangers. Structure of the prepared survey is shown below:

Table 3 Overview of Survey

Name of the Survey Part	Number of questions	Area of questions	Importance for Research Problem
General habits of financial services	10	1. Frequency of use of financial services 2. Attitudes toward technology and financial products 3. Emotions regarding the financial sector	1. Understand the main financial industry habits on the part of respondents 2. Ability to identify their connection to the FinTech sector 3. Assessing their current attitude toward the FinTech sector
Customer Trust Elements towards FinTech	12	1. Level of trust in FinTech sector 2. Sources of customer trust in FinTech products 3. Attractiveness of FinTech relative to traditional financial services	1. Ability to identify the most important factors responsible for creation of customer trust in relation to FinTech 2. Factors with potential for improvement in creating customer trust
Metrics	7	1. Demographic characteristics	1. Ability to group respondents into clusters to show differences based on demographic characteristics

Source: Own creation based on original survey plan

Goal of the initial part of the interview was to find out the general habits and attitudes of respondents toward the financial sector. This was to provide their general attitude and frequency and use of financial products. Acquiring these habits and a general assessment of the current situation was intended to enable further analysis. I have used categories that other researchers believe provide an understanding of respondents' financial habits. These questions were intended to better validate the group of respondents on whom the analysis would be conducted. (Zhang, Siyal i Riaz, 2023)

In formulating the main part of the survey, which focused on the factors of their role in the formation of customer trust towards the FinTech sector, I was guided by results obtained in other studies. Using the list of potential factors was the source for the formation of my questions. I investigated the importance and degree of dependence of the different elements and their influence on the final customer trust towards the FinTech sector.

What I used, were factors that other researcher believed had a significant impact on customer trust towards FinTech. Based on the elements mentioned in other studies, I created statements on a 5-degree scale to verify the strength of importance of these factors among the respondents I surveyed. This scale I used was to facilitate the possibility of comparing values and averages, and the inspiration from other researchers' categories ensured reliability and validity. In this way, I was not only to be able to obtain correct results, but also to be able to compare them with values obtained by other researchers. Ultimately, the aim of this section was to create a hierarchy of key factors according to the respondents. (Siddiqui i Rivera, 2022)

With this, I wanted to verify the research obtained in other works and also obtain up-to-date results that I could present to my interviewees. While I was creating questions related to demographic characteristics, I was guided by the desire to identify differences that exist between different demographic groups. I wanted to identify the characteristics that determine different level of trust towards FinTech. (Hu, Ding, Li, Chen i Yang, 2019)

It should be noted that the questionnaire created was based on 3 other studies. Nevertheless, the structure of the questionnaire was not intended to verify the hypotheses (there were none in the study), but only to provide information that could be presented in a qualitative study and compared with the studies on which it was based. For this reason, it was not necessary to obtain a representative sample, carry out an elaborate statistical analysis or use other elements inherent in a complete quantitative study.

Qualitative method I chose was unstructured interviews. I held a total of 4 interviews with representatives of the FinTech industry, the financial sector and with institutions directly related to them. Interviews took place in an online format via the Microsoft Teams platform. Final length of each interview was about 1 hour, during which a transcript of the interview was recorded. (With the confirmation of the interviewee). All the interviews were unstructured, which means that I had a general outline and plan for the interviews, but each of them was modified on an ongoing basis depending on the information obtained from the interviewee.

Table 4 Overview of Interviews

Interview number	Type of interviewee's organisation	Interviewee's position	Area of the discussion
1	FinTech	CEO	<ol style="list-style-type: none"> 1. Understanding how customer trust is incorporated into the FinTech's long-term strategy 2. Analyzing best practices for strengthening customer trust 3. Outlining key opportunities and risks for FinTech related to customer trust
2	Traditional Bank	Middle Specialist	<ol style="list-style-type: none"> 1. Differences in customer trust between traditional banks & FinTech 2. Customer trust as a source of competitive advantage 3. Adaptation of traditional banks to FinTech innovations
3	BFG	Director	<ol style="list-style-type: none"> 1. Sources of customer trust in the FinTech sector 2. Adaptation plans by FinTech to gain customer trust 3. Importance of the role of customer trust in FinTech strategy
4	Consulting Firm	Financial Advisor	<ol style="list-style-type: none"> 1. Concerns about security and customer trust in FinTech sector 2. Academic approach on growth & opportunities for FinTech 3. Importance of customer trust in the FinTech sector

Source: Own creation based on original interviews protocol

Before conducting the interview, I was sending the interviewee the results of my survey to introduce the scope of my master thesis. (in addition, I also provided interview questions). I began the interview by confirming that I would be taking notes for the thesis (asking as well for the permission for recording).

Interviews 1 and 4 were recorded in full, while interview 3 only partially. As for interview 2, it was given in written form during which the interviewee answered by email. All the interviews were conducted in Polish (native language of researcher and interviewees).

For this reason, all the obtained information were translated into English for the purpose of analyzing the results. They were translated adaptively which means that I cleaned the text of colloquialisms. I did not make any modification for the content. In addition, at the very end, I compared the original Polish version of the information obtained along with the translated English one. Thanks to that I could make sure that the original sense was preserved.

2.4. Research Limitations

After obtaining results from both research methods, it was crucial to make the right methodology. Presenting an integrated approach in this work required adequate analysis of both types of collected results. In the case of the questionnaire, here I used statistical analysis, the purpose of which was to indicate the presence of significant relationships between selected factors. In the case of interviews, I focused here on the in-depth opinions and comments indicated by the interviewees. Based on their experience and expertise, I relied on their quotes to indicate significant trends and findings. (Shorten i Smith, 2017)

In case of survey results, the attention was focused statistical data confirming the existence of dependencies and relationships between variables and the presentation in the form of graphs and other statistical methods. They were based primarily on the indication of static conclusions and their relevance to the phenomenon under study. In the case of the interview, the focus was on identifying key quotes and conclusions obtained from the interviewees. Analysis was based on the comparison of the conclusions with the aspects presented in the theoretical part of the work and also the results obtained through the quantitative survey.

As for limitations, it is important to point out those that occurred in both my methods:

- In the case of quantitative research, the sample I selected is not completely representative of the entire population in Poland (that was not the goal of this research). People who completed the survey are mostly my friends with similar demographic characteristics to me (age, place of residence, education). Additionally, for some of the respondents, terms FinTech and customer trust may not have been sufficiently defined. Survey took place in a limited timeframe and its questions were only closed-ended. (Nardi, 2018) Limitation, nevertheless, does not prevent the results of this study from fulfilling a supporting function.
- For the interviews, I would identify lack of the time as the main limitation. In addition, unstructured nature made it difficult to compare responses between interviewees here. (lack of same questions). People's position may also have influenced their position and assessment of key aspects (FinTech employees more positive about trust). Ultimately, my lack of experience in organizing interviews may have influenced the under-reporting and inappropriate depth of some aspects. (Aspers i Corte, 2019)

3. Empirical Part

3.1. Result Presentation

3.1.1. Survey

A total of 102 respondents took part in the survey conducted for this work. Analysis of the survey results began with a review of the metric and the questions therein related to demographic characteristics:

- As for the age of the respondents, more than 3/4 of them (75.5%) said they were between 18-25 years old. The second most popular group of respondents was between the ages of 26-35 (15.7%). This means that the survey was filled out primarily by young people. (Appendix 23)

- As for the gender distribution of respondents, women prevailed here. The difference was small but 54.9% of respondents were women. 43.1% of men participated in the survey. The remaining 2% of respondents preferred not to indicate their gender. (Appendix 24)

- Among the respondents surveyed, as many as 85.3% of them had a university degree. Only 13.7% declared secondary education. The remaining 1% of respondents indicated primary education. (Appendix 25)

- Large cities dominated when it came to where respondents lived. Such types of cities were indicated by 69.6% of respondents. The second most common answer was medium-sized cities chosen by 15.7% of respondents. Small cities were indicated by only 8.8% of respondents. (Appendix 26)

- There was a wide variation in average monthly income. As many as 16.7% of respondents chose not to provide such information. The largest number, 26.5% of respondents, indicated a range of PLN 1-6000. The second most frequently indicated answer was 6001-12000 (23.5%). Nearly one in five respondents indicated that they earn more than PLN 12,000 per month (20.6%). (Appendix 27)

- Another question asked about the overall level of individual savings. In this case, the largest number of respondents - 28.4% - chose not to provide such information. Nearly one in five respondents (20.6%) indicated that they have between PLN 1-30000 in savings. In addition, 14.7% of respondents with a sum of savings exceeding 90000PLN took part in the survey. (Appendix 28)

- Last question verified the respondents' country of residence. As many as 84.3% of respondents lived in Poland. The rest of them lived in other European countries. (Appendix 29)

This means that the average respondent is a woman, with higher education, young age, living in a large city in Poland.

Subsequent questions focused on respondents' behavior and habits toward the financial sector. Analysis was aimed at understanding what types of banking sector customers are dealing with:

Majority of respondents said they use banking and financial services daily (75.5%). The second most popular answer indicated by 14.7% of them was once a week. This means that more than 90% of respondents use banking services at least once a week. (Appendix 1)

Next question concerned the frequency of verifying one's financial situation. In this case, more than half (51%) said they do it daily. More than 1/4 of them (27.5%) said they do it once a week. Another 15.7% said they do it once a month. This means that less than 6% of respondents do it less frequently than once a month. (Appendix 2)

Another question asked respondents to state which financial products they use most often. Nearly 90% (88.2%) indicated a current account. The second most frequently indicated answer was payment services such as PayPal (67.6%). In third place were investment services indicated by 39.2%. The least frequent respondents indicated loan and insurance services. It should be emphasized that the question asked what they use most often not what services and products they have. (Appendix 3)

Following this, the question verified to what extent respondents felt informed about currently available financial products and services. Within this question, they were to specify this on a scale of 1 (uninformed) - 5 (informed). In this case, the average value of the answer was 3.49.

The standard deviation had a value of 1.079. largest number of respondents (40.2%) - indicated answers with a value of 4. Second most popular value was 3 (22.5%). The least frequently indicated value was 1 (3.9%). (Appendix 4)

On an identical scale, the next question verified how important respondents thought technology was in financial management. In this case, the average value of the answer was 3.71 and the standard deviation was 1.287 (greater variation in values). The most frequently indicated values were 4 and 5 indicated by 1/3 of respondents (33.3% each). It is worth noting, however, that in this question 8.3% of respondents indicated the value of 1. (Appendix 5)

Once again, the importance of ethical and social responsibility of institutions providing financial services was verified on the same scale. In this case, the average value of the answer was 3.15 and the standard deviation was 1.300. the largest number of respondents 30.4% indicated the value of 4. It is worth noting that an almost equal percentage of respondents indicated the value of 1 (14.7%) and 5 (15.7%). This indicates a wide diversity of opinions in this area. (Appendix 6)

In the next question, respondents were asked to determine the convenience of using the mobile application in the course of financial services. The average value here was 3.99 and the standard deviation was 1.048. The largest number of respondents here chose the value 5 (39.2%). The second most popular value selected by one in three respondents was 4. (Appendix 7)

Next question concerned respondents' direct satisfaction with the services and products they use. In this case, the average value was 3.83. The standard deviation was 0.868. More than 45% of respondents indicated a value of 4. The second most popular answer was 3. Interestingly, only 1% of respondents indicated a value of 1. (Appendix 8)

Individual factors can have different effects on decisions regarding the selection of a financial service provider. The next question asked respondents to rate the importance of the following factors on a scale of 1 (does not influence) - 5 (influences): (Appendix 9)

- Cost of service (Mean – 3,57 std. Deviation 1,361) Position 5
- Ease of use (Mean – 3,76 std. Deviation 1,136) **Position 3**

- Effectiveness of service (Mean – 4,05 std. Deviation 1,057) **Position 2**
- Security features (Mean – 4,19 std. Deviation 0,927) **Position 1**
- Customer service (Mean – 3,36 std. Deviation 1,159) Position 6
- Recommendation from others (Mean – 3,22 std. Deviation 1,131) Position 7
- Reputation of provider (Mean – 3,58 std. Deviation 1,156) Position 4

As can be seen in the surveyed group of respondents, it is the elements of security, product effectiveness and ease of use that are the key factors of choice. Least important are the recommendations of other users, the level of customer service and also the cost of services. This shows the areas that should be the focus of FinTech if they want to gain the attention of customers with characteristics such as the respondents in this survey.

Last question in this section examining respondents' habitual use of financial services verified the number of financial service providers they use. Most respondents, 38.2*, indicated 2 providers. Second most frequently indicated answer was 3. In third place were answers 1 and 4 with a score of 12.7%. (Appendix 10)

Next question already verified the level of customer trust towards FinTech. In this case, the average value was 3.33 and the standard deviation was 0.988. The largest number of respondents indicated a value of 4 (37.3%). Every third respondent chose a value of 3. Nearly 10% of them indicated a value of 5. (Appendix 11)

Another 7 questions verified the extent to which individual elements are able to influence the level of trust a customer will give to FinTechs. Based on the results, it was again possible to create a hierarchy of answers: (Appendix 31)

- User friendly interfaces of FinTech (Mean – 3,24 std. Deviation 1,092) Position 6
- Brand and reputation of FinTech (Mean – 3,31 std. Deviation 1,126) Position 4
- Social Media Presence of FinTech (Mean – 2,50 std. Deviation 1,132) Position 7
- Endorsements from regulatory (Mean – 3,43 std. Deviation 1,029) **Position 3**
- Clarity of information on the offer (Mean – 3,81 std. Deviation 0,982) Position 1
- Responsiveness of customer service (Mean – 3,26 std. Deviation 1,043) Position 5
- Regular updates and improvements (Mean – 3,60 std. Deviation 1,055) **Position 2**

It can be seen here that the 3 factors that respondents believe are most likely to induce an increase in their level of trust in FinTech are reliable and transparent offerings and services from these entities, regular changes and improvements in offerings, and a greater degree of acceptance from regulatory entities. The least influential factors, on the other hand, are a FinTech presence on social media, an easy-to-use application interface and responsiveness on the part of customer service. It is also worth noting that the least variation in responses was in the clarity of the offering, while the greatest variation was in the role of FinTech's social media presence.

These results can provide guidance to FinTechs on what areas of activity they should focus on if they want to strengthen the level of trust with their customers. The responses of those surveyed can thus inspire larger-scale efforts. Synthesizing the factors responsible for selecting a financial service provider and the elements responsible for building customer trust can help create an integrated strategy for customer relationship management.

Next question tested how important security was for customers using financial services via the internet or a mobile app. In this case, the average value was 3.68 and the standard deviation 1.118. It is worth noting that the most respondents indicated a value of 5 (29.4%). Second most popular answer was value 4 (28.4%). Only 2% of respondents took the value 1. (Appendix 19)

Channels of use of financial services are elements that also influence the level of trust towards FinTech entities. For this reason, it was useful to identify which channels of use of financial services respondents prefer. The largest number, 45.1%, indicated that they prefer digital channels. 29.4% of respondents indicated that it depends on the type of service being provided (loans insurance possibly in person). No preference was indicated by 17.6% of respondents. Only 7.8% indicated that they always prefer physical locations. (Appendix 20)

One of the last questions tested the likelihood that respondents would trust FinTech more than traditional financial institutions. For this question, a value of 5 meant it would be possible and a value of 1 meant it would be impossible. The mean value of the responses here was 3.00 and the standard deviation 1.169, with most respondents indicating a value of 4 (32.4%). The second most popular answer was value 2 (24.5%). It is worth noting that more respondents indicated a value of 1 (11.8%) than a value of 5 (7.8%). (Appendix 21)

Last question in the entire survey was more open-ended and verified what would allow respondents to increase their level of trust towards FinTech. The 3 most frequently mentioned answers were an improved security system, a clearer presentation of the offering and more transparent operations. Other key elements could include a greater level of acceptance from audit supervisors, a more user-friendly system for using the application and more humanized customer service. (Appendix 22)

These findings were presented to the experts from the conducted interviews. Author was sending them as the general introduction to the key topic. It allowed for a better understanding of the level of the research problem being analyzed and for targeting the relevant thematic areas. As the result of this survey results presentation the paper received the input of some current and valid information. Those findings were able to inspire the experts during the discussion as well as they could be compared to the previous researchers results.

3.1.2. Interview 1

First interview was conducted with a board member of one of the largest FinTechs in Poland. This person not only has several years of experience in this industry, but also has several years of experience working for one of the leading traditional banks in Poland as well as experience working in strategic consulting. This was undoubtedly the person with the most complete range of information in the area studied in this work.

Conversation started with an attempt to define the meaning of customer trust. The discussion started by the attempt to define how this indicator and element is perceived by the customers themselves. This is how the interviewee commented on this aspect:

“It is one of the indicators that help customers to classify the institutions offering financial services available on the market. In addition to efficiency, quality, suitability, trust is another important element influencing the customer's initial approach to the institution's offer.”

(Interview 1)

From the very beginning, he pointed out the importance of customer trust in decision-making and in assessing the financial offers available on the market.

As the result we decided to discuss about the actual role of the customer trust. In the following section, the role that customer trust currently played in the financial sector was addressed in more detail:

“It is a critical role. People want to have a sense of stability about their livelihoods. At a time when our money is saved in digital bank accounts, trust in the institutions managing those accounts is a key aspect. A customer who decides to rely on this system must have something that will keep his trust in this.” *(Interview 1)*

It is emphasized here that customer trust is responsible for the customers' sense of stability. It helps to maintain faith in the online finance sector to some extent. A key element of this digital sector is technology.

For this reason, statement focused on the role of technology in building customer trust today:

“Many customers don't really realize what technology is behind FinTech products and solutions. Often, even when using financial services, they do not analyze who exactly is the provider of that service. So long as the institution holding the product itself is trusted then the customer does not question the reliability of the service itself.” *(Interview 1)*

It shows here that customers do not have trust in a technology or a product, but more in its supplier. This can be the useful information for the FinTech that want to create the wide spread of the trust among average users.

Building the trust among big group of customers required divided utilization and value. Therefore, he emphasizes that in addition to profitable products, technology also aims to protect finances and the stability of the banking system:

“The role of technology today is to raise the level of cyber security in the digital space. Banks are currently investing very large amounts of money in upgrading their security. Doing everything is aimed at countering hacking attacks. In the era of moving databases to the clouds and finalizing operations digitally, adequate level of security is essential.” (Interview 1)

Technology is therefore an area of investment for financial institutions and the aim of these investments is to increase the level of security that can provide a source of trust for customers. He thus points to the dual nature of technology as a source of innovation and a source of major risks:

“Technology therefore represents both an opportunity when it comes to more attractive and effective solutions, and a threat when we are talking about increasingly diverse ways of stealing data, hacking into accounts.” (Interview 1)

This means that technology both opens new opportunities and, at the same time, creates new risks that require action by financial institutions. In order to limit this negative effect, it is important for the companies to gain mechanism that will keep the customer – trust.

In this perspective gaining trust is critical function. When he was asked about the main sources of trust-building towards FinTechs, he points to several main elements, dividing them into those visible from the outside and those hidden more inside the company's business model:

“In my opinion, what stands out here is the front office side, i.e. the look and design of the application, the level of professionalism, the type of support and customer service offered, as well as the transparency and clear message of the offer. On the other hand, one should point out the licenses and guarantees held by the banks, the security tools used and other internal processes invisible to the customer. The scope of the business and the way the offer is presented is undoubtedly another element affecting the level of trust. Overly aggressive communication and an attempt to partially deceive the customer through a marketing offer that has little to do with real opportunities will negatively affect the level of customer trust.” (Interview 1)

This means that customer trust is influenced by various elements. It can, therefore, be compared to the strength of a company's brand. It consists of all the activities and elements perceived by the company's customers. Actions that FinTechs take can have both positive and negative effects on the level of this trust. At the end customer trust might be defined in more mathematical, statistical way. Collecting data is the required element for that.

Right now, there are only limited operations that can help to assess the level of the trust. Later he was asked about methods of measuring the level of trust. In addition, how this factor is considered in the strategies of banks and other financial institutions, he replied as follows:

“This is a heavily subjective and hard to study aspect. It varies from one customer to another and from one area to another that is studied. For this reason, banks usually analyze customer satisfaction, but undoubtedly trust has its share in this indicator. Banks are currently very active and fighting for a highly competitive position against other financial institutions. Nowadays, the position and the general opinion of customers on financial services is primarily determined by the average rating of the mobile application. It is this element that banks are focusing on the most.” (Interview 1)

He indicated that FinTechs and banks are currently competing on various levels. Customer trust and satisfaction is undoubtedly one of them. He pointed out, however, the importance of this competition in terms of the target group at which FinTech is targeting its offerings.

At this stage of conversation customer trust was defined as the source of market position. He expanded on this theme later in the talk, where he defined the bank's activities as the diversification of its offering, its strategy towards different target groups:

“By setting certain expectations in terms of customer trust, banks are diversifying their expectations in relation to different target groups. They understand that the level of trust will vary according to different demographic characteristics such as age, education, income, place of residence. These aspects are all considered when setting specific expectations for total customer trust.” (Interview 1)

As a result, he indicated that target groups of bank users, customer trust may be much more important than in others. Ultimately, it is up to banks and FinTech to identify this difference and priorities them. In most of the scenario's customer trust should be point out as the important factor in the strategy. It means that it should be included during strategy formulation.

This is way later he was questioned about the direct relevance of customer trust when formulating the bank's strategy, he replied in this:

“In the case of low levels of trust, a bank may decide to reconstruct its strategy and focus on measures to raise this indicator. Due to the critical nature of this element, its sudden deterioration can completely reverse the bank's plans and strategy in no time. Customer trust may not currently be the main determinant of the bank's strategy. It is not the element around which the bank's entire strategy is formed. This is due to the highly subjective nature of this indicator and problems in measuring it effectively. Nonetheless, customer trust is a very important auxiliary indicator, which helps to confirm the right direction of changes in strategy. It is, therefore, a way to measure customer response to new elements.” (Interview 1)

He determined that currently, customer trust cannot be the main driver of bank or FinTech success. It can be an important indicator to inform the position of a financial institution, but it cannot be the basis of the entire strategy. Over time this element may change, but currently trust is only a supporting indicator. This is due to its dynamic, difficult to measure and subjective nature. It means that the level of the importance might be hard to evaluate.

To get more insights on this topic he was directly asked about the significance of customer trust in the context of FinTech companies, he provided insight into the broader scope of their customer base and the importance of building relationships:

“It is important to remember here that FinTechs' customers are not always individual customers. In many cases, FinTechs offer their services and products to other financial institutions. In this case, it is the entire traditional banks that can become customers. In such a situation, it is their trust that FinTechs must fight for.” (Interview 1)

This statement led to the fact that FinTech companies often serve other financial institutions in addition to individual customers. Therefore, it is crucial for FinTechs to build and maintain trust not only with individual users but also with traditional banks, which can be key customers. Trust of these financial institutions is vital for the overall success and credibility of FinTech companies in the industry. This means in the same time that companies should put more effort into creating and implementing the solution that might increase level of the customer trust.

To achieve that it is important to better understand way of doing this. In a discussion focused on the strategies for fostering customer trust in the FinTech sector, particularly in Poland, he offered a comprehensive view on the importance of gradual and collective growth:

“FinTechs must gradually build their trust in the mentality of Poles. This is not about effective marketing campaigns and spectacular successes of individual institutions, but the stable development of the entire industry. Just as the stable situation of the majority of FinTechs can affect the group growth of customer trust, high-profile scandals around such institutions can quickly reduce customer trust in the entire sector. Education and the process of making customers aware of how the various financial technologies work can strengthen trust towards FinTechs. With a higher percentage of customers who understand the solutions and technology behind FinTechs, the percentage of users of these institutions' offerings will also increase.”
(Interview 1)

Importance of establishing a uniform and comprehensive method for instilling trust in the Polish FinTech market is emphasized by this statement. It emphasizes the significance of the sector's overall stability and growth, rather than depending solely on individual achievements or promotional activities. Moreover, it cautions against the potential for major scandals to erode customer trust in the industry, demonstrating the delicate nature of trust within this sphere. When this topic was started it was important to get more insight on bareer.

As the results regarding the main barriers sustaining FinTech growth, he pointed out:

“The smaller size of these organizations, and a more limited pool of resources, does not currently allow them to compete with all financial market participants. For this reason, they cannot afford to compete directly with the largest banks for customer trust. At this stage, teg entities must focus on finding their specialization, their market niche.” (Interview 1)

He therefore pointed to the current state of FinTech but concludes that in the future there is the potential to redress inequalities in market position and access to resources and knowledge. Over time, the resources held by FinTechs will gradually equal those held by traditional banks.

In the interview conducted, the interviewee's considerable experience and range of expertise was evident. In fact, he had 3 perspectives - customer, FinTech employee, traditional bank employee. It can be assumed that such holistic experience allows him to make accurate hypotheses and to see elements invisible to the average FinTech customer. For this reason, his comments were very accurate and the predictions he made might be very accurate. A summary of the highlights of this conversation can be found in the table below:

Table 5 Interview 1 Summary

Interview question	Scope of the research	Interview findings
What is the role of customer trust in the financial sector?	General role of FinTech	<ul style="list-style-type: none"> Financial institutions are categorized by their customers' trust, which affects early opinions about their effectiveness, value, and quality. Furthermore, trust influences long-term connections and customer loyalty by improving an institution's reputation.
What elements influence customer trust towards FinTechs?	Key elements of FinTech's trust	<ul style="list-style-type: none"> Transparency, excellent customer service, and professional application design are important factors that affect trust. Licensure, assurances, and strong security protocols are further means of fostering trust. Customers are far more likely to believe user ratings and suggestions, especially when they come from powerful individuals. To preserve and grow this trust, marketing strategies must be sincere and non-violent.
How companies currently measure customer trust?	Customer trust key measurements	<ul style="list-style-type: none"> Customer satisfaction surveys, which incorporate trust as a component while being subjective, are frequently used to quantify customer trust. Banks see mobile app ratings as a key indicator of customer trust. To establish targeted expectations, trust levels are also examined in relation to demographic variables like age, education, income, and geography.
How does customer trust currently affect banks' strategy?	Influence of customer trust in banks strategy	<ul style="list-style-type: none"> Banks may adjust their tactics to raise trust indicators in response to low levels of trust. Although trust is a crucial auxiliary indicator that evaluates customer reaction and supports strategic direction. Due to its significance, any decline in trust might prompt quick strategy adjustments to deal with the issue. Long-term planning and strategy optimization to satisfy customer expectations are influenced by trust.
What actions can FinTech take to enhance customer trust?	Chances & Opportunities for FinTech's trust	<ul style="list-style-type: none"> FinTechs don't have to rely just on marketing initiatives to win over customers; they may also build the sector gradually. Providing customers with information on financial technology may also increase trust. Customer trust can rise when proper rules are created with legislative backing. Concentrating on specialized service markets where FinTechs may provide superior services than traditional banks is another successful tactic.
What are the main obstacles to building customer trust in FinTech?	Limitations & Threats for FinTech's trust	<ul style="list-style-type: none"> Stabilization can be challenged by ongoing product and service innovation, which damages trust. Due of their smaller size and scarcer resources, FinTechs find it challenging to compete with established banks in terms of fostering trust. FinTechs are not seen by many customers as the main providers of financial services, but rather as supplementary services. There is pressure to uphold trust while innovating due to intense competition and the possibility of new and improved rivals.

Source: Source: Own creation based on results presentations

3.1.3. Interview 2

Interview two was conducted with a specialist working at one of the larger traditional banks in Poland. This person does not have much experience in the FinTech industry. his experience is primarily based on the traditional financial sector.

From the beginning conversation focused on how important customer trust is in the banking sector, especially now that we are moving towards using virtual money and cashless transactions. Interviewee explained it this way:

“The role of customer trust in the banking sector, is crucial. In today's era, we use virtual money and are moving towards cashless economic transactions. As we do not largely use physical cash, this requires trust in the entity that holds our funds and ensures their availability in the long term. The scale of the implementation of solutions and their ubiquity often means that customers who want to use a purchase or service must convince themselves of the form, which later translates into building trust.” (Interview 2)

She shared information that customer trust is very important in a cashless world. Since we don't use physical money as much anymore, we need to trust the banks and financial institutions that manage our money. This trust helps customers feel comfortable using digital services. As the result customer trust can help in making decision regarding provider.

To confirm that statement conversation turned to the importance of customer trust in choosing a financial institution. Interviewee shared insights on this topic:

“Customer trust plays a key role in the process of selecting a financial institution to use. An adequate level of trust is a critical, necessary condition that an institution must meet to retain a customer. The moment a customer's trust in a financial institution decline is also the point at which the customer can begin the process of looking for another financial service provider. Today, in the era of increasingly homogeneous offerings of individual financial institutions (in terms of products, mobile applications), trust plays an important aspect of standing out from the competition. Based on this aspect, institutions that potentially have an inferior offering compared to their competitors can build their market position.” (Interview 2)

She highlighted that customer trust is essential for financial institutions to retain their customers. If trust disappeared, customers are likely to seek alternatives. In a market where financial products and services are very similar, trust becomes a key factor that distinguishes institutions from their competitors. Even those with less competitive offerings can build a strong market position through trust. From the other side nowadays, it is important to remember about the innovation and technology.

Moving forward into this direction next part of the interview was about the influence of technology developments on the financial industry and how these modifications meet customer expectations. Interviewee expressed her opinions about this subject:

“Technological progress is noticeably very fast in the financial sector as well, and it needs to keep up to date with customer expectations. It is largely the customers who stimulate and set the direction in the technological trends that are applied in financial institutions. Increasingly, most of the operations previously carried out in outlets are moving online. This allows customers to access all services from anywhere in the world and at any time. All operations could not take place without the customer's trust in technology and the financial institution itself. Technology works here on many levels. On the one hand, the positive impact of technology can be seen in the increasing accessibility and attractiveness of the financial institution's offerings. On the other hand, more elaborate processes and products can inspire a greater degree of distrust on the part of customers.” (Interview 2)

She made the point that the financial industry's quick technical advancements must live up to customer expectations. Financial institutions employ technology to serve their customers, and as a result, more services are being offered online for convenience. For this change to occur, trust in the institution as well as the technology is essential. Although technology makes services more accessible, intricate procedures can often raise customer mistrust. This started discussion about the pros and cons about technology implementation in financial sector.

In the next step discussion centered on how technology and security relate to each other in the banking industry and how customer trust is affected by these factors. Expert offered the subsequent observations:

“Undoubtedly, technology is an aspect that can influence the increased security of data and funds. However, it can be a source of a certain sense of insecurity on the part of those who do not fully understand how these solutions work. In the face of this, it becomes a challenge for financial institutions to maintain the transparency of their offerings. Such an approach makes it possible to build trust among customers by improving the offer through technology while reducing the risk associated with the lack of knowledge regarding this technology among some people. The first essential element is that a bank is an institution that bases its activities on strict laws established by the highest authorities in the country. A bank is an entity that is controlled and held accountable for its actions by state authorities, e.g. the FSC, the Ministry of Finance, the Central Bank. With such a strong foundation, the bank acts as an institution of public trust.

This translates into such elements as: certainty of operations, security of money, guarantee of transactions carried out. Obtaining the necessary formal elements such as a banking license and other documents from these documents is the primary source of customer trust in banks. Another element will be the widely understood public opinion of the institution.” (Interview 2)

Technology can improve data and financial security; it can also make people feel insecure if they don't properly comprehend it. Thus, to foster trust, financial institutions must continue to be transparent. Strictly regulated by national legislation and subject to official supervision, banks are regarded as public trust institutions. Foundation for customer trust is provided by this regulatory system, which guarantees safe operations and trustworthy transactions. Furthermore, the public's perception is a significant factor in maintaining this trust. If the trust should be implemented in the companies' strategies there must be some critical evidence of the influence of this factor on the bank reputation.

Because of this finding talk went on to discuss how customer feedback and recommendations affect financial organizations' perceived credibility. Expert went into further detail on the origins and significance of these viewpoints:

“We are talking here about both direct opinions and recommendations from the customer's immediate environment, as well as more broadly. We are talking about the general narrative about a given financial institution, which can be based on opinions about a given institution on various forums and websites, mobile app ratings. Of course, these values are not directly derived from the level of customer trust in the institution, but they are one of the key factors in forming this trust especially in new customers. Elements that influence trust are also the expansion and increasing access to knowledge about the variety of products offered by the financial sector, which makes it easier for many to navigate the market.” (Interview 2)

Customer trust is greatly influenced by both explicit recommendations from friends and family and broad web reviews. Particularly for new customers, reviews on forums, websites, and mobile app ratings are quite important. Furthermore, giving customers greater information about financial goods improves their understanding of their alternatives and builds trust. Personal recommendations and easily accessible information work together to create a strong foundation of trust in financial institutions. To get all that positive output from the customer perspective it is not only important to implement good solution but also gain ability to measure the value of the change. This means that the financial institution required effective customer trust measurement tools.

As the result, discussion shifted to how banks measure customer satisfaction and trust, emphasizing the evolution of survey methods over time:

“Customer satisfaction surveys have always been based on surveys conducted. Only the way surveys are conducted has changed. Today, a survey is a text message received (asking for an opinion), a notification appearing in an application on the phone or electronic banking. All channels of customer contact are surveyed. Banks want the best possible opinion, which is also surveyed by external entities in various competitions, such as the Golden Banker. Another aspect can be a benchmarking study, which involves comparing overall customer opinions and ratings against other banks. This makes it possible to compare the level of overall satisfaction (including trust) against other competitors. For this reason, one may notice intense activity by banks to encourage ratings.” (Interview 2)

New approaches, such as text messaging and app notifications, have replaced more antiquated ways in customer satisfaction surveys. Via these platforms and outside contests like the Golden Banker, banks want to elicit favorable comments. By contrasting customer satisfaction and trust levels with those of rivals, benchmarking studies also have a significant impact, leading banks to aggressively seek out customer evaluations and comments. As soon as the FinTech gather information on the level of customer trust they can start benchmark and compare them with the main rivals – traditional financial institutions.

To sum up the direction of the discussion at the end conversation moved toward competitive dynamics between FinTech companies and traditional banks, focusing on how customer trust influences this landscape. Expert provided a detailed perspective:

“FinTechs are based on modern technology and represent a lot of competition for traditional financial players, thus forcing banks to implement new solutions. This situation is beneficial for customers, as they have access to new solutions and services. FinTechs introduce such innovative solutions that, for too many customers, they are still abstract solutions that cause a reduction in trust, until the service so presented becomes widespread (e.g. Revolut). A key barrier for such institutions, however, is getting customers to take advantage of their offerings. For this reason, today, customer trust may not be a direct source of competitive advantage for FinTech in the financial sector, but rather a necessary condition for reaching customers. If, on the other hand, we consider only the FinTech sector and the competition between entities in this category to actually higher levels of trust can be a source of competitive advantage. After all, gaining such an advantage can lead to getting more users.” (Interview 2)

She underlined that although FinTechs spur innovation and force established banks to embrace novel approaches, they encounter difficulties winning over customers because of the impersonal character of their offerings. Though trust may not yet directly provide FinTechs with a competitive edge in the larger financial sector, it is necessary for them to draw in users. Higher levels of trust, however, may set businesses apart from rivals in the FinTech sector and draw in more customers. Taking into consideration only positive aspect would not be the right approach. All the changes might bring positive but also negative elements.

This is why additionally discussion also covered the challenges posed by cyber fraud in the context of virtual services and the evolving expectations of customers for robust security measures. Interviewee provided the following insights:

“With the development of virtual services, we are increasingly facing cyber fraud. Customers expect more and more new ways and protection mechanisms from banks to ensure the safety of their transactions, e.g. verification of the bank's helpline employee in the app, control of unusual transactions - blocking the withdrawal of funds on another continent at a time when a moment earlier a transaction was made in the home country. Above all, transparency and creating an easy-to-understand message are key here. Nowadays, communication is the basis of trust. A person using banking services must be aware of what services and products he or she is using. Creating complicated rules and regulations as well as unclear fee tables will negatively affect the level of trust. For this reason, in my opinion, today's banks must focus primarily on improving their security features internally, as well as creating a user-friendly way of communication.” (Interview 2)

Because the risk of cybercrime is increasing due to the rise of virtual services, banks need to implement advanced security measures. Customers look for services like staff verification and odd transaction tracking to safeguard themselves. Establishing straightforward and unambiguous communication is essential to fostering trust since convoluted laws and unclear fee schedules have the potential to erode it. Banks should prioritize strengthening internal security protocols and ensuring that communications are clear to increase customer trust.

Her answer focused primarily on pointing out the differences and areas in which FinTechs are inferior to traditional banks. Interviewee's experience of working in a traditional bank and also comparing it with FinTech offerings made the interviewee able to quite accurately identify the conditions that need to be met in order to equalise the level of customer trust for both industries. This is shown in the table below.:

Table 6 Interview 2 Summary

Interview question	Scope of the research	Interview findings
What is the role of customer trust in the financial sector?	General role of FinTech	<ul style="list-style-type: none"> • In the banking industry, customer trust is crucial, particularly as we transition to cashless transactions and virtual money. Customers who feel trusted know that their money is secure and ready to use when they need it. • It is essential for setting financial institutions apart in a market where products are becoming more and more similar. A high level of trust can aid in the positioning of organizations with possibly subpar offers in the market. • Reductions in trust are a major cause of customers searching for other services, therefore maintaining and gaining new customers.
What elements influence customer trust towards FinTechs?	Key elements of FinTech's trust	<ul style="list-style-type: none"> • Several things, such as following stringent regulations and possessing the required licenses to guarantee the security of transactions and funds, affect customers' trust in FinTechs. • Public opinion is also significant, as seen by both specific suggestions and more general internet evaluations. Building customer trust is also aided by institutional transparency and the availability of information about financial products. • Customers will trust FinTechs more the more comfortable and confident they are with the technology underlying the services.
How companies currently measure customer trust?	Customer trust key measurements	<ul style="list-style-type: none"> • Businesses mostly use customer satisfaction surveys distributed by text messages, app alerts, and online banking to assess trust. • Comparing customer evaluations and ratings with those of other banks is another way that independent benchmark surveys and contests,
How does customer trust currently affect banks' strategy?	Influence of customer trust in banks strategy	<ul style="list-style-type: none"> • Banks' strategies are heavily influenced by customer trust, which directs project development and sets the agenda for operations. • Trust is a crucial component of strategic decisions, as are customer feedback and expectations. A rapid erosion of trust might result in a decrease in customer acquisition and a loss of existing ones. • As a result, trust is examined both directly and indirectly to make sure that strategic decisions support preserving or boosting trust.
What actions can FinTech take to enhance customer trust?	Chances & Opportunities for FinTech's trust	<ul style="list-style-type: none"> • FinTech organizations should concentrate on enhancing security features and creating user-friendly communications that concisely describe services and products to gain the trust • Key is to mitigate the negative effects of convoluted legislation or pricing structures is to communicate clearly and simply. • To increase overall customer happiness and trust, future may make use of artificial intelligence to customize customer experience, enhance service quality, and swiftly detect fraud.
What are the main obstacles to building customer trust in FinTech?	Limitations & Threats for FinTech's trust.	<ul style="list-style-type: none"> • Advanced fraud tactics are a significant barrier because they may erode customer trust even in the face of sophisticated security measures. • After these kinds of events, rebuilding trust is challenging and takes time. Since personal recommendations are frequently the foundation of trust, bad experiences can affect more people than just the one experiencing them.

Source: Source: Own creation based on results presentations

3.1.4. Interview 3

For the third interview, an expert working in a high-level position in the financial supervisory institution was interviewed. This person has no direct experience from working in a bank, but has an extensive knowledge of the financial system in Poland. Because of her position, she is regularly involved in the control and supervision processes of FinTech operations.

As the first topic conversation began with an assessment of the Polish financial sector's development and the high level of customer trust in the country's major banks. Expert provided a detailed perspective on this topic:

“The Polish financial sector is very developed compared to the rest of Europe. Many solutions are only found in our market and the quality of financial services is at a higher level in our country. Even though customers currently have a lot of trust in the largest banks in Poland, they still check the balance of their accounts very regularly. This happens primarily through mobile applications. Options such as push-up notifications keep users up to date with their account balances all the time. Customer trust in the financial sector gives institutions a kind of permission to implement their strategy.” (Interview 3)

In comparison to the rest of Europe, the Polish financial industry is extremely sophisticated, offering one-of-a-kind solutions and better service quality. Major Polish banks have a high degree of trust, but users often check their account balances, usually using smartphone applications that offer push alerts. Financial institutions may execute their objectives with greater trust and pursue expansion plans with less concern about customer backlash because to this high level of trust. Technology can be used in some examples as the tool to obtain trust.

This is why the discussion then turned to the role of technology in fostering trust and customer satisfaction within the Polish financial sector. Interviewee elaborated on how advanced technologies contribute to this trust:

“In Poland, technology plays an important role in building trust and customer satisfaction in the financial sector. Technologies such as BLIK, well-developed payment card payment systems make the system trusted by customers. Poland undoubtedly has a leading position when it comes to the use of technology and innovation in the financial sector. In Poland not only banks and financial institutions have well-developed technologies. Entire financial and payment infrastructure in the country is at a high level. Terminals, mobile applications as well as other elements of the system are at a much higher level than in West” (Interview 3)

Robust payment card networks and sophisticated solutions like BLIK boost customer trust. With its sophisticated banking and payment infrastructure, including terminals and mobile applications, surpassing that of several Western European nations, Poland is a leader in technical innovation in the financial industry. As it can be noted technology has currently the general huge impact in the financial sector.

After that was confirmed, discussion explored the influence of technology on the attractiveness and competitiveness of banking products, as well as the ongoing need for traditional services. The interviewee offered a comprehensive view on this topic:

“Nowadays, technology is responsible for a high level of attractiveness and competitiveness of products in the banking offer. In addition, it promotes widespread accessibility as well as the ability to execute individual actions through various channels. Despite the effectiveness of mobile applications in daily operations there are, however, actions that in my opinion will still be the field of visits to outlets for a long time. It is important to keep in mind the different attitudes of specific customer groups towards technology. For this reason, banks should leave open the possibility of more traditional service even in the face of the apparent benefits of technology. In Poland, the education system is not conducive to effective use of the financial system. Despite the high development of our financial institutions, there is a lack of appropriate programs and teaching methods to show young people effective methods of investing and managing their funds. Our level of education in this area is significantly lower compared to Western countries.” (Interview 3)

Competitiveness and attractiveness of banking goods are significantly increased by technology, which offers several service channels and wide accessibility. For a while, though, some financial operations probably still need in-person meetings. Recognizing that different customer groups have different perspectives on technology, she emphasized how crucial it is to keep offering conventional service choices. Furthermore, she drew attention to Poland's deficiency in financial education compared to other Western nations, implying that more robust educational initiatives are required to impart to youth sound money management and investing techniques. Security is the important part of the customer trust. While customers are putting the money into some institution, they are looking not only for the most attractive but also for the stable solutions.

To better understand the role of the security interviewee provided insights into how branches contribute to a sense of security and how customer trust is measured:

“Despite the fact that numerous banks are now moving away from providing services and customer service at physical branches, the complete elimination of these branches may have a negative impact on customer trust. Although many bank customers rarely choose to visit these locations the mere awareness of their existence and the possibility of visiting them creates a certain sense of security in their minds. Security is undoubtedly an important element in building customer trust. Since most of us use the services of various banks we are naturally interested in problems, scandals related to the activities of these banks. The occurrence of even isolated attacks or security breaches of specific financial institutions can very quickly deteriorate trust towards the bank among the wider public. As for methods to measure customer trust, the main point to be made here is various types of surveys and customer analysis. Surveys can take place both on the bank's customers and on a more general part of the public.” (Interview 3)

Even while many banks are doing away with physical branches, doing away with them entirely would damage customer trust. Even though customer don't frequently visit branches, their presence gives customers a feeling of security. Trust is largely dependent on security, and security-related events such as hacks or breaches may swiftly destroy public faith. Banks use surveys and customer research to evaluate customer trust. They target the public as well as their own customers to gain detailed feedback.

Next during the talk expert discussed the potential for advanced technology solutions. Those elements were identified as the source of the bank strategy:

“It seems to me that soon banks will work on more sophisticated solutions that will use algorithms and artificial intelligence to more accurately assess the degree of customer trust. Technology will be an effective tool for assessing the subconscious opinions of customers. Banks realize that customer trust is a very important element responsible for a bank's competitive position. For this reason, the largest banks in Poland decide on numerous measures to strengthen customer trust and satisfaction. Many of these solutions, however, are too aggressive which motivates customers to limit their contact and communication with banks. Customer trust can undoubtedly be a source of competitive advantage. This can be seen in the case of large banks, which very often can afford to have a less attractive, developed offering FinTechs. This is because what they make up for here is customer trust and widely recognized stability.” (Interview 3)

To properly evaluate customer trust, banks will soon use artificial intelligence and algorithms, utilizing technology to accurately measure subconscious thoughts. Understanding how important trust is to keep a competitive edge, the biggest banks in Poland are taking a number of steps to improve customer satisfaction and trust. Nevertheless, too forceful tactics might cause customers to have fewer contacts with banks. Large banks have a competitive advantage over FinTechs because of their established customer base, stability, and perceived innovation. It was essential to point out most important source of competitive advantage.

As the result later in discussion, interviewee offered insights into the shift towards more attractive investment options and the importance of trust:

“Nowadays, many financial institutions are still primarily focused on providing basic banking services. Currently, young people are looking to their banks for investment support. Today's financial institutions must meet these expectations and offer more attractive forms of money investment. Traditional deposits and savings account no longer meet the expectations of a growing number of customers. Taking care of one's reputation and position in the financial space is a very important aspect. Obtaining official licenses for FinTechs to operate, for example, banking, can increase the level of trust from customers. The participation of individual institutions in guarantee funds (€100k) will undoubtedly help offset the anxiety associated with the shorter history of such an institute.” (Interview 3)

While many financial institutions continue to concentrate on providing basic services, there is an increasing need for investment help, particularly from the youth. Banks must provide more alluring investment alternatives than just standard savings accounts and deposits if they are to live up to these expectations. Reputation and trust are important. For FinTechs with less experience in the market, getting official licenses and taking part in guarantee funds may greatly increase customer trust. This is why currently it is important to better understand actual position and the understanding of FinTech placement.

In order to be able to assess that interview has been addressed to the current perception of FinTechs among customers and the challenges these institutions face in gaining full trust:

“In my opinion, nowadays FinTechs are treated by most customers as additional services. Most Poles use the services of these financial institutions as a kind of supplement to their basic account. Admittedly, they see the benefits of the efficiency of these solutions, but they lack sufficient trust to place all their funds there. I believe that a large portion of customers can acquire trust in FinTech institutions over time.”

Some banks in Poland have been operating in the country continuously for more than a dozen years. Time is, one of the most important factors in building trust in a brand or institution. In today's reality, FinTechs must 'wait' until they permanently enter the everyday lives of customers.” (Interview 3)

Currently, most customer see FinTech companies as additional services to their main bank accounts. Although they recognize the effectiveness of FinTech solutions, they do not yet have enough trust in them to depend entirely on them. Traditional banks in Poland that have been in operation for a long time are proof that trust may be developed over time. For FinTechs to gain the same degree of trust, they must become a long-term fixture in their customer's life.

Further it was explored the challenges FinTechs face in presenting innovative products simply and transparently, along with the impact of generational changes on their market potential. Interviewee provided insights into these dynamics:

“Offering an attractive and innovative product offering based on new products can be attractive, but it often involves the use of more complicated products. FinTechs are then faced with the challenge of presenting this offering in an extremely simple and transparent way. In the case of financial institutions, there is an attachment effect and some customers do not change their bank for life. For this reason, the potential target market for FinTechs is already naturally limited at the very beginning. Only a generational change and the entry of a generation for whom such institutions are the norm will be able to reverse this trend. Many FinTechs, digital banks are choosing to strongly limit contact with consultants. They are using chatbots based on artificial intelligence in their customer service. Of course, this form of communication can be effective, but at the very end it raises some doubts in some customers. This is especially true for those with unusual problems, who in critical situations would prefer to rely on direct contact or at least the possibility of a phone call.” (Interview 3)

Though fresh ideas have the potential to draw in customers, FinTechs must communicate these products' intricate features in an understandable and open manner. The early market for FinTechs is restricted by customers' commitment to established banks; meaningful changes are unlikely to occur until newer generations, who see these institutions as the norm, gain greater traction. Furthermore, many FinTechs' dependence on AI-based chatbots for customer support may annoy customers who would rather speak with a live person, particularly in urgent or uncommon circumstances.

This third interview was a comprehensive overview of the financial market. Interviewees' knowledge of this market because of their work in a regulator institution made them knowledgeable about the standards of the industry. She pointed to the importance of having appropriate standards in place and the law governing FinTech as necessary elements to achieve a stable, high level of trust from customers. A more systemic approach to assessing the issue rather than focusing on more focused arguments could be seen here. Results can be found in the table below:

Table 7 Interview 3 Summary

Interview question	Scope of the research	Interview findings
What is the role of customer trust in the financial sector?	General role of FinTech	<ul style="list-style-type: none"> Poland's financial industry is so advanced and offers cutting-edge products that are exclusive to the country, trust is essential to attracting and keeping customers. Trust gives financial institutions a form of customer license to move forward with expansion plans, which makes it easier and more freely for them to implement their strategy.
What elements influence customer trust towards FinTechs?	Key elements of FinTech's trust	<ul style="list-style-type: none"> A range of factors, which include the regulatory environment and the ownership of the required licenses to guarantee the security and legality of transactions, affect customers' trust in FinTechs. Trust is greatly influenced by public opinion, as seen by both explicit recommendations and more general internet evaluations. Another crucial component is security, as isolated incidents of compromise or attack have the potential to reduce public trust.
How companies currently measure customer trust?	Customer trust key measurements	<ul style="list-style-type: none"> Through a range of customer surveys and studies, as well as text messaging, app alerts, and electronic banking channels, banks gauge their customers' trust. More details may be found in surveys that compare customer opinions and ratings with those of other banks. Banks intend to employ more sophisticated technologies in the future.
How does customer trust currently affect banks' strategy?	Influence of customer trust in banks strategy	<ul style="list-style-type: none"> Bank's ability to compete is largely dependent on its ability to build customer trust, which influences many strategic choices that aim to increase satisfaction and trust. Big banks frequently compete by using their well-established reputation, sometimes even with less alluring products than FinTechs. Aggressive attempts to establish trust, however, may have the opposite impact and encourage customers to minimize their dealings with banks.
What actions can FinTech take to enhance customer trust?	Chances & Opportunities for FinTech's trust	<ul style="list-style-type: none"> FinTechs should concentrate on offering more appealing investment help, particularly for younger customers, in order to boost customer trust. Participating in guarantee funds and obtaining official licenses are two ways to greatly boost trust. FinTech companies should make an effort to communicate openly and ensure that their products are clear and easy to use.
What are the main obstacles to building customer trust in FinTech?	Limitations & Threats for FinTech's trust	<ul style="list-style-type: none"> FinTech companies have many challenges in gaining customer trust, such as rivalry with established corporations with greater resources, longer histories, and higher standing. Due to the intricacy of new solutions, FinTechs must be honest and straightforward in how they promote their services. Customers may get concerned about little direct interaction with experts and reliance on chatbots, particularly if they have peculiar difficulties and would rather speak with someone in person or over the phone.

Source: Source: Own creation based on results presentations

3.1.5. Interview 4

Last interview was with a financial advisor from a leading consulting firm. This person has experience working with both leading banks in Poland and smaller financial institutions. She has a more strategic view of the entire research problem under study.

Debate started by investigating the present state of customer trust in banks, examining their function within the financial industry and the factors that impact it:

“The customer's trust is undoubtedly one of the main aspects that determine the choice regarding the product or institution in which he will place his funds. Nowadays, when the appearance of the mobile application, the product offerings of many banks are very similar it is the customer's trust that can be a decisive argument in the choice. In addition, the customer's trust in a financial institute is seen today as a very important asset from the bank's perspective, a value that can be used to build a strong market position for such an institute. The customer's trust in a financial institution is to some extent the sum of the customer's own experience and the public's opinion of the institution.” (Interview 34)

Given the similarities of mobile applications and offers among banks, customer trust is essential when choosing which financial goods or institutions to employ. Financial institutions view trust as an important difference and a valuable commodity that helps them establish a dominant position in the market. This trust's diverse foundation is highlighted by the fact that it is based on both individual experiences and popular opinion. At the end it is important to better understand the source of this key customer factor.

This is why conversation explored the different factors influencing customer trust, depending on whether they are considering their current bank or evaluating a new offer. Interviewee provided insights into these distinctions:

“In this case, it is useful to divide is customer trust according to whether it relates to the bank he uses or the bank whose offer he is considering. In the case of the former option, it is his personal experience that plays a key role here. In the second case, the general opinion of other users and the direct recommendations of his friends are of great importance here. Customer trust will also depend on the expectations and attitude of the customer towards the financial institution. It is important to remember that customers have different motivations when using financial services. In some cases, they will depend on a safe institution to allocate their funds. In others, however, they will be looking for an attractive solution to invest their funds. Trust will be directly related to purpose and motivation for using financial services.” (Interview 4)

Depending on whether it's about their present bank or a possible new one, customer trust fluctuates. For the former, firsthand experience is crucial, but suggestions and public opinion have an impact on the latter. Additionally, trust is based on the demands and objectives of the customer, such as whether they are searching for appealing investment options or a safe location to deposit their money. Therefore, trust is strongly related to the reason and incentive behind a person's use of financial services. Customer trust is not clear and easy to measure factor. From the bank perspective it is however crucial to obtain such information.

As the result discussion focused on how banks measure and assess customer trust. Expert explained the various methods used to gauge customer trust and attitudes towards financial institutions:

“This is done through traditional methods such as surveys, but also by analyzing customer actions. Banks study customer decisions and, based on this, determine their attitude to the bank's offerings. For example, they track receipts. It can be indicated that customers choose to receive their remuneration at the institutions they trust the most. Another way is to track the general popularity and trends regarding a certain financial institution in social media. Reviews on social media platforms, mobile app ratings and opinions on social forums are currently, mainly a source of building opinions about a financial institution.” (Interview 4)

Banks evaluate customer trust using regular surveys as well as behavior analysis. Trust levels may be determined by monitoring the locations where customers choose to collect their salary. Additionally, banks may gain insights into public perception and trust in financial institutions by keeping an eye on social media reviews, mobile app ratings, and forum opinions. This helps them understand overall popularity and trends. To affect those trends and measurements banks should plan and implement some action.

To point out those bank option discussion moved to a common method used by banks to measure customer trust. Interviewee discussed the effectiveness trust as the key indicator:

“A very common way to measure trust is to ask whether a given customer would be willing to recommend their bank's services to others. Phrased in this way, the question does not directly ask about the level of trust and the degree of satisfaction, but at the same time determines the customer's attitude towards the bank. It should be remembered that personal recommendations are a very powerful form of marketing and, in addition, a customer who declares a willingness to recommend the services of a particular bank must give it a corresponding degree of trust.” (Interview 4)

One common method of assessing customers trust is to ask them if they would recommend their bank's services. This query reveals the customer's general perception of the bank while also inadvertently evaluating contentment and trust. Readiness to suggest shows a high degree of trust in the bank. Personal recommendations are a powerful marketing tool. Customer trust might be the source of those recommendations. From the other side there might be another elements affecting that.

To get better understanding on that it was important to explain how trust is integral to customer satisfaction and the bank's long-term goals:

“Customer trust is one of the elements that make up total customer satisfaction and the perception of the bank. Customer trust can be considered one of the key KPIs in a bank's long-term strategy. A bank can set a certain level of customer trust that it wants to achieve and then, based on analysis of changes in it, evaluate the effectiveness of its actions. Banks that are trying to steer their operations toward greater personalization and tailoring their offerings to individual customers’ needs must include customer trust as one of the key indicators of their own success.” (Interview 4)

Customer trust is a critical KPI in long-term initiatives since it plays a significant role in overall satisfaction and perceptions of the bank. Banks are able to evaluate the success of their initiatives by establishing and tracking trust levels. Sustaining a high level of customer trust is critical for banks that prioritize customization and specialized products in order to assess success. Success in the finance sector can be defined in the different way. Some of the institution can explain it as revenue growth other as better reputation or bigger customer group.

In order to narrow the topic, conversation was led to the role of customer trust in retaining existing customers and attracting new ones, particularly in the context of FinTechs competing with traditional banks:

“Customer trust can be an important element to reduce the outflow of existing customers and increase the inflow of new customers. For this reason, a high level of customer trust towards FinTechs can be a determining factor for the success and development of such an institution. It should, however, be remembered that it is currently difficult for FinTechs to compete with traditional banks in this area. That's why I think that when it comes to competition between FinTechs, trust can be a source of competitive advantage. However, when it comes to the financial market, in the current situation, customer trust in FinTechs is not able to provide a significant competitive advantage over traditional banks. (Interview 4)

Acquiring customer trust is essential for lowering attrition and luring in new customers, which is especially critical for FinTech companies. FinTechs can thrive and expand when there is a high degree of trust, but at the moment, they find it difficult to compete with traditional banks in this area. Therefore, trust can be a competitive advantage in the FinTech space, but it does not yet give traditional banks a major advantage in the larger financial market. Law and regulatory were identified as the main source of the advantage of traditional banks.

This is why expert mentioned the importance of legislative assurances and the potential impact of recognizable figures promoting FinTech services:

“They can take legislative actions that are expected to lead to them receiving assurances from financial institutions. Inclusion in the lists of safe financial institutions by the KNF, BFG or NBP will help to increase the degree of customer trust through obtaining certain legislative assurances. The involvement of more recognizable figures in the promotion of FinTech services may convince a large part of undecided customers. Currently, many FinTech institutions are low visibility organizations in the public space. Obtaining the figure of a recognizable ambassador will help to gain the acceptance of a larger portion of customers.” (Interview 4)

By obtaining statutory guarantees and being recognized as secure financial institutions by organizations such as the KNF, BFG, or NBP, FinTechs can increase customer trust. Using well-known individuals to endorse their products might also draw in unsure customers. Given the present limited exposure of many FinTechs, having a well-known ambassador may greatly improve their public perception and increase acceptability. Those action can be the better of FinTech’s strategy aiming to improve the customer trust level.

To continue the direction of this thoughts at the end the conversation focused on the strategies FinTechs can employ to gain broader acceptance and build customer trust:

“I think, first and foremost, gaining greater acceptance from a legislative perspective, which will help gain widespread acceptance among customers. The next step will be to transform the offer AND present it in a more accessible AND transparent way for customers. Despite the use of advanced technology, these institutions will try to formulate their offers and communications in as simple and transparent a way as possible for the average user. FinTechs will try to build customer trust based on narrative and benefit language. At the core of their communications will be a message informing customer that through the use of technology they are able to best manage the customer's available financial resources. Building trust based on giving guarantees of the best, most efficient offer will be at core of much of FinTech.” (Interview 4)

It is essential for FinTechs to secure legal support to attain broad customer acceptability. After that, they must clearly and transparently disclose their offerings. FinTechs should prioritize clear and uncomplicated communication despite their cutting-edge technologies. By highlighting the advantages and effectiveness of their services and reassuring customers that technology helps them to handle finances well, they will gain their customer trust. They will put a lot of emphasis on providing exceptional service and clear communications to establish trust. As the opposite it was important to move to the negative elements and the threats towards FinTech sector.

Conversation concluded with a discussion on the challenges FinTechs face due to customer awareness and concerns about technology:

“I would point out here a kind of lack of awareness and knowledge of the technology on the part of customers. FinTechs are institutions that have only been on the market for a few years. For this reason, the level of knowledge of the average customer about them is still low. Only with the growth of this element will a larger audience begin to appreciate these offerings. The increasing number of cyber-attacks has caused some customers to become increasingly anxious about technology-based products and solutions. In the face of this, many digital banks and digital FinTechs may suffer. Popular and widely spread financial scandals resulting from the activities of such organizations will erode the trust of a large portion of customers for an extended period.” (Interview 4)

Customers' lack of awareness and understanding of FinTechs is a major obstacle. Since these establishments are relatively new, many patrons are not acquainted with them. A better understanding will result in a higher appreciation for FinTech products. But the increase in cyberattacks has made customers more wary of technology-based goods, which might hurt FinTechs and digital banks. Furthermore, numerous financial scandals involving these kinds of companies have the potential to permanently harm customer trust.

This final interview was the most practical and presented a business approach. Interviewee's experience in consulting provided him with knowledge of how many businesses and industries function. For this reason, he focused primarily on the opportunities and strengths of the FinTech sector. He did not focus so much on the competition of this part of the industry with the rest of the financial system, but rather analyzed more the importance of FinTech development from the customers' perspective. Key summaries from the conversation can be found below:

Table 8 Interview 4 Summary

Interview question	Scope of the research	Interview findings
What is the role of customer trust in the financial sector?	General role of FinTech	<ul style="list-style-type: none"> • When choosing where to invest money, customers' trust is crucial, especially considering how similar banks' mobile app UI and product offers are. • From a bank's point of view, trust is a valuable asset that contributes to the establishment of a strong market position. • It is a crucial component of customer retention and competitive differentiation as it combines public opinion with personal experience.
What elements influence customer trust towards FinTechs?	Key elements of FinTech's trust	<ul style="list-style-type: none"> • Public perception and regulatory compliance both influence people's trust in FinTechs. Secure transactions are essential, and they are bolstered by statutory guarantees. • Trust is greatly impacted by public opinion, which is shaped by both explicit recommendations and more comprehensive internet evaluations. • Trust is also shaped by customer attitudes and expectations toward financial institutions, with security and creative problem-solving being essential components.
How companies currently measure customer trust?	Customer trust key measurements	<ul style="list-style-type: none"> • Traditional surveys and customer behavior research, including monitoring the place where customers choose to receive their payments, are used to gauge customer trust. • Banks also keep an eye on forum comments, ratings for mobile apps, and social media trends. • By leveraging the influence of personal recommendations, asking customers if they would suggest their bank's services is an indirect way to gauge their level of happiness and trust.
How does customer trust currently affect banks' strategy?	Influence of customer trust in banks strategy	<ul style="list-style-type: none"> • In banks' long-term strategy, customer trust is a key performance indicator (KPI) that influences customer satisfaction and the bank's overall reputation. • It focuses the bank's efforts on creating customized and individualized offers. In order to determine the success of strategic initiatives, maintain customer acquisition and retention, and determine the competitive standing of the bank, trust is crucial.
What actions can FinTech take to enhance customer trust?	Chances & Opportunities for FinTech's trust	<ul style="list-style-type: none"> • By securing statutory guarantees, such as inclusion on lists of trustworthy financial institutions, FinTechs may boost trust. • Using well-known individuals to endorse their products might help draw in unsure customers. Building trust may be achieved by streamlining and making their offers more transparent, as well as by clearly outlining the advantages of their technology-based financial management solutions.
What are the main obstacles to building customer trust in FinTech?	Limitations & Threats for FinTech's trust	<ul style="list-style-type: none"> • Ignorance of customers about FinTech technology is a significant barrier. Since FinTechs are still relatively new, many customers may not yet know about these companies. • Anxiety among customers regarding technology-based solutions is being exacerbated by an increase in cyberattacks, and financial scandals have the potential to severely affect trust and have a long-term impact on the industry.

Source: Source: Own creation based on results presentations

3.2. Discussion

First research question formulated in this thesis was as follows: **"What is the current level of customer trust towards FinTechs?"**

Even the survey provided a partial answer in this area. Most respondents would rather be able to trust a FinTech and give them their financial information. The largest percentage indicated to answer, rather yes. However, there was still a large percentage of those who were unsure. (Appendix 11)

In the interview it was stated that Poland today has a relatively developed financial system. In the opinion of most customers, it operates in a stable condition. This is due to both major financial institutions and supervisory authorities. Nevertheless, this trust has a very fragile nature. People trust institutions including FinTechs, but still want to check them regularly. In the event of some scandal or problems, the level of trust can quickly be lost. This means that currently the level of trust in FinTech may be high, but it can be lost very quickly. It is certainly not as strengthened as the level of trust in FinTech. (Table 7)

A customer's trust in a bank is a very individual matter today. Customers base this on their own experiences and those of their closest acquaintances. Even if a financial institution enjoys widespread trust, it may still not evoke positive emotions in an individual's perception. Some customers view FinTechs on a par with traditional banking institutions. Sometimes they believe that they are merely entities with a more innovative approach. People consider their level of trust in specific cases not in relation to the industry. (Table 8)

Many customers now keep all their funds in digital accounts. For this reason, trust is at the heart of this whole system. If customers do not trust their institution and are constantly looking for problems, such cooperation will not survive in the long term. Customer trust is nowadays an indicator that helps when evaluating and selecting a bank. In general, Poles trust the banking system, but due to past crises they still approach it with a certain level of caution. (Table 5)

Customer trust in the overall system is quite high. However, it can vary from one institution to another. For this reason, a reduction in the level of trust in an entity may be a signal for change. This is why customer trust is now one of the key factors keeping them with their current service provider. It is worth noting that most of the financial sector is based on trust in the stability of individual entities. If FinTechs fulfil this role, they can enjoy customer trust. (Table 6)

One of the final questions in the survey was whether respondents would be willing to trust FinTechs more than traditional financial institutions. Despite the wide variety in answers, positive values (4+5) were chosen by 40.2% of respondents while negative ones (1+2) were chosen by 36.3% of respondents. This means that, as of today, it is the group of undecideds with a value of 3 (23.5%) that is likely to dominate the opinion of society as a whole. Undoubtedly, the level of trust in FinTech is much higher than it was just a few years ago and, as the research shows, will steadily increase. (Appendix 21)

Second research question formulated in this thesis was: **“How is customer trust incorporated into FinTechs' strategy?”**

FinTech is financial services that rely heavily on the use of innovation and technology. The survey was able to indicate that a large proportion of respondents appreciate the importance of using technology in financial management. As many as two-thirds of respondents indicated that this was an important aspect for them. They realize that the use of algorithms, artificial intelligence, automation and other technological solutions can lead to more efficient management of their finances. These are exactly the kind of solutions and products they expect from today's banks and FinTechs. (Appendix 5) Customer satisfaction surveys are the simplest tool for measuring trust and customer satisfaction. Banks want to have the best possible reputation in the community. There is a current trend to encourage customers to share positive opinions and stories about their use of the bank's services. Due to the growing number of potential competitors in the financial sector, major banks are trying to strengthen their competitive position. There is a greater level of personalization, fulfilment of customer needs and other measures aimed at customer retention. Today, customer trust is undoubtedly a source of long-term competitive advantage and should be factored into the strategy of financial institutions. (Table 6)

As technology develops, financial institutions will have increasingly sophisticated tools to measure the level of customer trust. Tools based on artificial intelligence and algorithms already often assess customer scoring in which trust level is one component. With the increasingly fierce competition between traditional banks and FinTechs, customer retention will grow in importance. For this reason, his or her satisfaction as well as the level of trust will soon become very important. Banks are now taking steps to strengthen service satisfaction and trust while investing in modern methods to measure them more accurately. (Table 7)

Customer trust can be seen as a so-called KPI within the bank's strategy. It is possible, therefore, to set an expected level for this indicator and then monitor progress towards it. Today, it is undoubtedly the case that traditional banks have more data about their customers than FinTechs. For this reason, it is currently much easier for them to adapt their strategies to market changes. Over time, however, these boundaries will blur. Institutions that choose to base their business model on a higher level of customer focus, higher personalization will establish customer trust as one of the key growth indicators. (Table 8)

It is very difficult to define a consistent indicator in terms of customer trust. It is important to remember that different banks have different target groups. Some of them have a specialized offer aimed at a narrow target group. For this reason, it is important to note that customer trust should be aligned with the bank's strategy. This is because the aim is not to achieve a high level of trust in society, but to achieve it in the target group of interest to the bank. Nowadays, total trust in a bank is derived from general trust in the financial system and the financial sector. FinTechs that are currently operating in the market benefit from the stability of these systems in effect raising their own trust levels. Over time, however, an increasing number of customers will differentiate between these systems and diversify and differentiate their level of trust accordingly. (Table 5)

When analyzing the consideration of the level of customer trust, it is useful to contrast it with the level of satisfaction. As already indicated, these elements are closely linked. As the survey revealed, most respondents are relatively satisfied with their current financial services. (Appendix 8) This may indeed mean that, when generalized, the current market situation (no crisis, no problems in the financial system) is conducive to a higher degree of customer trust. In the event of uncontrollable phenomena, leaks or hacking attacks, however, this can change rapidly. Such risks must be considered in the strategies of financial institutions, especially FinTechs, which will undoubtedly be more vulnerable to such sudden changes due to their young nature.

FinTech strategy should therefore consider customer trust. However, this element should not, at present, be the main criterion for planning this strategy, but rather be considered in the category of potential barriers or opportunities. Currently, the level of trust towards these entities is not strong enough to determine the entire FinTech strategy on its own.

Third research question formulated in this thesis was: „**How can FinTechs increase the degree of customer trust?**”

In the survey, a question was asked about the elements that respondents felt would increase the level of perceived trust in FinTech. Respondents identified six main solutions. Each of these garnered between 40 and 51% response rate (multiple choice question). Actions that FinTechs can take to increase customer trust include – enhanced security measures, increase the level of transparency, provide more clear information on fees and offer conditions, achieve more regulatory endorsements, introduce better (more human) customer service and implement more user-friendly interface. Those can be the examples or directions of the changes that FinTech should implement to increase the degree of customer trust. (Appendix 22)

At this point, a large proportion of FinTechs have attractive and effective offerings. The products and services offered by these entities are of high quality. The challenge here is to adapt these offers and formulate communications that will reach the average customer. FinTechs and technology are developing so rapidly that communication and marketing very often cannot keep up. For this reason, the barrier to entry to start using such services is often too high for the average user. In the future, FinTechs should focus on transparency and normalizing the incidence of their offerings in the mainstream financial market. (Table 6)

Currently, FinTechs primarily target a specialized audience. The basis for building trust is to expand the user base. As they acquire a larger customer pool and acquire a longer operating history, customer trust will come as a natural result. FinTechs need to tailor their offering more to the average user. The style of communication, the type of products must some extent move closer to well-known market standards. Of course, technology and innovation can still be a source of innovation, but they cannot be responsible for creating an aura of mistrust. In other words, the competitive advantage of these companies must not only be based on effective and attractive products, but also on the culture and communication of the organization. (Table 5)

Currently, the main barriers to FinTech growth are due to their limited budgets and their poor reputation in society. For many people, these entities remain interesting financial curiosities to which they would not be able to move their money. Some of these people are permanently attached to the offerings of traditional banks. It seems that over-aggressive promotion of such solutions may not be the optimal solution. Over time, the market will see more customers more open to new technological solutions.

In the meantime, FinTechs should focus on building their position in the market based on the stability and attractiveness of their offering. Their activities should focus primarily on areas where traditional banks are deficient. (Table7)

A set of questions exploring the areas that may be responsible for increasing customer trust showed that the following actions may have the greatest potential to achieve this - improving the presentation of the offering, pricing and services offered by FinTechs, communicating more regularly with customers about changes and improvements in the way institutions operate, and obtaining greater compliance and certification from current financial supervisory institutions (for example, a banking license). These are areas in which FinTechs should develop in order to have an effective impact on customer trust. (Appendix 31)

Finally, the information gathered as a result of the research should be compared with the review of studies and research carried out in the literature review. This will make it possible to compare and identify relevant changes and updates concerning the FinTech sector over the last years.

In a report published two years ago, the main barriers identified for the FinTech sector were the high regulatory requirements, the limited ability to collaborate with key stakeholders and the lack of necessary knowledge and visibility. (Figure 17) Problems arising from a lack of data and experience have since been addressed. FinTech players have become increasingly active in the market gaining the necessary data. They are constantly growing as a result of collaborations with other institutions. The challenge still remains, however, in terms of legislation and regulation. Financial regulators are still often unable to adequately adapt the law to the solutions offered by FinTech. For this reason, they cannot confidently accept all the activities of these entities. It will probably still be a long time before regulators are able to adapt the pace of the law to the pace of the industry. What is worse, it cannot be excluded that this pace will only increase in the coming years due to the further development of technology. (Table 7)

In a study carried out eight years ago, the third most important factor responsible for the decline in trust towards financial institutions was the short time and duration of operations. This element in recent years could be attributed to the entire FinTech industry, that is, a sector in which numerous new entities with a completely new history and operating model have emerged. (Figure 19)

Duration is still one of the key elements that affect the level of trust. The persistence of a financial institution over a long period of time indicates its stability. Already, FinTechs, which were the first to join the financial market, are gradually being consolidated in the minds of average users. It will still be some time before the entire industry is accepted by average customers. Despite the potential to accelerate this process, it appears to be a natural transformation of the financial sector that does not require special measures. Key here is to maintain stability and operational continuity and look forward to changing attitudes towards the FinTech sector. Customer trust will therefore be the result of these market transformations not the result of the actions of individual companies. (Table 5)

In data from four years ago, FinTechs were among the least trusted financial institutions in Poland. This was the opinion of the respondents surveyed at the time. At that time, only 32% of respondents expressed the ability to trust such entities (in comparison, 20% trusted SKOKs). FinTechs had one of the last positions in the entire ranking. They were trusted by less than one in three respondents. There were more people who did not trust them or had a neutral attitude. (Figure 21) FinTechs have undoubtedly become more important to society thanks to a clearly more attractive offering and a growing pool of customers. This can be seen both in the survey conducted for this thesis and in the interviews with experts. Of course, they are still a long way from the level of traditional banks, but the changes in customer sentiment in recent years indicate that it is not impossible to reach this level. Change is possible through general trends in all customers. It will be a change in habits and in the perception of the entire industry. This will be driven by generational change (more open to technology), technological change (greater demand for the use of technology) and competitive change (more direct competition between financial institutions). (Table 8)

In 2016, the report identified key areas of opportunity for the FinTech sector to grow in attractiveness. Looking back over the years, it is safe to say that the ability to reduce costs, the possibility of gaining a competitive edge, increased customer retention and the ability to create new revenue channels identified there were all correct. (Figure 15) Use of technology has allowed attractive results to be achieved in all areas. Currently, there are examples of FinTechs that have a significant presence in all of these business areas. FinTechs are undoubtedly a form of transformation of the financial sector. This is already being recognized both by those who choose to create them and by large banks, which choose to use their solutions in their more traditional business models. (Table 6)

Table 9 Summary of research results (Survey & Interviews 1-4)

Source of findings	First Research Question	Second Research Question	Third Research Question
Surveys	<p>Customer trust levels in FinTech are lower than in traditional banks are increasing.</p> <p>Trust is strongly influenced by the safety, efficiency and ease of services</p>	<p>Customer trust determines the level of customer satisfaction.</p> <p>Customer trust reduces the risk of losing a customer</p> <p>Customer trust increases the number of new customers.</p>	<p>FinTechs should simplify their offerings and increase information transparency</p> <p>FinTechs should get a higher level of acceptance from the regulator</p> <p>FinTechs should improve the level of security and quality of communication channels</p>
Interview 1	<p>FinTechs must progressively gain customer's trust by developing their products steadily and informing them about their technology.</p>	<p>FinTechs are concentrating on educating customers, being transparent, and obtaining governmental backing. Their objective is to offer a safe and easy-to-use experience in order to progressively establish trust.</p>	<p>By concentrating on the industry's steady growth, informing customers about their technology, and securing legislative backing to guarantee dependable and secure services, FinTechs may boost customer trust.</p>
Interview 2	<p>Although it is still lower than that of traditional banks, trust in FinTechs is rising. Because FinTechs are relatively new to the industry and there is perceived volatility, customers are wary.</p>	<p>FinTechs foster trust by offering strong security and open communication. They use cutting-edge technology and artificial intelligence to improve customer satisfaction and establish a reputation for dependability and security.</p>	<p>FinTech companies must to strengthen their security protocols, uphold operational openness, and leverage artificial intelligence to provide tailored and effective services. Developing a solid and favorable reputation over time will be beneficial.</p>
Interview 3	<p>Compared to traditional banks, FinTechs have less trust, mostly because of their shorter history and lesser market share and reputation.</p>	<p>For FinTechs, trust is an essential performance metric. By providing individualized services, open lines of contact, and data and transaction security, they want to foster a greater sense of trust.</p>	<p>Providing easy to understand intelligible products is essential to increasing customer trust. It is crucial to make a commitment to transparent communication and provide strong security measures.</p>
Interview 4	<p>Customers' degree of trust is impacted by the fact that many view FinTechs as supplementary services rather than as primary suppliers of financial services.</p>	<p>FinTech companies are incorporating trust into their business plans by securing formal licenses, partnering with well-known individuals to advertise themselves, and streamlining their products to make them easier for customers to access and comprehend.</p>	<p>FinTechs should concentrate on getting legislative guarantees, promoting themselves with well-known individuals, and clearly and easily presenting their products in order to establish customer trust.</p>

Source: Source: Own creation based on results presentations

Conclusions and Recommendations

Based on the research, it has been established that customer trust is one of the key determinants of success in the financial sector. As the research review showed, FinTech institutions are entities that do not yet enjoy such a high level of this trust. Even though the level of this trust has been increasing over the past few years, it still significantly lags that of traditional banks. Despite this, based on the author's research, it was possible to identify tools and ways to close this gap.

Currently, the main competitive advantage of FinTech is more attractive from the perspective of the customer. On the side of traditional institutions stands a better reputation, support from various stakeholder groups and a higher degree of social acceptance. Trust is a resource that traditional banks have had to work for over the years. In the case of FinTech, it will still be some time before they can reach a similar level. This will involve challenges due to formalization and regulation by regulatory bodies. FinTechs very often operate on solutions that are not yet properly vetted and defined by law. For this reason, they raise concerns among some customers.

However, as experts pointed out, in the perspective of the next years, this element will be reduced. As time goes by, more and more customers will recognize the competitive advantage of FinTechs due to their efficiency. Financial institutions based on technology and innovation will gain their market position based on increasing recognition. If they manage to maintain an adequate level of security, lack of security scandals and reduce the number of fraudsters in their circle, they will gradually build customer trust.

On the academic side, it is necessary in the coming years to continue to observe changes in the level of customer trust towards FinTech institutions. It is likely that this indicator will change and increasingly approach the level characteristic of traditional financial institutions. Through qualitative interviews with customers, it is possible to dig even deeper into the topic and identify actions and areas that can at least partially accelerate this process. This work focuses on interviews with experts associated with the industry. While qualitative research results have been obtained that have identified some general trends and conclusions, they are not deep enough to predict the direction of change in the years to come.

As for the practical recommendations resulting from this work, they can be divided into two parts, one of which will be aimed at FinTech and the other at traditional financial institutions:
FinTech:

- These entities need to focus on formulating their service offerings in the most understandable way possible. Limited trust on the part of some customers means that to decide on an offering, they need the certainty that comes from its clarity. Nowadays, offers from traditional institutions are extremely simple and not very complex. Even though FinTechs very often have highly developed products, they need to present them in a way that is easy to understand for the average user. Transparency of the offer, the absence of hidden terms and conditions and the stability of the services will be a source of building customer trust. (Interview 3)

- These institutions cannot focus only on continuing to implement more efficient as well as attractive technologies. In many cases, the public, regulators and other stakeholders may not be able to keep up with the pace of change. Efforts to manage stakeholders and bring them together and encourage cooperation are a necessary element for the effective development of the FinTech ecosystem. Such operation will affect with growing customer trust. (Interview 4)

- The FinTech industry must avoid major scandals. When a large proportion of customers equate all such entities with each other the occurrence of a scandal can reverberates throughout the sector. In the case of traditional financial institutions, where individual entities have a more firmly established position, this threat is less. For this reason, FinTech entities should actively invest in enhancing their cyber security. Over the time by avoiding the scandals the level of the customer trust toward entire sector and individual companies will increase gradually. (Interview 2)

- One way to reach customers who do not have a high level of trust in the FinTech industry may be to outsource services. Many large financial institutions, banks are actively interested in taking advantage of the more attractive and cost-effective solutions offered by small FinTechs. Such an approach may make FinTechs not have to fight for the trust of the retail customer. In this situation, if they tailor their services to large enterprises, they are the ones who will become their customers. (Interview 1)

With the disappearance of the main barrier of lack of trust in some customers, more and more people will appreciate the innovation of solutions offered by FinTech. The key here is to maintain one's characteristics and focus on specialization in specific areas. Limiting the size of the organization and using technology in a specific area of activity can lead to the formation of a permanent competitive advantage over traditional banking institutions. If successful, it is in these areas that these entities will be more trusted than banks. (Table 9)

On the other hand, as for the actions that will be taken by traditional financial institutions, they will maintain their position for years to come based on their resources, market position, high level of customer trust and skillful stakeholder management. Over time, in the face of further technological development, they will be forced to absorb some of the solutions characteristic of the FinTech sector. (Interview 3)

Traditional banking institutions that have many customers will gradually decide to make their offerings more attractive by implementing solutions specific to FinTech entities. Of course, this transformation will take place slowly, but gradually innovations will find their way to these entities as well. This will take place through internal innovation processes or through acquisitions of FinTechs with such solutions. Due to their organizational size, these entities will not be able to keep up with the small and specialized FinTechs, but through proactive changes they will not lose their competitive position heavily. (Interview 1)

With the development of technology, there will be an increasing number of financial players in the market offering different solutions. Many of them will have a similar level of payoff and attractiveness. It is at this stage that trust on the part of the customer will gain real importance. In a situation where different entities will offer similar offerings; it is the attitude and willingness of the customer to start using their services that will be key. Looking ahead to the next few years, where more and more financial entities will begin to base their key functional areas on advanced technology, trust will prove to be a key element. This is because over time, the solution presented may be so technically advanced that defining it concretely will be impossible. In such a situation, trust on the part of the customer will be the main factor responsible for the customer's decision to choose an offer. FinTech sector faces, therefore, the challenge of building a stable level of trust with customers. In the perspective of the next few years, this is achievable. Nonetheless, it will require specific actions discussed in this work aimed at overcoming current barriers. (Table 9)

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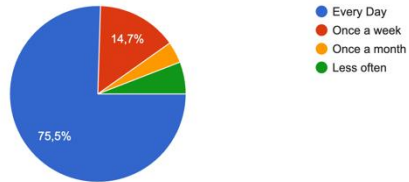
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Appendix

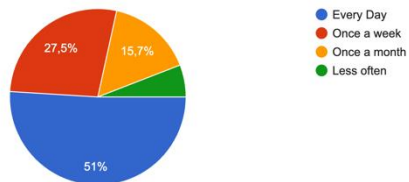
Appendix 1

1) How often do you use financial / banking services or products?
102 odpowiedzi



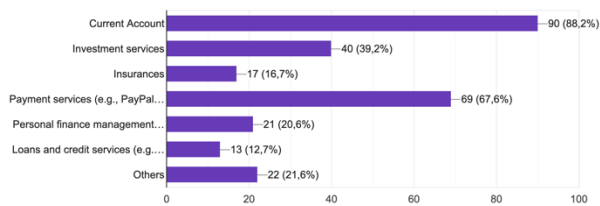
Appendix 2

2) How often do you check your financial situation?
102 odpowiedzi



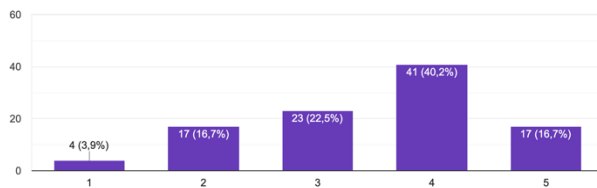
Appendix 3

3) What types of financial services do you use most frequently? (Select all that apply)
102 odpowiedzi



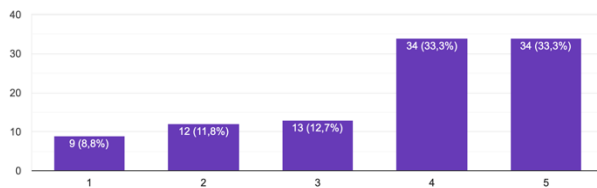
Appendix 4

4) To what extent do you feel informed about financial products and services available to you?
102 odpowiedzi



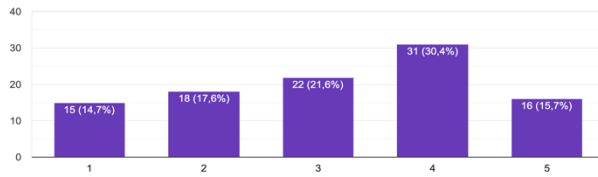
Appendix 5

5) How important is the role of technology in your financial management?
102 odpowiedzi



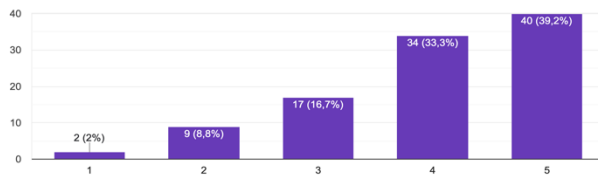
Appendix 6

6) How important is the ethical or social responsibility policy of a financial service provider / bank to you?
102 odpowiedzi



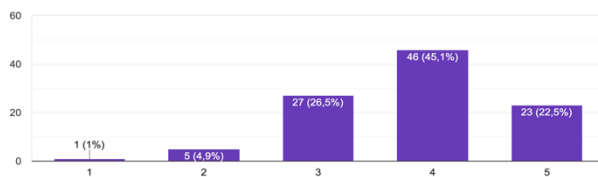
Appendix 7

7) How would you rate the convenience of using online or mobile platforms for financial operations?
102 odpowiedzi



Appendix 8

8) How would you assess your satisfaction with the financial products and services you are currently using?
102 odpowiedzi



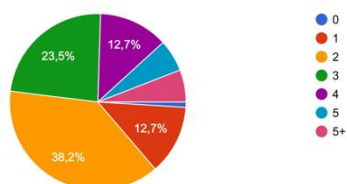
Appendix 9

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Cost of services	102	1	5	3.57	1.361
Ease of use	102	1	5	3.76	1.136
Effectiveness of service	102	1	5	4.05	1.057
Customer service	102	1	5	3.36	1.159
Security features	102	1	5	4.19	.972
Recommendations from others	102	1	5	3.22	1.131
Reputation of provider	102	1	5	3.58	1.156
Valid N (listwise)	102				

Appendix 10

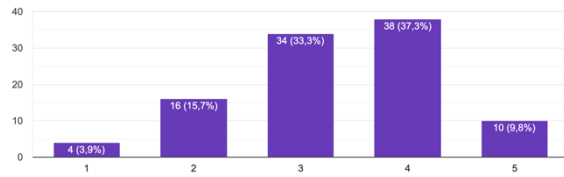
10) How many banks and institutions providing financial services do you have?
102 odpowiedzi



Appendix 11

11) How much do you / would you trust financial technology (FinTech) companies with your personal and financial information?

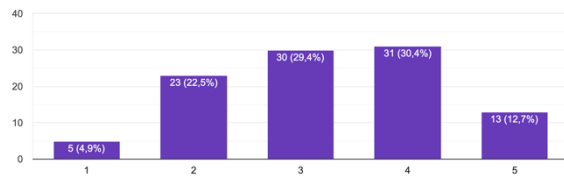
102 odpowiedzi



Appendix 12

12) To what extent do user-friendly interfaces and ease of use influence your trust in a FinTech application?

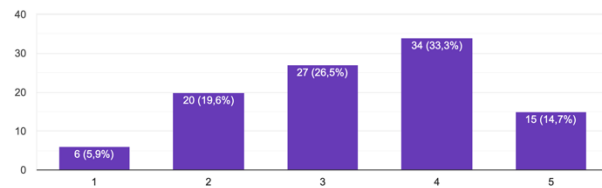
102 odpowiedzi



Appendix 13

13) To what extent do brand and reputation of FinTech provide influence the level of your trust?

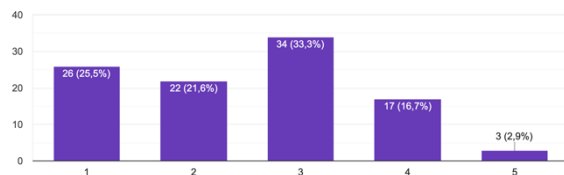
102 odpowiedzi



Appendix 14

14) To what extent do social media presence and engagement by a FinTech company influence your trust in them?

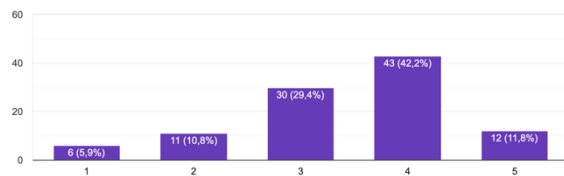
102 odpowiedzi



Appendix 15

15) To what extent do endorsements from regulatory bodies or compliance with financial regulations impact your trust in FinTech services?

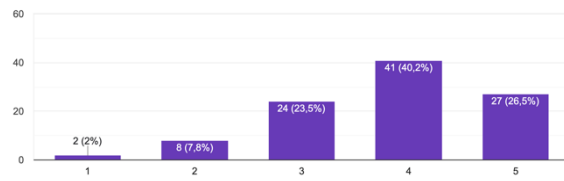
102 odpowiedzi



Appendix 16

16) To what extent do clarity of information (fees, policies, procedures) provided by FinTech services building your trust?

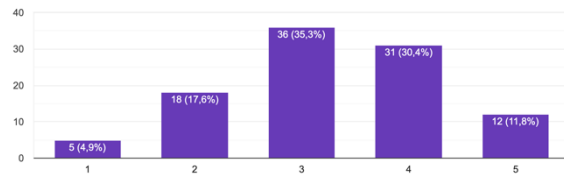
102 odpowiedzi



Appendix 17

17) To what extent does the responsiveness of customer support impact your trust in a FinTech company?

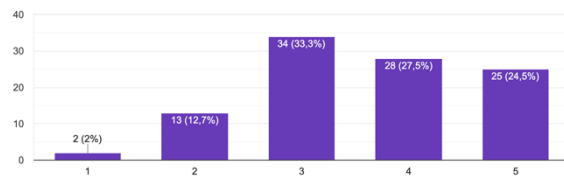
102 odpowiedzi



Appendix 18

18) To what extent do regular updates and improvements to the service influence your trust in a FinTech platform?

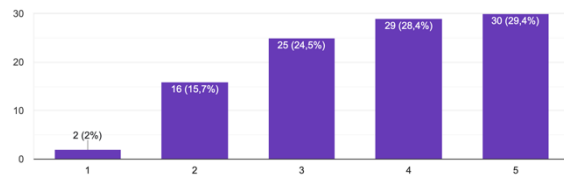
102 odpowiedzi



Appendix 19

19) How concerned are you about the security of your financial data when using online or mobile financial services ?

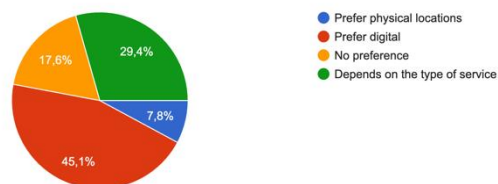
102 odpowiedzi



Appendix 20

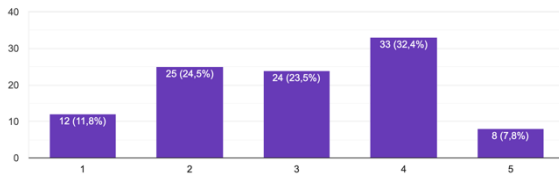
20) How does the presence of physical locations a FinTech service influence your trust level?

102 odpowiedzi



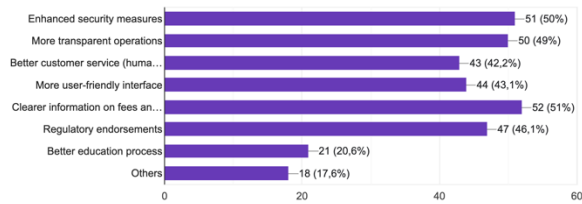
Appendix 21

21) How likely are you to trust a FinTech service more than to traditional financial institutions (bank) you are familiar with?
102 odpowiedzi



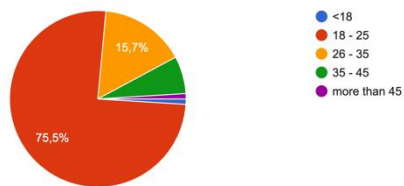
Appendix 22

22) What element would increase your trust towards FinTech service? (select all that apply)
102 odpowiedzi



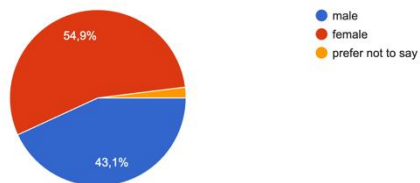
Appendix 23

23) How old are you? (give your age in number of years)
102 odpowiedzi



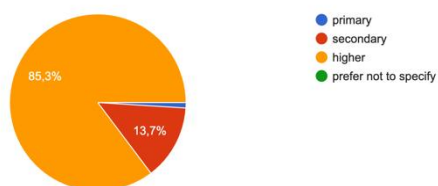
Appendix 24

24) What is your gender?
102 odpowiedzi



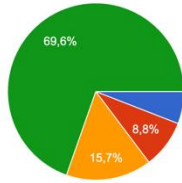
Appendix 25

25) What is the highest level of education you have completed?
102 odpowiedzi



Appendix 26

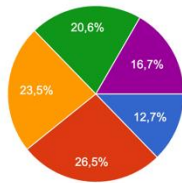
26) Where do you live?
102 odpowiedzi



- village
- small city (up to 50 thousand residents)
- medium city (from 50 to 200 thousand residents)
- large city (more than 200 thousand residents)
- I prefer not to specify

Appendix 27

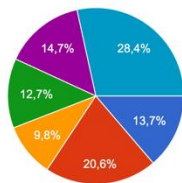
27) What is your average monthly income?
102 odpowiedzi



- I do not have regular income
- 1 - 6000 PLN
- 6001 - 12000 PLN
- Over 12000 PLN
- I prefer not to specify

Appendix 28

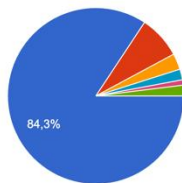
28) What is the total number of your savings?
102 odpowiedzi



- I do not have any savings
- 1 - 30000 PLN
- 30001 - 60000 PLN
- 60001 - 90000 PLN
- Over 90000 PLN
- I prefer not to specify

Appendix 29

29) In which country do you currently live?
102 odpowiedzi



- Poland
- Portugal
- Germany
- France
- Italy
- UK
- Other EU-country
- Non-EU country

Appendix 30

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
4) To what extent do you feel informed about financial products and services available to you?	102	1	5	3.49	1.079
5) How important is the role of technology in your financial management?	102	1	5	3.71	1.287
6) How important is the ethical or social responsibility policy of a financial service provider / bank to you?	102	1	5	3.15	1.300
7) How would you rate the convenience of using online or mobile platforms for financial operations?	102	1	5	3.99	1.048
8) How would you assess your satisfaction with the financial products and services you are currently using?	102	1	5	3.83	.868
Valid N (listwise)	102				

Appendix 31

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
12) To what extent do user-friendly interfaces and ease of use influence your trust in a FinTech application?	102	1	5	3.24	1.092
13) To what extent do brand and reputation of FinTech provide influence the level of your trust?	102	1	5	3.31	1.126
14) To what extent do social media presence and engagement by a FinTech company influence your trust in them?	102	1	5	2.50	1.132
15) To what extent do endorsements from regulatory bodies or compliance with financial regulations impact your trust in FinTech services?	102	1	5	3.43	1.029
16) To what extent do clarity of information (fees, policies, procedures) provided by FinTech services building your trust?	102	1	5	3.81	.982
17) To what extent does the responsiveness of customer support impact your trust in a FinTech company?	102	1	5	3.26	1.043
18) To what extent do regular updates and improvements to the service influence your trust in a FinTech platform?	102	1	5	3.60	1.055
Valid N (listwise)	102				

Appendix 32

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
11) How much do you / would you trust financial technology (FinTech) companies with your personal and financial information?	102	1	5	3.33	.988
19) How concerned are you about the security of your financial data when using online or mobile financial services ?	102	1	5	3.68	1.118
21) How likely are you to trust a FinTech service more than to traditional financial institutions (bank) you are familiar with?	102	1	5	3.00	1.169
Valid N (listwise)	102				