DOI: https://dx.doi.org/10.26500/JARSSH-06-2021-0102



# Consumer perception in the use of financial technologies: Comparison of Turkey and Azerbaijan

## SHALALA ASADOVA\*, EMINE EBRU AKSOY

<sup>1,2</sup> Department of Business Administration, Ankara Haci Bayram Veli University, Ankara, Turkey

#### **Abstract**

Aim: The concept of financial technology, which grew out of the digitalization of the financial sector, is becoming more and more significant every day. This research examines how people in Turkey and Azerbaijan feel about using financial technologies and about seeing if those feelings vary depending on demographic factors.

**Method:** This research employed surveys for this purpose in both countries. An overall sample size of 397 questionnaires was used for the study. The survey data were analyzed by the SPSS 22 program. Non-parametric tests were used to analyze the opinions of the general public. **Findings:** The tests' results show that in both countries, consumers' perspectives on the usefulness of financial technologies vary with age and level of education. Consumers in Turkey have a more negative outlook on the efficacy of financial technologies than those in Azerbaijan. That Turkey is closer to the developed world and smart capital and uses these sorts of business models more frequently than Azerbaijan may account for the disparity.

**Implications/Novel Contribution:** This research provides information on consumer attitudes in two different countries. It illuminates the demographic factors that shape consumer preferences. There hasn't been a lot of research done on this topic in either country.

Keywords: Financial technology, Digitalization, Innovation, Financial services, Consumer perception

Received: 9 September 2020 / Accepted: 11 November 2020 / Published: 15 March 2021

### INTRODUCTION

High-access technology is at the heart of the digitalization process, which also impacts the demographics and culture of a society (Kutulay, 2016). Digital transformation is reorganizing many industries, and its effects can be felt across many domains. Artificial intelligence, robotics, developed data collection applications, and other tools are just some of the ways that digitalization is transforming our personal, social, and economic lives (Eisebith, Messner, & Matthies, 2018).

The financial services industry is also changing at this time due to the influence of new technologies. The financial services industry is notoriously open to new ideas and is frequently at the forefront of adopting cutting-edge IT solutions (Eickhoff, Muntermann, & Weinrich, 2017; Senawat, Zarkasyi, & Gafur, 2018). Modern technological advancements have significantly impacted how financial services are consumed. The term "fintech" (short for "financial technology") was coined to describe the impact of new technologies on the financial sector (Gelis & Woods, 2014; Ripain, Amirul, & Mail, 2017). The widespread adoption of digital tools within the financial services industry is collectively called "financial technology" (Financial Stability Board, 2017). Fintech is an acronym for "financial technology," which describes companies whose core competencies lie in developing cutting-edge financial technologies and providing cutting-edge financial services. Many different definitions of "financial technology" have been proposed. According to the Financial Stability Board, "Fintech" refers to "financial innovation enabled by technology that significantly impacts financial markets, institutions, and the process of providing financial services through the adoption of novel business models, practices, and procedures." It is impossible to formally define the fintech concept based on any legislation or law because different fintech business models are subject to different regulations because they offer different products and services in different areas (Dorfleitner, 2017).

The lending process, the backbone of the financial services industry, has begun to undergo a reorganization

<sup>\*</sup>Corresponding author: Shalala Asadova

<sup>†</sup>Email: shalala.asadova96w@gmail.com

due to the effects of digitalization on the sector. The financial services sector met digital platforms that connect potential borrowers and investors directly, bypassing the need for traditional intermediary financial institutions. Peer-to-Peer (P2P) lending is a business model that emerged as an alternative to conventional financial intermediaries like banks, intending to provide a more streamlined approach to borrowing money (Mateescu, 2015). A peer-to-peer (P2P) lending platform is a business model that allows lenders and borrowers to make all of the key decisions in the lending process while the company makes money by charging a fee for its services (Bachmann et al., 2011; Lalonde, 2017). The crowdfunding platforms that are project-based versions of these sites are yet another manifestation of the digital revolution. It's a novel strategy that pools resources from numerous investors to finance a single endeavor (United Nations Development Program, 2017). It's possible to invest in businesses on the internet through these platforms using various digital business models, including debt, equity, donation, and reward (Atsan & Erdoğan, 2015).

Digital innovation has begun to reorganize and create new business models in many areas of the financial services industry, including investment management. Robo advisors are a product of the financial services industry's push toward digitization; they aim to make financial advice more widely available and offer customized, algorithm-driven recommendations (Perficient, 2019). This digital business model comprises a set of algorithms that tailor an investor's portfolio to their specific needs and comfort level with risk (Ivanov, Snihovyi, & Kobets, 2018).

One of the main forces behind the digitalization of trade is the rise of digital wallets, which are also significant business models. One definition of a "digital wallet" is "a software application that stores a user's credit card, identity, and address information and automatically provides this information during commercial transactions" (Gökçen, 2007). Common digital wallet applications include Android Pay, Chase Pay, Amazon Pay, Samsung Pay, Apple Pay, Paypal, Alipay, and WeChat Pay (Merchant Machine, 2018).

As new technologies continue to have a profound impact on the structure of existing businesses, it stands to reason that the insurance industry, which is intrinsically linked to the goods and services provided by these models, will also be impacted by the rise of the digital age. The concept of insuretech emerged due to the industry's transition to digital practices. Thanks to real-time data analysis, insuretech companies can tailor their policies to each customer, offer fully digital and secure service with smart contracts built on the blockchain, and gain a cost and speed advantage by employing drones to investigate accident sites in inaccessible and potentially dangerous locations (Ekonomist, 2017; Yazici, 2018).

The term "digitalization" is often used to describe the widespread influence of modern communication and information technologies on all facets of society and culture (Schumacher, Sihn, & Erol, 2016). While investing in software development is crucial for realizing the cost and competitive advantages of the digitalization process, so is a thorough assessment of how customers will react to the change. Some countries are lacking in this area, even though the most successful businesses in this sector are in developed nations. Steps toward successfully adapting society to innovations require in-depth research into consumer perception and understanding how that perception shifts based on demographic and psychographic factors.

The primary objective of this research is to examine whether or not there is a statistically significant difference in consumers' perceptions of the usefulness of financial technologies based on factors like age, gender, education, and income. When looking at the relevant literature, it becomes clear that there haven't been many studies done on this topic in either country, and there aren't enough data sets for in-depth analyses. As a result, polls were distributed amongst consumers in both nations to gauge their thoughts.

Firstly, this study includes a literature review, wherein the primary research outcomes are analyzed. The second section focused on the methodology, research questions, and hypotheses that guided the study. The study's final section included data gathered from consumer surveys in Turkey and Azerbaijan about their experiences with financial technologies. The survey data were analyzed with SPSS 22.



### LITERATURE REVIEW

Since fintech is still a relatively novel idea, not many scholarly works are devoted to it. There is no cross-cultural study of how Turks and Azeris each view the other's use of financial technologies. Still, some studies look at consumers' perspectives from various angles.

To investigate the convenience of online banking, a survey was conducted by Srivastava (2007). He looked into what factors influence people's attitudes toward online banking. The study looked into whether or not factors like participants' gender, religious affiliation, level of education, and household income influenced their attitudes toward internet banking. The research showed that demographic factors like respondents' sex, level of education, and household income all play a role in how people form opinions. Internet banking is more common among those with higher incomes and levels of education and men. It was also found that customers' religious beliefs do not influence their impressions of internet banking. Features like an intuitive interface, low fees, and stringent safety measures positively influence consumers' attitudes toward internet banking.

The use of fintech services was also studied from the perspective of different demographic groups due to the work of Kus (2017). She limited her research to how mobile banking services are used. Customer satisfaction with mobile banking apps has been surveyed. Higher-educated users, such as Srivastava (2007), have more developed perspectives, as Kus (2017) found in her research. Contrary to the findings of Srivastava (2007), Kus (2017) found no significant difference in consumer perception based on either income or gender. Additionally, the study found that young consumers' perceptions are higher than those of older generations. Chansaenroj and Techakittiroj (2015) analyzed mobile banking usage from a behavioral intention perspective, emphasizing the correlation between user-friendliness and intent to use the service.

Chuang, Liu, and Kao (2016) also analyzed consumer perception in using fintech services through behavioral intentions, not demographic characteristics. The study discovered that positive attitudes toward using fintech services were related to trust in brands and services, perceived usefulness, and perceived ease of use.

In addition to Chuang et al. (2016), Hu, Ding, Li, Chen, and Yang (2019) looked into the various compelling factors influencing the spread of fintech solutions. It was also determined that the brand factor significantly affects consumer perception Hu et al. (2019). Also, according to Semuel and Lianto (2014), a trustworthy brand image can win over customers by making them feel safer. As opposed to Chuang et al. (2016), Hu et al. (2019) found that users' perceptions of fintech's usability had no bearing on their decision to adopt the technology. It was also found that while state support and user innovation positively affected consumer perception, the perception of risk had the opposite effect.

Behavioral factors like perceived ease of use, perceived usefulness, personal innovation, security concerns, and demographic profile were studied by Tun-Pin et al. (2019) to determine their impact on fintech business model adoption. According to Chuang et al. (2016), it was determined that consumers' impressions of a product are positively impacted by its perceived usefulness and ease of use Hu et al. (2019). User creativity has been linked to favorable outcomes in product acceptance and adoption. Gender-specific analyses led to the same conclusion reached in Srivastava (2007): men tended to have more developed perceptions.

Numerous studies were thus carried out to examine how consumer's demographic and behavioral characteristics influence the concept of financial technologies in general, or internet banking, which is a part of this concept. However, no research has been done comparing and contrasting consumer attitudes toward financial technology use in Turkey and Azerbaijan. The current situation underscores the relevance and necessity of this research.

### RESEARCH METHOD

The study's overarching objective is to examine how people in Turkey and Azerbaijan feel about using financial technologies and whether those feelings vary depending on demographic factors. To accomplish this goal, a survey was used to collect information. Three hundred seventy-nine questionnaires were included in the study, 45.6% of which were completed by citizens of Turkey and 54.4% by citizens of Azerbaijan. SPSS 22 was used to conduct the statistical analysis of the survey data. The first section of the survey includes questions about the participants' demographics and experience with various financial technology models. A 5-point Likert scale was used to analyze audience feedback in the following section. The expressions used to gauge consumers' opinions



have been given more nuanced forms through factor analysis. This led to the categorization of Likert-scale responses into two groups: those expressing skepticism about the efficacy of financial technologies and those expressing a high degree of confidence in their dependability. Consumers' demographic characteristics and perspectives have been tested for statistical significance using Kruskal-Wallis and Mann-Whitney U tests.

## Questions and Hypotheses of the Research

This study aims to compare and contrast consumers' perspectives in the two countries to see if there are any significant differences in how they view the use of financial technologies based on factors like age, gender, education, and income. Two research questions were developed for this purpose, along with five primary and ten secondary hypotheses.

**Research question 1**: Determining whether consumer perception of financial technologies differs significantly according to demographic characteristics such as age, gender, income, and educational level.

- H1: Consumer perception in the use of financial technologies differs significantly according to age groups.
- **H1.1**: Consumer perception against the efficiency of financial technologies differs significantly according to age groups.
- **H1.2**: Consumer perception against the reliability of financial technologies differs significantly according to age groups.
- **H2**: Consumer perception in the use of financial technologies differs significantly by gender.
- H2.1: Consumer perception against the efficiency of financial technologies differs significantly by gender.
- H2.2: Consumer perception against the reliability of financial technologies differs significantly by gender.
- H3: Consumer perception in using financial technologies differs significantly according to income level.
- **H3.1**: Consumer perception against the efficiency of financial technologies differs significantly according to income level.
- **H3.2**: Consumer perception against the reliability of financial technologies differs significantly according to income level.
- H4: Consumer perception of using financial technologies differs significantly according to the level of education.
- **H4.1**: The consumer perception against the efficiency of financial technologies differs significantly according to the level of education.
- **H4.2**: The consumer perception against the reliability of financial technologies differs significantly according to the level of education.

**Research question 2**: Determining whether consumer's perception of financial technologies in Azerbaijan and Turkey differs significantly.

- **H5**: Consumer perception differs significantly in using financial technologies by country.
- H5.1: Consumer perception differs significantly against the efficiency of financial technologies by country.
- H5.2: Consumer perception differs significantly against the reliability of financial technologies by country.

## RESULTS AND DISCUSSION

## **Frequency Analysis**

Frequency analyzes were conducted on the demographic characteristics of the participants in both countries. The analysis results related to gender were given in the Table 1. As seen from Table 1, 47.5% participants are female, and 52.5% are male in Turkey. In Azerbaijan, 47.7% of participants are female, and 52.3% are male.



Table 1: Frequency analysis related to gender

	Female	%	Male	%
Turkey	86	47.5	95	52.5
Azerbaijan	103	47.7	113	52.3

The frequency analysis results related to age are given in Table 2. According to the results, 44.2% of participants are between the ages of 26-35, 40.9% are between the ages of 18-25, and other age groups follow them in Turkey. In Azerbaijan, 54.6% of participants are between the ages of 18-25, 21.3% are over the age of 45, and other age groups follow them.

Table 2: Frequency analysis related to age

	18-25	%	26-35	%	36-45	%	Over 45	%
Turkey	74	40.9	80	44.2	19	10.5	8	4.4
Azerbaijan	118	54.6	36	16.7	16	7.4	46	21.3

The frequency analysis results related to the level of education were given in Table 3. In Turkey, most of the participants have undergraduate (44.3%) and graduate (43.1%) levels of education. Participants whose education level is undergraduate (48.1%) and graduate (36.1%) also constitute the majority in Azerbaijan.

Table 3: Frequency analysis related to level of education

	ruble 5. I requestly analysis related to level of education							
	Primary,	%	Associate Degree	%	Under-Graduate	%	Graduate	%
	Secondary or							
	High School							
Turkey	12	6.6	11	6.1	80	44.2	78	43.1
Azerbaijan	18	8.3	16	7.4	104	48.1	78	36.1

The frequency analysis results related to monthly income were given in Table 4 in each country's currency. As seen, participants included in the first two income groups in both countries constitute the majority.

Table 4: Frequency analysis related to income level

		.,	,		
	Frequency	%		Frequency	%
0-1500 TL	67	37	0-500 AZN	89	41.2
1501-3000 TL	43	23.8	501-1000 AZN	81	37.5
3001-4500 TL	30	16.6	1001-1500AZN	28	13
4501-6000 TL	27	14.9	1501-2000 AZN	5	2.3
More than 6000 TL	14	7.7	More than 2000 AZN	13	6

As seen from Table 5, in Turkey, mobile banking applications (155 people), online payments and money transfers (111 people), and contactless payments (94 people) are the most widely used models in Turkey. In Azerbaijan, online payments and money transfers (140 people), mobile banking applications (113 people), and contactless payments (68 people) are the most commonly used fintech models.



Table 5: Frequency analysis related to the models used

	Turkey	Azerbaijan
Crowdfunding platforms	1	4
Robo-advising services	1	0
Contactless payments	94	68
Digital wallets	62	35
Mobile banking applications	155	113
Online payments and money transfers	111	140
Insuretech services	17	10
None of them	12	29

## **Factor Analysis**

Factor analysis, which is a multivariate analysis method, was used to divide the expressions in the 5-point Likert scale into meaningful groups. Previously, Kaiser-Meyer-Olkin (KMO) and Bartlett's tests were applied to check whether the data sets were suitable for this analysis. Results of the tests were given in Table 6. According to the results, KMO values are over 0.5, and the *p* values of Bartlett's test are less than 0.05 in both countries. In this case, data sets are suitable for factor analysis.

Table 6: (KMO) and bartlett tests

		Turkey	Azerbaijan
KMO test for sampling adequacy		0.886	0.925
Bartlett Test of Sphericity	Ki-square	1.586.514	2.352.148
	df	66	66
	p	0.000	0.000

Factor analysis was conducted on the data from both countries following conformity testing. Principal Component Analysis was utilized for factor extraction, with Kaiser Normalization and Direct Elimination utilized for rotation in the analysis. In Table 7, the results of the test were displayed. After analyzing "Perception against the efficiency of financial technologies" and "Perception against the reliability of financial technologies," 12 unique expressions were grouped into these two categories for both countries. In only three rounds of rotation did we reach convergence.

Table 7: Factor matrix

	Turkey		Azerba	ijan
	1	2	1	2
I think technological innovations related to financial services make our daily life easier.	0.908		0.908	
I think that financial technology services working independently from the location increases	0.908		0.908	
efficiency.				
I think financial technology services save time.	0.907		0.907	
I think that financial technology services working independently from time increases efficiency.	0.900		0.900	
I think the use of financial technology services is more economical.	0.858		0.858	
I think financial technology services are easy to use.	0.811		0.811	
It is easy for me to adapt to technological innovations related to financial services.	0.785		0.785	
I think that financial technology models provide customer-specific service increases efficiency.	0.762		0.762	
I follow the technological innovations related to financial services.	0.648		0.648	
I believe financial technology services are reliable enough to protect my personal data.		0.938		0.938
I believe that financial technology services are reliable enough in terms of legal infrastructure.		0.917		0.917
I believe that financial technology services are reliable enough in terms of technical infrastructure.		0.904		0.904



## **Reliability Analysis**

Cronbach's alpha was used to analyze the reliability of the consumer perception scale and its components. Table 8 displays the test results. The tables show that the consumer perception scale and its factors have reliability coefficients higher than 0.9 in both countries. Therefore, both countries' data sets are trustworthy for research purposes.

Table 8: Reliability values

	Turkey				Azerbaijan		
	Cronbachs $\alpha$	Cronbachs $\alpha$ Standardized	N	Cronbachs $\alpha$	Cronbachs $\alpha$ Standardized	N	
Consumer perception	0.915	0.918	12	0.915	0.918	12	
Perception against the ef-	0.921	0.924	9	0.921	0.924	9	
ficiency of financial technologies							
Perception against the reliability of financial technologies	0.919	0.92	3	0.919	0.92	3	

## **Normality Analysis**

The data sets' normality was checked using the Shapiro-Wilk normality test. Table 9 shows the outcomes of the tests. The p values of the consumer perception scale and its factors are 0.000, as shown by the results, for both countries. This means that the data sets from both countries do not conform to the normality assumption. Therefore, nonparametric techniques should be used the next time the data is analyzed.

Table 9: Normality analysis

	Turkey				Azerbaijan	
	Statistics	df	p	Statistics	df	p
Consumer perception	0.889	181	0.000	0.894	216	0.000
Perception against the efficiency of financial technologies	0.859	181	0.000	0.882	216	0.000
Perception against the reliability of financial technologies	0.942	181	0.000	0.932	216	0.000

#### **Nonparametric Tests**

To measure whether the general perception and its factors differ according to demographic characteristics Kruskal-Wallis and Mann- Whitney U tests have been implemented. The results of the analysis carried out for Turkey are in Table 10.

Table 10: Results of the nonparametric tests- Turkey

Hypothesis	Test	p Value	Result
H1	Kruskal- Wallis	0.005	Accepted
H1.1	Kruskal- Wallis	0.054	Rejected
H1.2	Kruskal- Wallis	0.01	Accepted
H2	Mann-Whitney U	0.729	Rejected
H2.1	Mann-Whitney	0.833	Rejected
H2.2	Mann-Whitney	0.974	Rejected
Н3	Kruskal- Wallis	0.038	Rejected
H3.1	Kruskal- Wallis	0.02	Rejected
H3.2	Kruskal- Wallis	0.116	Rejected
H4	Kruskal- Wallis	0.036	Accepted
H4.1	Kruskal- Wallis	0.007	Accepted
H4.2	Kruskal- Wallis	0.352	Rejected

The analysis revealed significant differences in how people of different ages in Turkey view the usefulness of financial technologies. One of the Post Hoc tests, called Tukey, was used to pinpoint the cause of the discrepancy.



According to the data, consumers older than 45 have the lowest level of perception. This indicates that younger participants have a more developed understanding of how to use digital financial tools.

There is no significant difference in "Perception against the efficiency of financial technologies" between generations. However, "perception against the reliability of financial technologies" differs considerably across age groups. The differences were uncovered with the help of the Tukey test. The survey found that consumers between the ages of 18 and 25 had a more favorable impression than those between the ages of 26 and 35, and those between the ages of 18 and 25 had a more favorable impression than those over the age of 45. This means that younger participants have a more positive attitude toward the efficacy of financial technologies.

The results of this study suggest that there is no significant difference in how consumers of different sexes view financial technologies or the factors that influence their use. This indicates that there is no major gap between how men and women view the utility of digital financial tools. There is also not much variation from one person's income level to another. p value of Hypothesis 3 (H3) is lower than 0.05. It has been observed, however, that when the source of the difference is eliminated, there is no longer a discernible difference between the groups. This indicates that consumers' perceptions of the value of financial technologies are unaffected by their income levels.

Among Turks, there is a large gulf between what people with different levels of education think about a product. The differences were uncovered with the help of the Tukey test. The results of this survey suggest that customers with an elementary, middle, or high school education have a lower level of perception than those with a college degree. More educated participants have a more nuanced understanding of the value of digital financial tools. As with the general public's opinion, opinions on the "perception against the efficiency of financial technologies" factor are all over the map. On the other hand, perceptions about the security of financial technologies do not vary noticeably with students' educational backgrounds.

The tests conducted on the data from Turkey were also applied to the data obtained from Azerbaijan. The results of the tests made for Azerbaijan have been shown in Table 11.

			3
Hypothesis	Test	p Value	Result
H1	Kruskal- Wallis	0.005	Accepted
H1.1	Kruskal- Wallis	0.054	Rejected
H1.2	Kruskal- Wallis	0.01	Accepted
H2	Mann-Whitney U	0.729	Rejected
H2.1	Mann-Whitney	0.833	Rejected
H2.2	Mann-Whitney	0.974	Rejected
Н3	Kruskal- Wallis	0.038	Rejected
H3.1	Kruskal- Wallis	0.02	Rejected
H3.2	Kruskal- Wallis	0.116	Rejected
H4	Kruskal- Wallis	0.036	Accepted
H4.1	Kruskal- Wallis	0.007	Accepted
H4.2	Kruskal- Wallis	0.352	Rejected

Table 11: Results of the nonparametric tests- Azerbaijan

Results from the surveys conducted in Azerbaijan indicate a clear generational divide in consumers' overall impressions. The differences were investigated using the Tukey test. The survey results show that consumers between the ages of 18 and 25 had a higher perception of the brand than those over 45. Also, consumers over 45 have a less positive impression than those between the ages of 26 and 35. Additionally, consumers between the ages of 18 and 25 have a more favorable impression than those between the ages of 36 and 45. This indicates that younger participants have a more nuanced understanding of how to use digital financial tools.

The factor of "perception against the efficiency of financial technologies" also reveals a significant difference between age groups. The Tukey test shows that consumers' opinions decline with age, with those over 45 having less favorable opinions than those between the ages of 18 and 25. There's a significant age gap in consumer perception, with those over 45 having a lower opinion than those between 26 and 35. In the same vein, younger consumers (1825) have a more favorable impression than their older counterparts (3645). Teenagers have more



optimistic views than older participants.

In addition, there is a clear generation gap on the question of whether or not people trust financial technologies. When the Tukey test is used to determine the cause of the difference, it is found that consumers over the age of 45 have a more negative perception than those in the 1825 age range. Further, consumers over 45 have a more negative impression than those between the ages of 26 and 35. Younger participants tend to have more optimistic views.

There is no discernible gender gap in Azerbaijan's consumer perception or its influencing factors. This indicates that there is no major gap between how men and women view the utility of digital financial tools. In addition, there hasn't been any discernible variation in financial status. This indicates that consumers' perceptions of the value of financial technologies are unaffected by their income levels.

Customer opinion in Azerbaijan varies greatly depending on educational background. Tukey test results indicate that consumers with undergraduate and graduate degrees have more favorable perceptions than those with only secondary education. More educated participants have a more nuanced understanding of the value of digital financial tools. As with the general public, opinions on the "perception against the efficiency of financial technologies" are all over the map. On the other hand, perceptions about the security of financial technologies do not vary noticeably with students' educational backgrounds. This indicates that consumers of all educational backgrounds have similar views on the safety of modern financial technologies.

## Comparison of Turkey and Azerbaijan

The Mann-Whitney U test was used to analyze the data and determine if there were statistically significant differences in the use of financial technologies across countries based on general consumer perception, "perception against the efficiency of financial technologies," and "perception against the reliability of financial technologies." Table 12 displays the test results that were obtained.

Table 12: Comparision of Turkey and Azerbaijan

Hypothesis	Test	p Value	Result
H 5	Mann-Whitney U	0.584	Rejected
H 5.1	Mann-Whitney U	0.001	Accepted
H 5.2	Mann-Whitney U	0.321	Rejected

The results indicate no major cultural differences in how people view financial technology. In contrast to Azerbaijan, Turkey scored higher on the test for "perception against the efficiency of financial technologies." However, "perception against the reliability of financial technologies" shows little variation across nations.

## **CONCLUSION**

As a result of the digitalization process, the financial services industry is undergoing significant transformations. Fintech refers to the new generation of models that have emerged due to the influence of technological innovations in the financial services industry and which have the potential to transform the problematic aspects of the traditional system into opportunities.

This study aims to find out how people in Turkey and Azerbaijan feel about high-tech business models in the financial services sector. It also wants to determine if people's feelings change based on their demographics. Based on the analysis done for Turkey, the way people think about things is very different depending on their age and level of education. The "perception against the efficiency of financial technologies" factor shows a big difference by education level, and the "perception against the reliability of financial technologies" factor shows a big difference by age group.

According to the results of a study conducted in Azerbaijan, the general consumer perception of the use of financial technologies and the factor of "perception against the efficiency of financial technologies" vary greatly across age groups and educational attainment. When comparing "perception against the reliability of financial technologies," only age groups differ significantly.

Analysis has been carried out to determine whether the consumer perception of using fintech models differs



by country. The results of the analysis show that the value of the factor of "perception against the efficiency of financial technologies" is higher in Turkey than in Azerbaijan. Turkey is geographically closer to the developed countries and smart capital than Azerbaijan. This situation may affect the financial awareness of society, the rapid spread of new business models, and the effective use of these services.

Similar to the research results of the Kus (2017) and Srivastava (2007) studies, it was determined that more highly educated consumers were better able to adopt these innovations. Although Srivastava (2007) and Hu et al. (2019) found that men have more positive perceptions than women, the current study found no such gender gap between the two groups. Inadequate legal regulations, insufficient state incentives, a lack of financial awareness and innovation culture, problems in the education system, conservative cultural values, etc., may impede the spread of financial technologies.

Both countries have only recently begun to explore similar ideas. As a result, there aren't enough funds to conduct comprehensive studies. If, in the coming years, sufficient and comprehensive data sets are formed and society has more knowledge in these areas, the study's scope can be expanded. Empirical research is not limited to survey and interview techniques but uses data from statistical agencies and company reports.

### **REFERENCES**

- Atsan, N., & Erdoğan, E. O. (2015). Girişimciler için alternatif bir finansman yöntemi: Kitlesel fonlama crowdfunding. *Eskişehir Osmangazi Üniversitesi İktisadi ve İdari Bilimler Dergisi*, *10*(1), 297-320.
- Bachmann, A., Becker, A., Buerckner, D., Hilker, M., Kock, F., Lehmann, M., ... Funk, B. (2011). Online peer-to-peer lending-a literature review. *Journal of Internet Banking and Commerce*, 16(2), 1-10.
- Chansaenroj, P., & Techakittiroj, R. (2015). Factors influencing the intention to use mobile banking services in Bangkok, Thailand. In *4th International Conference on Business and Humainities*, Bangkok, Thailand.
- Chuang, L.-M., Liu, C.-C., & Kao, H.-K. (2016). The adoption of fintech service: TAM perspective. *International Journal of Management and Administrative Sciences*, *3*(7), 1-15.
- Dorfleitner, G. (2017). Fintech in Germany. Berlin, Germany: Springer International Publishing.
- Eickhoff, M., Muntermann, J., & Weinrich, T. (2017). What do fintechs actually do? A taxonomy of fintech business models. In *International Conference on Information Systems*, Seoul, South Korea.
- Eisebith, F., M., Messner, D., & Matthies, I., E. (2018). *Digitalization: What we need to talk about*. Retrieved from https://bit.ly/3s5sA4s
- Ekonomist. (2017). *Insurance technologies are transforming the industry*. Retrieved from https://bit.ly/3pBfTfY Financial Stability Board. (2017). *Financial stability implications from fintech*. Retrieved from https://bit.ly/3ug19Xq
- Gelis, P., & Woods, T. (2014). The rise of fintech in finance. Retrieved from https://bit.ly/3pHVeat
- Gökçen, H. (2007). Yönetim bilgi sistemleri. Istanbul, Turkey: Palme Yayıncılık.
- Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. *Symmetry*, 11(3), 340-356. doi:https://doi.org/10.3390/sym11030340
- Ivanov, O., Snihovyi, O., & Kobets, V. (2018). Implementation of robo-advisors tools for different risk attitude investment decisions. In *ICT in Education, Research and Industrial Applications Conference*, Kyiv, Ukraine.
- Kus, P. (2017). *Digital banking services* (Unpublished master's thesis). Department of Business Administration, Bahcesehir University, Istanbul, Turkey.
- Kutulay, B. K. (2016). *Digitalization, new generation technologies and their effects on finance* (Unpublished master's thesis). Yeditepe University, Department of Business, Administration, Istanbul, Turkey.
- Lalonde, R. (2017). P2P lending and how its regulated. Retrieved from https://bit.ly/3k4MDNv
- Mateescu, A. (2015). Peer to peer lending: Data and society. Retrieved from https://bit.ly/37t0V5G
- Merchant Machine. (2018). *The rise of digital & mobile wallets: 2019 global usage stats.* Retrieved from https://bit.ly/3ulCt03
- Perficient. (2019). Impact of robo-advisors in wealth management. Retrieved from https://bit.ly/2ZxoqWI
- Ripain, N., Amirul, S. M., & Mail, R. (2017). Financial literacy and SMEs potential entrepreneurs: The case



- of Malaysia. *Journal of Administrative and Business Studies*, 3(2), 60-68. doi:https://doi.org/10.20474/jabs-3.2.1
- Schumacher, A., Sihn, W., & Erol, S. (2016). Automation, digitization and digitalization and their implications for manufacturing processes. In *Innovation and Sustainability Conference Bukarest*, Bucharest, Romania.
- Semuel, H., & Lianto, A. S. (2014). Analisis ewom, brand image, brand trust dan minat beli produk smartphone di Surabaya. *Jurnal Manajemen Pemasaran*, 8(2), 7-54. doi:https://doi.org/10.9744/pemasaran.8.2.7-54
- Senawat, S. M. Y., Zarkasyi, S. W., & Gafur, I. F. A. (2018). The effects of corporate social responsibility on financial performance on Indonesian public listed tobacco companies. *International Journal of Business and Administrative Studies*, 4(6), 267-279. doi:https://dx.doi.org/10.20469/ijbas.4.10004-6
- Srivastava, R. K. (2007). Customers perception on usage of internet banking. *Innovative Marketing*, 3(4), 67-73.
  Tun-Pin, C., Keng-Soon, W. C., Yen-San, Y., Pui-Yee, C., Hong-Leong, J. T., & Shwu-Shing, N. (2019). An adoption of fintech service in Malaysia. *South East Asia Journal of Contemporary Business*, 18(5), 134-147.
  United Nations Development Program. (2017). *Crowd funding*. Retrieved from https://bit.ly/3s0avVw

Yazici, S. (2018). Finansal teknoloji. Retrieved from https://bit.ly/3awzXMi

