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# DIGITAL SERVICES AS A TOOL FOR CREATING COMPETITIVE ADVANTAGE IN THE BANKING SECTOR IN NORTH MACEDONIA

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**Abstract:** *In the last few years participants of the banking sector in North Macedonia are facing big competition as a result of the increased innovations between these participants. The only way for banks to stay relevant with their operations is to create a sustainable competitive advantage. For an organization to hold out in a competitive environment, it needs to develop competitive strategies. One of the aspects of creating a competitive advantage in the banking sector is creating digital services. These services have a high impact on the banking sector and enable banks to have a competitive advantage in different manners. In addition to a theoretical approach to creating a competitive advantage in the banking sector, we conducted empirical research on how banks in North Macedonia create competitive advantage by offering digital services. This paper aims to describe the end-users attitude on digital banking services as well as the bank's strategies on creating a competitive advantage by offering digital banking services.*

**Keywords:** *Competitive Advantage; Competitive Strategies; Digital Banking Services*

## INTRODUCTION

Competitive advantage is the value of the product or the service that an organization offers that customers value more compared to products or services from the competing offerings (Baltzan and Phillips 2010). The competitive power in the banking sector is represented by the behavior or the process of creating banking or alternative products to increase the market share (Hadi and Hmood 2020). Banks acquire more customers by offering quality products, by cost reduction, by using high technology, and by offering good treatment to their customers.

According to Louay Subhi Dahbour, "the organization must determine how it competes with competitors in the banking industry to achieve outstanding competitiveness" (Hadi and Hmood 2020, 28), while the author Jamal Dahsh Mohammed believes that "when banks compete with each other they are very much based on price, quality, flexibility, and delivery, which are dimensions of competitive banking advantage" (Mohammed 2017, 185-186).

Sustainable business models allow the banks to achieve a competitive advantage by increasing the brand reputation and by reducing costs (Nosratabadi *et al.* 2020). To achieve the sustainable competitive advantage of complex processes it is needed to manage from a transition to sustainability where the transition can be accomplished by offering innovative services, innovative approaches on delivering the services, and by forming new business partnerships (Freudenreich *et al.* 2019). According to this in the process from transition to sustainability strategies, the create value and cost leadership are recommended.

The essence of the competitive advantage is the company's attention on how to broaden the products on the market, the type of marketing strategy to be implemented, why customers should buy the company products, and other questions. Competitive advantage needs to be correlated with the company's competitive position and profitability in a long term (Ensign 2001). When creating a competitive advantage, companies generally have two choices: to create specialized products or implement the lowest costs. Choosing the strategy is part of the three generic strategies: managing expenses, differentiation, or focus, so companies can invest their resources to enable sustainable competitive advantage.

Managing the expenses as a strategy requires the company to implement better efficiency compared to the competition. The differentiation strategy asks that the company add more value to their customers compared to the company expenses. The focus strategy means that the company manages its expenses or differentiates in a segmented market. Choosing the right and successful strategy to implement requires knowledge about the expense structure of the company and the company's competitiveness. The authors Reed and De Fillipi (1990) acknowledged that competitive advantage is related to competencies developed within the company, while Hofer and

Schendel (1978) concluded that competitive advantage is a unique position that companies develop over their competitors through their resource allocation models. The value chain is a way of conceptualizing the activities that are needed to provide a product or service to consumers (Ensign 2001). The value chain can be used to explore the impact that each of the activities individually can have on differentiation and cost.

As part of building a competitive advantage, it is of particular importance to companies to innovate. The authors Abou-Moghly, Al Abdallah, and Al Muala (2012) researched the impact of innovation on creating a competitive advantage, i.e. on the four dimensions of competitive advantage, cost, quality, time, and flexibility. Their results show that innovation has a positive impact on time and that is the biggest impact of this dimension, with which the use of innovation in banks improves the leading time and time needed to develop or modify products and services. Despite the improvement of the lead time and improves time servicing customers and thereby improving the time in both types of innovation, innovation in product and process innovation.

In terms of quality, innovation also has a positive impact, and improving quality allows banks to compete in the market based on the features and specifications of their products and services. Innovation also affects costs by enabling banks to offer quality products and services at lower costs, while reducing operating costs. Flexibility as a fourth dimension of competitive advantage has a positive impact on the innovations applied by the bank in that innovative methods in processes and products allow them to adapt products and services to customer requirements, as well as to offer products and services in response to competition.

The internet has a great impact on the banking sector by allowing the banks to create a competitive advantage (Daniel 1999). Researchers agree that the internet allows the banks to achieve competitive advantage in various ways including cost reduction (Peppard 2000), strengthening brand image (Daniel and Storey 1997), improving service quality (Delvin 1995), and cross-sale of products (De Young 2001). From the bank's perspective, the main advantage of e-banking is the expense reduction in the workflow of the physical branches (Devlin and Yeung 2003).

From the bank client's perspective e-banking transaction costs are reduced (De Young 2001). Savings from the reduced costs come from the combined effects from the reduction and better utilization of workforce, equipment, and more economical usage of physical space and operative expenses. The author Robert Peterson (1997) recognized that the internet marketing implications should not be isolated from the rest of the business. The bank's brand needs to be correlated with the special products and services offered by the bank that is better compared to the competition. Banks that implement more sophisticated usage of the internet by offering better functionality, ease of usage, better security, and privacy control are more likely to achieve a better image. Internet's interactive nature allows for more personalized marketing offers, thus allowing the

clients additional value. It is also considered that the internet can be used as a potential marketing tool with an endpoint client connection, therefore enabling the banks to become client-focused and create potential value (Srirojanant and Thirkell 1998). A cross-sale of a wide spectrum of financial services can demand that the bank work in high volume in addition to a high level of financial expertise.

Santomero and Eckles (2000) pointed out that the real benefit from distributing more products is not just the efficiency but also the customer service which is a 'consumer economy' that allows for the banks' potential in creating and offering various products and services. By clients recognizing the comfort of using multiple products or services from the same bank, this would allow for a higher income for the bank.

Internet services can increase cross-sale opportunities such as credit card offerings, account overdraft, and insurance services while reducing expenses at the same time. After recognizing the elements of digital transformation, it is important to find out the problems facing digital transformation. In that context, the author Shubham Singhania (2018) emphasized that: "(1) A country requires an adequate level of infrastructure to adopt the technology and provide the necessary support for its growth and usage, and (2) Since the internet is an open-source of communication, privacy and security of data transferred over the network is susceptible to theft, unauthorized access and exploitation (...)" (p. 31).

All of the above perspectives on creating a competitive advantage in terms of creating more value for customers, with lower costs and greater flexibility are included in the digital services of banks and therefore the emphasis of this research is on the internet and digital services offered by banks for its customers.

## **DIGITAL SERVICES AS A TOOL FOR CREATING COMPETITIVE ADVANTAGE IN THE BANKING SECTOR IN NORTH MACEDONIA**

As a result of the increased number of innovations in the banking sector, banks are faced with a big competition.

This research aims to determine the ways that banks create competitive advantage. To determine the real situation of creating a competitive advantage in North Macedonia, we conducted empirical research with accenting the digital (internet) services as a tool for creating a competitive advantage in the banking sector. The banking system in North Macedonia consists mainly of ten banks predominantly owned by foreign shareholders and four banks owned by domestic shareholders, and in terms of total revenues, the subsidiaries of foreign banks generate the highest revenues and have the largest share of 65.1 % in total revenue (NBRNM 2020). Table 1. presents the structure of the banking sector in North Macedonia according to the ownership structure and the revenues they generate and the percentage with which they participate in the total financial result.

**Table 1: Structure of the Banks in North Macedonia and their Total Income (Source: NBRNM 2020).**

Property Type	Number Of Banks	Total Revenue	Financial Result
<b>Banks Predominantly Owned by Foreign Shareholders</b>	10	17.420	72.6%
- subsidiaries of foreign banks	6	14.922	65.1%
Austria	2	2.611	6.2%
Bulgaria	1	379	0.4%
Greece	1	5.296	27.3%
Slovenia	1	4.479	22.0%
Tukey	1	2.156	9.2%
- other banks in predominantly foreign ownership	4	2.498	7.6%
Bulgaria	2	1.278	5.1%
Germany	1	918	1.9%
Switzerland	1	302	0.5%
<b>Banks Predominantly Owned by Domestic Shareholders</b>	4	6.158	27.4%
private property	3	6.046	26.9%
state property	1	112	0.5%
<b>Total</b>	<b>14</b>	<b>23.577</b>	<b>100%</b>

*\*The data in the table is presented in millions and percentages.*

We analyzed the three largest banks in North Macedonia (Komerzijalna Banka AD Skopje, Stopanska Banka AD Skopje, and NLB Banka AD Skopje) in terms of their strategies and performance. The goal of the three largest banks in North Macedonia is to provide a higher level of service quality, to offer modern products, to be professionally supported by market-oriented, well-trained management and highly professional staff, adjusting to changes as a consequence of the modern environment through the offer of products and services that will be easily accessible with the help of modern distribution channels, as well as making a profit through efficiency and economy in operation. The success of the operation according to the three largest banks in the country is due to the implementation of high-quality standards in operation, modern information technology infrastructure, successful market strategy, as well as professional management.

Digital banking services come down to electronic banking and mobile banking which is a software application that is installed and used via mobile phone. Electronic banking provides the following services to users:

- Insight into the balance and turnover of accounts, cards, deposits, and loans at any time;
- Obtaining an electronic statement;

- Conversion from one currency to another;
- Ability to pay regular expenses;
- The ability for various payments to individuals and legal entities in the country;
- Ability to pay credit card and loan obligations;
- Opportunity for foreign currency payments;
- Recharge a prepaid account on a mobile phone;
- Change of limits for POS and ATM card transactions;
- Online loan application and other loan applications;
- Online credit card application;
- Online submission of complaints about card transactions;
- Locations of branches and ATMs.<sup>1</sup>

Mobile banking offers the following services to its users by using a software application:

- Insight into the situation and the turnover of the transaction accounts in Denar and foreign currency;
- Insight into the condition and turnover of credit cards;
- Insight into the condition and turnover of savings deposits;
- Insight into the condition of the approved loans;
- Calculator for loans, savings deposits, and purchase and sale of foreign currency
- Opening a transaction account;
- Execution of all payments such as internal transactions, overheads, and other payments to individuals and legal entities;
- Change of limit on ATM cash withdrawal cards, POS terminal payments, and internet payments;
- Purchase and sale of foreign currency (non-cash);
- Replenishment of credit for mobile phone;
- Locator of the nearest ATM or branch;
- Direct contact in the bank at any time;
- Payments on overdue liabilities for credit cards and credits;
- Receiving notification for payment card transactions and inflows and outflows from the transaction account;
- Foreign currency payment operations;
- Notification for inflow from abroad;
- Greater security when paying with PIN authentication or fingerprint;
- Ability to pay for contact to telephone directory;
- Opportunity to apply for a loan, and ability to update personal data.<sup>2</sup>

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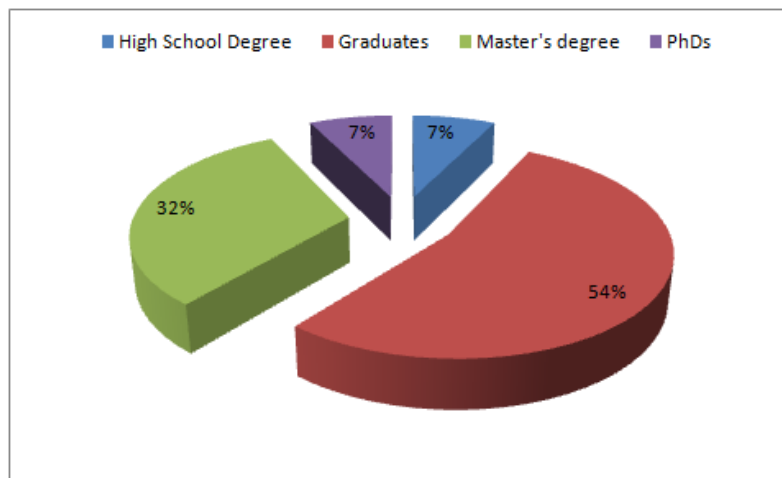
<sup>1</sup> Electronic banking services of the analyzed banks: Komercijalna Banka AD Skopje, Stopanska Banka AD Skopje, and NLB Banka AD Skopje.



The descriptive method of this paper aims to describe the situation in North Macedonia, on how users of banking services consider the competitive advantage by offering digital services together with the degree of how banks aspire to create that competitive advantage by using digital services. Data collection in the research is a crucial method for it to be optimally realized.

The surveying method was applied in this research, and the technique that was used is the online survey examination. An online questionnaire was created through Google Forms and it was transmitted to the respondents via e-mail and social networks. The purpose of this research is to find out whether through the internet banks in North Macedonia create a competitive advantage. The data collection methodology and optimal realization are of high importance. In our research, we conducted an online inquiry method by using Google Forms. The questionnaire was distributed by e-mail and social media. The respondents are selected by purposive choice and represent a target sample, respectively users of banking services that are considered appropriate for the sample to be representative. The questionnaire contained 10 questions of a closed type with predetermined answers. The questions address the benefits of using internet services, the ease of usage of the offered services, and whether the banks' internet service offerings make it more competitive compared to the other banks. The questionnaire was answered by 42 respondents and the answers were analyzed and processed in SPSS to determine the connection between the internet services offered by the banks and their competitive advantage.

Addressing the respondents' age groups, 52% were aged 20 to 30, 33% were aged 31 to 40, 10% were 41 to 50 and only 5% were aged above 50 years.

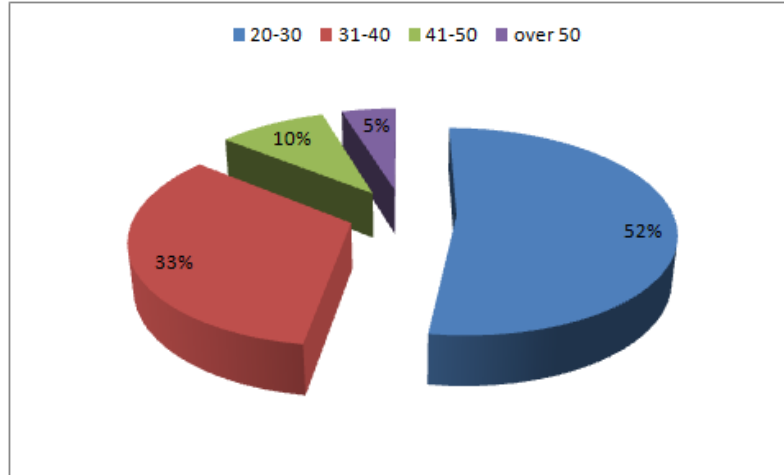


**Figure 1: Education Specifics**

<sup>2</sup> Mobile banking services of the analyzed banks: Komercijalna Banka AD Skopje, Stopanska Banka AD Skopje, and NLB Banka AD Skopje.

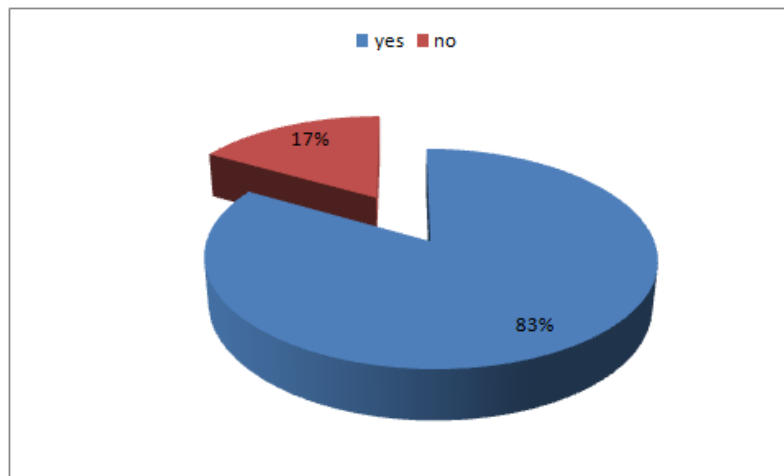


Most of the answers came from females (71%), 22 were graduates, 13 have master's degrees, 3 are PhDs, and 3 have high school degrees, thus allowing us to have answers from profiles with various degrees of education.



**Figure 2: The Respondents' Age**

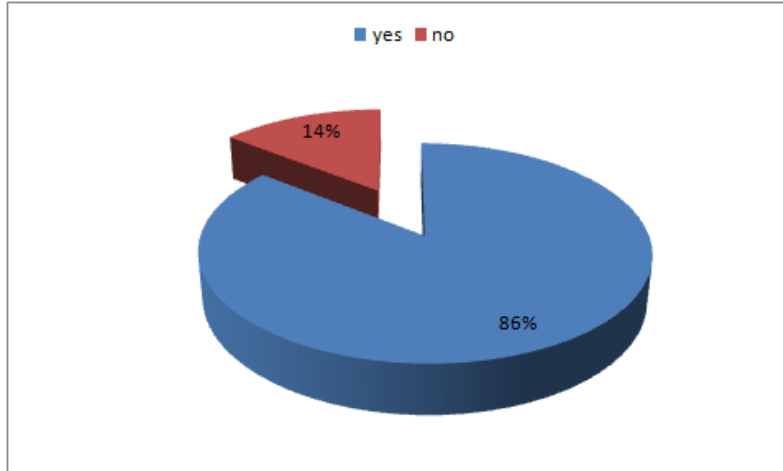
Considering the question 'Do you use banking services on the internet?' we received 35 positive (83%) answers, therefore confirming the usage of internet banking services by the respondents and contributing to the credibility of the following questions.



**Figure 3: The Usage of Internet Banking Services**

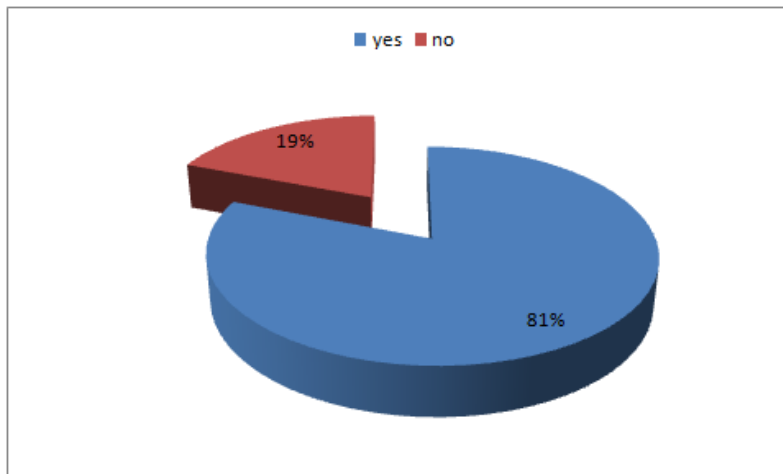
Taking into account the interactive nature of the internet and the ability to create personalized marketing offers as an additional value, the second question was: 'Does your bank enable personalized banking offers?'

We received a positive answer from 86% of the respondents and conclude that banks in North Macedonia are client-focused and aim to create additional value for their clients.



**Figure 4: Enabling Personalized Banking Offers**

One of the main methods in creating a competitive advantage that banks use is to lower costs for internet services. That is why our next question addressed: 'Are online transactions cost less than transactions executed in physical branch banks?'. With this question, we aimed to identify whether banks in North Macedonia strive to gain a competitive advantage by using internet services. We received a positive answer from 81% of the respondents, thus confirming that competitive advantage is created by stimulating internet transactions by applying lower costs.



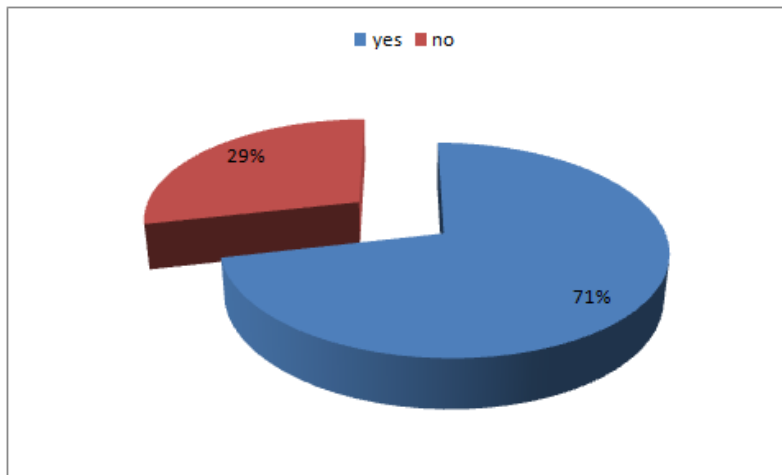
**Figure 5: Lower Internet Expenses**

The ease of usage of e-banking is directly correlated with the creation and internet implementation of a bank's image. By setting the question: 'Are the e-banking services easy to use?', we aimed to discover how easy our e-banking services to use by the end-users as a key factor for the usage frequency for these services. Analyzing the answers we discovered that most of the respondents (95%) find these services easy to use and just 2 of the respondents answered that they don't find these services easy to use. This allows us to conclude that banks in North Macedonia are making sophisticated use of the internet and enable e-banking services that are easy to use.

Creating and implementing a bank's image is not just done by making the e-banking services easy to use but also making them secure and implementing privacy controls. To determine our respondents' perception we asked: 'Does your bank allows controls for security and privacy for online transactions?'. Most of the respondents (95%) consider that their banks offer them security and privacy controls resulting in a better image for their banks.

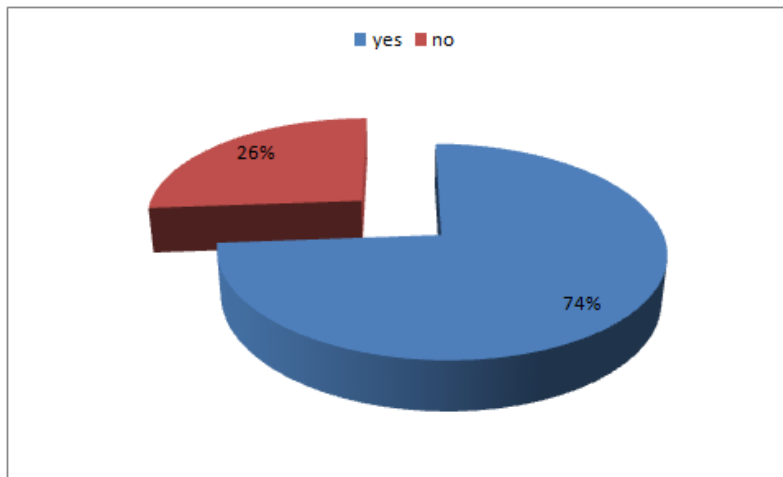
Having into consideration that a bank's branding need to be connected with products and services that the bank offers and that they are better compared to the banks' competition we asked the following question: 'Are electronic services offered by your bank are better than other banks in North Macedonia?'. This question helped us determine if clients believe that their bank has better services compared to other banks.

From the questionnaire, we concluded that although many of the respondents believe that their bank offers better electronic services, a significant number of respondents (39%) do not believe that they are offered the best electronic services. This allows us to conclude that banks to strengthen their brand need to focus on increasing the quality of electronic services that they offer to their clients.



**Figure 6: Better Electronic Services Compared to Other Banks**

As a next question, we asked: 'Are the services of e-banking offered by your bank make your bank more competitive in comparison with other banks in North Macedonia?'. The answers to this question helped us identify how much clients think that e-banking contributes to bigger competitiveness. On this question, 31 respondents (78%) gave a positive answer compared to 11 (26%) that consider that offering e-banking services does not make a bank more competitive from the rest of the banks in North Macedonia. That is why we can conclude that offering e-banking services can make a competitive advantage for banks.



**Figure 7: The E-Banking and Competitiveness**

Table 2. represents the Pearson Correlation from the answers to the previous two questions, where the independent variable is taken from the question: 'Are electronic services offered by your bank are better than other banks in North Macedonia?' and as the dependent variable the answers from the question: 'Are the services of e-banking offered by your bank make your bank more competitive in comparison with other banks in North Macedonia?'.

**Table 2: Pearson Linear Correlation (Source: Pallant 2009).**

		Better Electronic Services	Larger Competitiveness
Better Electronic Services	Pearson Correlation	1	.648**
	Sig. (2-tailed)		.000
	N	42	42
Larger Competitiveness	Pearson Correlation	.648**	1
	Sig. (2-tailed)	.000	
	N	42	42

We used the following scheme to determine the correlation of the variables (Pallant 2009):

Low = 0.10 – 0.29

Medium = 0.30 – 0.49

High = 0.50 – 1.0.


Pearson's variable correlation is 0.648 or  $r=0.6$  which determines a high or strong correlation between the variables. This correlation shows that as the quality of electronic services increases the banks' competitive advantage increases as well. Furthermore, the determination coefficient shows the amount of distortion of the dependent variable that is explained by the independent variable. In this correlation, the determination coefficient is 0.419 or 41.9% from the variance of the one variable explained by the other variable. This data shows that the electronic services that banks offer explain 41.9% of the creation of the banks' competitive advantage. The statistical meaning is determined by Sig which in this case is 0.000 or  $p<0.05$ , making it statistically relevant.

## CONCLUSION

In creating a competitive advantage in the banking sector, digital services undoubtedly have a significant impact on the banking sector and provide a competitive advantage to banks by reducing costs, strengthening the brand, improving quality and service, and cross-selling. A digital service of banks in North Macedonia comes down to electronic banking and mobile banking which is a software application that is installed and used via mobile phone.

From this research, we can conclude that banks in North Macedonia are client-focused, enable personalized banking services and enable internet transactions that have lower costs compared to transactions that are made at their physical branches. Their brand image is implemented on the internet by making their e-banking services easy to use while maintaining the security and privacy controls, therefore concluding that banks use sophisticated technology.

From the questionnaire analysis, we can also conclude that banks in North Macedonia need to focus on increasing the quality of the electronic services that they offer. That way banks can strengthen their brand and the banks' image, therefore, increase the competition in the banking sector. From the correlation from the answers in the questionnaire, we can conclude that increasing the quality of electronic services also increases the banks' competitiveness.

Given that this research covers exclusively the digital services of the bank, for future research we recommend creating a business model that will cover the different perspectives for creating a competitive advantage in the banking sector. 

## REFERENCES

1. Abou Moghli, A., Al Abdallah, G., Al Muala, A. (2012). Impact of Innovation on Realizing Competitive Advantage in Banking Sector in Jordan, *American Academic & Scholarly Research Journal*, Vol.4, No.5.
2. Baltzan, P. & Phillips, A. (2010). *Business Driven Technology*, 4th ed, McGraw-Hill Irwin, Boston, USA.
3. Daniel, E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. *International Journal of Bank Marketing* 17.
4. Daniel, E. and Storey, C. (1997). On-line banking: Strategic and management challenges. *Long Range Planning* 30.
5. De Young, R. (2001). Learning-by-Doing, Scale Efficiencies, and Financial Performance at Internet-Only Banks.
6. Devlin, J. F. (1995). Technology and innovation in retail banking distribution *International Journal of Bank Marketing* 13.
7. Ensign, P.C. (2001). Value Chain Analysis and Competitive Advantage: Assessing Strategic Linkages and Interrelationships, *Journal of General Management*. 27(1).
8. Freudenreich, B. Lüdeke-Freund and F. Schaltegger, S. (2019). A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of Business Ethics*.
9. Hadi, A.M., Hmood, S.J. (2020). Analysis of the Role of Digital Transformation Strategies in Achieving the Edge of Financial Competition. *International Journal of Innovation, Creativity, and Change*. [www.ijicc.net](http://www.ijicc.net) Volume 10, Issue 11, 19 – 40
10. Hofer, C.W. and Schendel, D. (1978). *Strategy Formulation: Analytical Concepts*, St. Paul, MN: West Publishing.
11. Komercijalna Banka AD Skopje, <https://www.kb.com.mk>, accessed 2020
12. Mohammed, Jamal Dahsh. (2017). Electronic banking and its role in enhancing the competitive advantage of banks applied study in a number of civil and government banks, *Journal of the University of Kirkuk for Administrative and Economic Sciences*, Volume (7) Issue (1).
13. [NBRNM] National Bank of the Republic of North Macedonia, <http://www.nbrm.mk/>, accessed 2020
14. NLB Banka AD Skopje, <https://nlb.mk>, accessed 2020
15. Nosratabadi, S., Pinter, G., Mosav and A., Semperger, S. (2020). Sustainable Banking; Evaluation of the European Business Models. *Sustainability* 2020.
16. Pallant J. (2009). *SPSS: Priracnik za prezivljavanje – postupni vodici kroz analizu podataka pomocu SPSS za Windows*, prevod 3. Izdanja Miljenko Sucur, Beograd.
17. Peppard, J. (2000). Customer Relationship Management (CRM) in Financial Services. *European Management Journal* 18.



18. Peterson, R., Balasubramanian and Bronnenberg, B. (1997). Exploring the Implications of the Internet for Consumer Marketing. *Journal of the Academy of Marketing Science* 25.
19. Porter, ME. (1996). What is Strategy?, *Harvard Business Review*, vol. 74, no.6.
20. Porter, Michael E. (1985). *Competitive Advantage*. The Free Press. New York.
21. Porter, Michael E. (1990). *Competitive Advantage*. The Free Press. New York.
22. Reed, R. and De Fiilippi, R.J. (1990). 'Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage', *Academy of Management Review*, Vol. 15, No. 1.
23. Santomero, A. M. and Eckles, D, L. (2000). The determinants of success in the financial new services environment: now that firms can do everything, what should they do and why should regulators *Economic Policy*, Reserve Bank of New York.
24. Singhania, S. Varda , S. (2018). Digital Technology in the Realm of Banking: A Review of Literature, <https://www.researchgate.net/publication/329514279>, accessed 2020.
25. Sirojanant, S. and Thirkell, P. C. (1998). Relationship marketing and its synergy with web-based technologies. *Journal of Market Focused Management*.
26. Stopanska Banka AD Skopje, <https://www.stb.com.mk/>, accessed 2020.