CHAPTER 9

A DELPHI-AHP APPROACH TO THE COVID-19 EFFECT ON DIGITALISATION IN THE BANKING SECTOR

Violeta Cvetkoska, Gokulananda Patel and Milanka Dimovska

ABSTRACT

Purpose: *The purpose of this study is to reveal the readiness of the employees in the banking sector in the Republic of North Macedonia to adapt to the reorganisation of working hours while at the same time using the safest payment methods in conditions when the world is trying to deal with the crisis caused by the COVID-19 virus.*

Need for the study: *The world is rapidly moving towards increasing digitalisation, which is part of all spheres of human life. The outbreak of the COVID-19 virus pandemic has accelerated these processes by requiring people to adapt to the new conditions. The countries that have worked rapidly to digitise the system, while massively using non-cash payments, have adapted more easily to their regular daily tasks. The Republic of North Macedonia, as a developing country, is trying to take a step forward by introducing the innovations used by developed countries, taking into account the available assets and human resources.*

Methodology: *A method for qualitative forecasting, Delphi, is used in three rounds, and the gained insights serve as inputs in the creation of two analytic hierarchy process (AHP) models.*

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Findings: *From the extensive analysis we performed, we found that the lack of digitalisation and process automation made it difficult for employees to adapt to the method of working from home, and on the other hand, they had a much easier time adapting to the use of alternative distribution channels.*

Practical implications: *Our findings are useful for the country, regulatory bodies and the bank's management in developing strategies and plans for working from home or reorganisation of working hours, to be more acceptable to employees, emphasising the benefits for both employees and employers. Also, researchers and management practitioners in developing countries interested in this area can follow our combined Delphi-AHP approach in conducting similar research.*

Keywords: Digitalisation; non-cash payment; working from home; COVID-19; banking sector; Delphi-AHP

JEL Codes: C44; G21

INTRODUCTION

Every society is obliged to take all necessary measures to protect the health of its population. The COVID-19 pandemic has brought the world into an unexpected state, reflecting its negative impact on everyone: the way people live, maintaining social distance and affecting overall operations, including the banking sector. The Republic of North Macedonia, like many other countries in the world, has faced numerous unplanned and negative impacts as a result of the unexpected outbreak of the pandemic. The banking sector has faced increased withdrawal of deposits by customers and the emergence of insolvency among individuals and legal entities. The financial and banking sectors in the Republic of North Macedonia have not remained immune to the overall impact of the health crisis that has penetrated into all pores of life.

The reorganisation of working hours in the banking sector has emerged as a real need in order to complete regular work tasks in a pandemic. The world will continue to face new crises and pandemics, which is why it is necessary to prepare and develop strategies for working in emergencies.

The pandemic has caused massive changes in people's behaviour regarding the use of digital payment. The world is being restructured towards digitalisation in all spheres where conditions and technology allow it, and the appearance of the coronavirus has only accelerated the process of removing cash as a means of payment as well as the need for digitalisation and caused significant changes in consumer behaviour.

Economies around the world are shifting away from cash payments, and digital services are becoming a trend not only because of their ease of access but also because of the reduced exposure of people to the virus when physically handling

banknotes and coins. This way of thinking encouraged the banks to not only improve the existing ones, but also to introduce new favourable opportunities for non-cash payment in accordance with the changing market conditions. With the gradual abolition of the use of traditional means of payment, the habits of consumers are changing, which directly affects the already adopted way of life. Every year, with the rapid development of new technologies, the percentage of use of digital payment methods is increasing. Moving to digital transactions has many benefits, including transparency, anti-money laundering and tax evasion.

People have the right to choose or reject the solutions offered, which greatly reduce the risk of contact with the COVID-19 virus. Working from home as a way to get things done on a regular basis, as well as using the most secure payment method, has shown the need for greater digitalisation as the world struggles to cope with the effects of the COVID-19 pandemic. The basics of identifying people's ability to accept or reject changes caused by the outbreak of the COVID-19 virus have been elaborated on through the aspects of reorganisation of working hours and non-cash payment. At the same time, the chapter focusses on the selection of the most appropriate working hours adapted to the given situation of the employees in the banking sector, as well as on the selection of the most favourable payment alternative, showing the positive and negative sides of the obtained results. During the implementation of the research, a combined approach of qualitative and quantitative methods appropriately adapted to the needs of the purpose was applied, using the Delphi and the analytic hierarchy process (AHP) methods. The results show that employees in the banking sector found it more difficult to adapt to the imposed conditions for working remotely during the pandemic caused by the COVID-19 virus. On the other hand, the high digitalisation of the banks in the country has enabled clients to enjoy uninterrupted service and the safety of their health. The banking sector in the country has successfully overcome the challenges and achieved positive results in its operations.

The rest of the chapter is laid out as follows. The literature review is elaborated after the introduction, followed by the methodology used, and the presentation and analysis of the obtained results, respectively. Finally, there are concluding remarks in the last section.

LITERATURE REVIEW

There are many different views and opinions expressed about remote operations and the use of digital distribution channels, especially in the period of a pandemic caused by the COVID-19 virus. Sujana (2018) gives the opinion that digital banking is actually digitalisation, using digital technologies and online protocols to perform the day-to-day operations of banks.

According to the Governor of the National Bank of the Republic of North Macedonia, in order for a country to be economically developed, it is necessary to work, among other factors, on improving human resources and digitalisation

(Angelovska Bezhoska, 2021). The consequences of a pandemic need to be overcome by increasing productivity. On the other hand, the changes imposed by the pandemic, especially digitalisation, should be taken into account. The fact that the COVID-19 virus has imposed digitalisation as necessary paves the way for the improvement of technical and technological solutions and the approach of the digital age in all spheres of life.

King (2019) stated that the development of digitalisation and the latest analytical achievements have given a chance to financial institutions, where only the best of them will move towards the digital age. The question is whether smaller institutions will survive in the high competition created by digitalisation and the use of data. Their biggest challenge to becoming digital banks will be to provide adequate human resources and knowledge, as well as appropriate technologies for digitalisation and data use. Agur, Martinez Peria, & Roch (2020) believe that the use of digital financial services enables entrepreneurs to connect with not only financial institutions and suppliers, but also human resources and markets. However, the services lead to the maintenance of the necessary distance between people, which appeared as a necessity during the outbreak of the COVID-19 virus, as well as connecting with areas and places where there is no real existence of financial institutions. Bank customers in Japan have wide access to banking services. Just like in other countries in the world, the main goal of using digitalisation in financial institutions is to put the operations of banks at a higher level (Digital Transformation of Japanese Banks, 2021).

Increased use of digitalisation, as pointed out by SaranyaPriyadarshini (2018), leads to a lower need for human resources, which causes the necessary reduction in the number of employees. As a result of this situation, there will be a need for new employment that will be aimed at ensuring greater security of institutions from cyber attacks and the introduction of new technologies into operation. The information published by the National Bank of the Republic of North Macedonia shows that in the Republic of North Macedonia, financial and banking institutions have paid more attention to improving the security situation due to cyber attacks on institutions (Angelovska Bezhoska, 2020). On the other hand, the emergence of pandemics has shown the need to address the problem globally given the increasing incidence of attacks in this period.

The International Labour Organisation (2020) has stated that countries are facing an unequal level of development in digitalisation, and in some areas, there is a problem with Internet networks as well as the use of advanced technology. In accordance with that, Alashhab et al. (2021) stated that people who work remotely on their devices and use digital services can be the targets of various attacks if they use programmes that are not secure or are not updated in a timely manner. Therefore, more work should be done on educating people who work with larger databases of possible threats.

According to Moeckel (2017), working remotely will become more prevalent in the future as a result of increasing advances in technology. In order to control the emerging pandemic, Felstead and Reuschke (2020) believe that the place of work has changed and homes have become places where employees work. This phenomenon was present everywhere. On the other hand, as stated by Chung,

Seo, Forbes, and Birkett (2020), working from home during the pandemic period led to an inevitable change in the need for flexible working hours for employees, and there was a change in the classic division of household chores. According to Milasi, Fernandez-Marcias, and Gonzales-Vazquez (2020), institutions that did not have adequate information technology probably had greater difficulty adapting to the new conditions. In several European Union member states, half of those who worked from home had not previously been exposed to such work, which makes it even more difficult to adjust.

Parry et al. (2021) point out that the COVID-19 virus pandemic has caused people to increase their need for connectivity and help to cope with the effects of the crisis. Many of them lacked travel to work, exchange of opinions and knowledge, and the need to be in some way related to the institution where they work. Employees cannot compensate for the lack of connection by using modern means of communication. In agreement with this, in Remote Collaboration: Facing the challenges of COVID-19 published by Delloite in March 2020, people who work from home sometimes do not have a clear line between work and home responsibilities, i.e., there is interference between them and certain problems may occur. Rahman and Arif (2021) point out that better digitalisation of services is very important at a time when it is necessary to maintain less contact between people. In this way, services can be present in poor regions where institutions were not included.

In the period of crisis, as pointed out by Arner et al. (2020), it is necessary to apply the already established existing structures in order to obtain maximum benefits from them. According to Świecka, Terefenko, and Paprotny (2021), increasing demand for innovative and technical solutions as well as offers of digital services will lead to a rapid shift to new payment methods. In this context, Ren and Tang (2020) said that the growing presence of the Internet, the rapid expansion of new products, and the attractiveness of smartphones all lead to increased non-cash payments that reduce the social distance between people while protecting them from possible infections with the virus. In agreement with that, Wasiaturrahma, Wahyuningtyas, and Ajija (2019), the growing expansion of computer products at the same time, accompanied by greater competition among banks, leads to their incentive to offer market diversification of products for the development of cashless payment.

The World Economic Forum (2020) stated that due to the close connection between online shopping and non-cash payment methods, the authorities need to focus on new forms and models of payment that are characterised by speed, are not expensive and are available through an elastic payment system. Following the meaning of Kaur et al. (2020), contactless payment methods are increasing and are more present in countries due to the positive aspects and benefits they have in performing payment operations. However, they are still subject to various problems in their use and acceptance. Goczek and Witkowski (2015) point out that a positive benefit of using non-cash payments is the increased fight against the effects of the illegal economy and a clear picture of the operations performed. All this contributes to the countries' fight against illegal actions. According to Eriksson, Gökhan, and Stenius (2021), the identified risks to the safety and

privacy of users, such as the use of the mobile phone as the only option, are key barriers to accepting the mobile payment method in relation to other payment options. Maureen Nelloh, Santoso, and Slamet (2019) think that an increase in non-cash payments using smartphones as part of financial technology could have the effect of violating privacy and security. Arauz, Garratt, and Ramos (2021) stated that reducing the use of cash leads to an increase in online shopping, which in turn results in the use of non-cash payments and the emergence of new payment products. On the other hand, according to Rogoff (2016), the use of non-cash payment channels is not able to completely eliminate cash as a method of payment as its importance remains.

The crisis caused by the COVID-19 virus has had a strong impact on the entire system in the Republic of North Macedonia. Many countries in the world were affected by the unpredictable occurrence of the pandemic, and the banking sector in the Republic of North Macedonia was not spared from the negative consequences that led to reduced profits. As a result of the imposed social distance, the citizens of the country have started to use payment cards for online shopping much more (Citizens increasingly enjoy the benefits of mobile applications and e-commerce, 2021). There was also an increase in transactions made using mobile phones in the first three months of this year, as well as transactions made via computers. In terms of working from home, the Republic of North Macedonia has very poor experience. Employees aged 15–64 years account for a very small proportion of the workforce, i.e., 1.7%, 1.9%, 1.6%, and 2.9%, respectively, from 2017 to 2020 (Employed Persons Working from Home as a Percentage of Total Employment, by Sex, Age, and Professional Status (%), 2021).

The research 'What will be the productivity of employees with shorter work hours?' by Cvetkoska and Dimovska (2021) conducted in 2019 in one financial institution in the Republic of North Macedonia using the Delphi method is the first study of this type conducted in a developing country through which we enter into a small segment of the basic problems, causes and changes that would be initiated if the Republic of North Macedonia thought about changing the duration of working hours. The results show that by introducing certain changes, such as process automation, motivational factors, improved accountability, better task planning, etc., the work tasks could be performed in a shorter period of time, i.e., seven working hours.

Process automation and digitalisation are very important factors in the context of the COVID-19 pandemic. They are interconnected and allow employees to perform work responsibilities remotely. The emergence of the COVID-19 virus has shown us the connection and dependence between teleworking, digitalisation and non-cash payment.

METHODOLOGY AND DATA

With the onset of the COVID-19 virus pandemic, everyone faced the fundamental challenge of testing their ability to adapt to new ways of life and work. It is difficult for people to live and function normally in conditions where there is a

real danger to their health. People differ not only in their physical condition, but also in their psychological readiness to respond to challenges. The changes also affected the employees in the banking sector, who had to make decisions about the new organisation of their units and to motivate and encourage the population to use alternative distribution channels in connection with non-cash payments, reduce contact between employees and customers and reduce the possibility of infection viruses to a minimum.

To conduct this research, a combined approach of the qualitative forecasting method Delphi and the multi-criteria decision making (MCDM) method AHP is used. AHP is the most applied MCDM method based on the bibliography by Mardani et al. (2015). Our combined Delphi-AHP approach will provide an answer to the purpose of the research: to reveal the readiness of the employees in the banking sector in the Republic of North Macedonia to adapt to the reorganisation of working hours, while at the same time using the safest payment methods in conditions when the world is trying to deal with the pandemic caused by the COVID-19 virus. Reduced risk of exposure of banking employees to the COVID-19 virus can only be achieved by concurrently implementing two diametrically opposed factors (reorganisation of working hours and digital distribution channels) that appear to have nothing in common when considered separately, but when combined, provide the maximum protection effect.

As the Delphi method itself states, the greater the number of research experts, the more inaccurate information can be obtained. For that purpose, the part of the Delphi method included 20 respondents from the banking sector, employed in five banks in the Republic of North Macedonia, who represented the panel of experts. By designing this method, although we do not have a face-to-face confrontation, it still enables the brainstorming of views and encourages a debate that is followed through the rounds by the respondents, and the process is completed when a consensus is reached by all participants in the panel of experts. Another very important feature of the Delphi method is the complete anonymity of the panel of experts, as well as the feedback that lasts throughout the entire process. The first round of the Delphi method, which was fully answered by 18 respondents, consists of 10 open-ended questions that give the opportunity for a wide range of diverse answers and creative thinking, confronting respondents with the imposed need to reorganise working hours as a necessary solution for completion of work obligations, i.e., providing services to clients, but also using alternative distribution channels as a condition for protection of the health of customers and employees. Through the answers from the first round, in fact, we can see the readiness of the employees to adapt to the new way of performing the work responsibilities, whether or not they are still adjusting, what are the positive and negative sides they face when reorganising the working hours in conditions of a pandemic caused by the COVID-19 virus and what are their views on non-cash payments, i.e., whether the trend will continue and how it affects the health of employees and customers.

For the second round, six closed-ended questions were formulated, which the employees had to answer by giving a grade from 1 to 5 or by selecting one of the offered answers. The answers offered for the questions of the second round are,

in fact, the results obtained from the first round. In the third round, the second-round questions were sent back to the panel of experts, but in addition to theirs, each respondent had the opportunity to see the answers of the other experts. The third round was crucial because it determined whether the respondents defended their views and re-decided on them or, under the influence of other experts in the panel or based on other factors, changed the previously expressed opinion. A consensus was reached in the third round as there were no changes in the answers given.

The completion of the Delphi process is a point of consensus and the results are used as a starting point for the two AHP models. For the needs of this method, five respondents from the panel of experts were included. The criteria were derived from the answers obtained from the Delphi method. The first AHP model refers to alternatives related to the reorganisation of working hours, and the aim was to choose the most appropriate working hours in conditions of health and economic crisis caused by the COVID-19 virus. The basis of the AHP method was actually laid in the second round of the Delphi method. In the fourth question, the respondents were offered five alternatives for the reorganisation of working hours in conditions of a pandemic caused by the COVID-19 virus, and they were offered as alternatives in the AHP. The five alternatives are working from home, rotation (one week working from home, one week working in the office), four-hour workday, flexible working hours and eight-hour workday with the optimal number of employees according to the capacity of the offices. In accordance with the set of alternatives, it was possible to confirm or obtain new results in relation to the previously obtained ones from the Delphi method. Based on the offered alternatives and criteria, the AHP model for choosing the most appropriate working hours in a pandemic caused by the COVID-19 virus is presented in Fig. 1. The goal is presented at the top of the model, followed by the criteria. The alternatives are presented at the bottom of the model.

The aim of the second model of the AHP applied to this research is to select the most favourable payment alternative in a pandemic caused by the COVID-19 virus. During the COVID-19 virus, the population was increasingly encouraged to reduce the use of cash as a means of payment and resort to other non-cash and contactless payment alternatives, emphasising the advantages of digitalisation. For this model, the following non-cash alternative distribution channels were offered as alternatives: cash payment, debit card, credit card, contactless payment by smartwatch and contactless payment by mobile phone. As a result, the following criteria were set: lower exposure to the virus, transaction speed, commissions, established habits and payment security. Based on the offered alternatives and criteria, the AHP model for choosing the most favourable payment alternative in conditions of a pandemic caused by the COVID-19 virus is presented in Fig. 2. The goal is presented at the top of the model, followed by the criteria, whereas the alternatives are presented at the bottom.

The process of the Delphi method, consisting of three rounds, was conducted between 28 October and 30 November 2020, while the surveys for the AHP were sent to the employees on 25 December 2020, and they had time to respond by 8 January 2021.

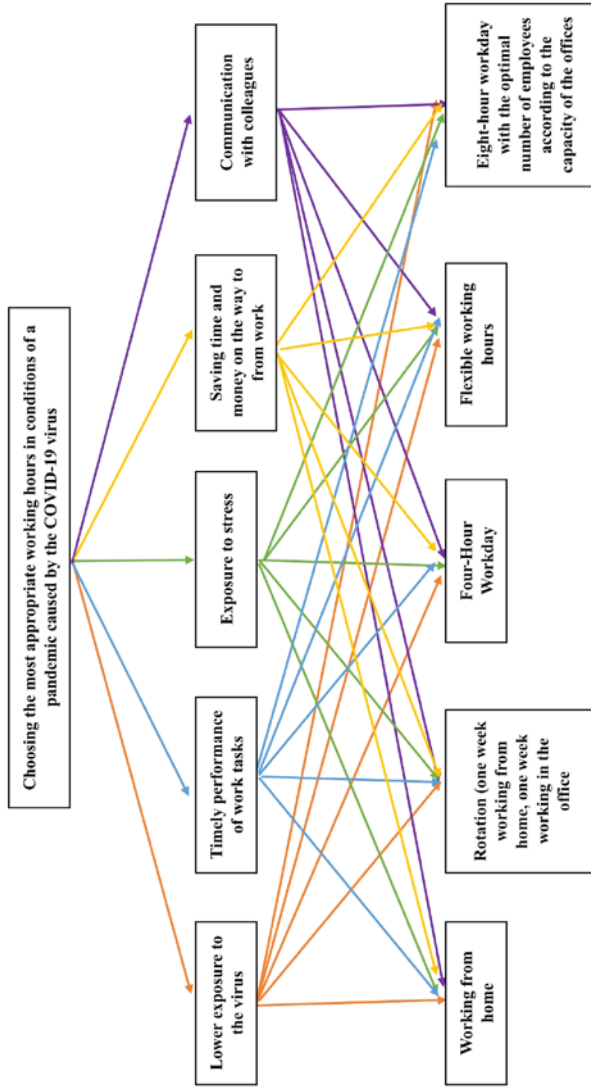

Fig. 1. The AHP Model for Choosing the Most Appropriate Working Hours During the COVID-19 Pandemic.

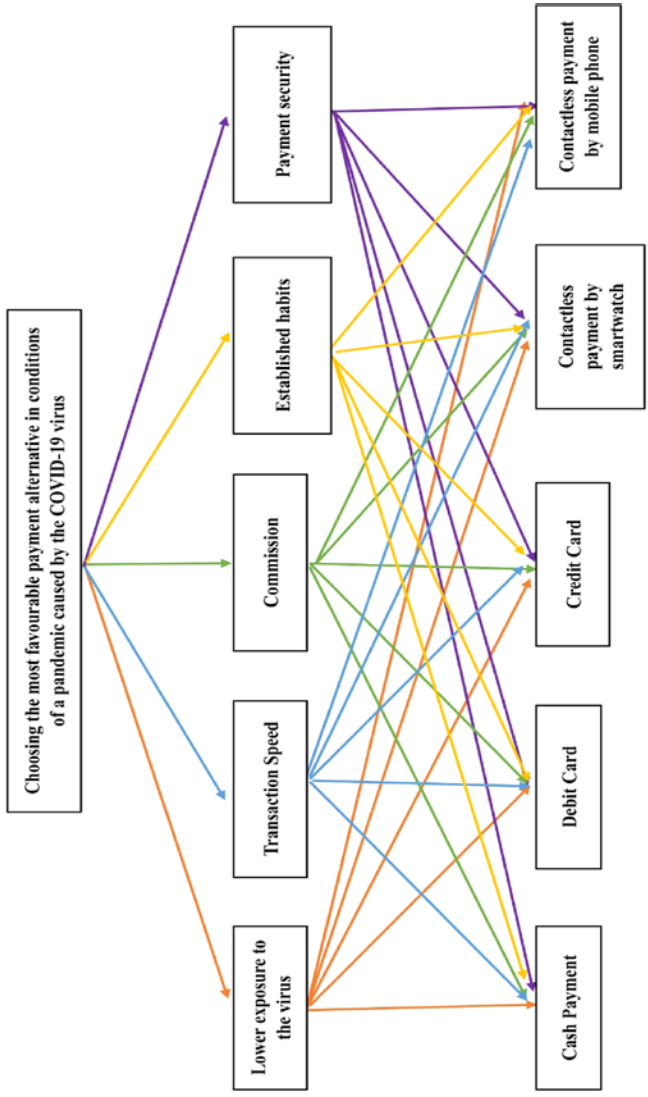

Fig. 2. AHP Model for Choosing the Most Favourable Payment Alternative During COVID-19.

RESULTS AND DISCUSSION

Working from home in emergency living conditions forced employees to adapt to the new conditions that were imposed. Due to the sensitivity of the situation, the banks made the necessary changes in a timely manner, showing their professionalism to the maximum. Given the differences that exist between people, it is realistic to expect that the adjustment will not be the same and that the effects will be positive or negative. For some of the employees in the banking sector, such as bank tellers and employees of the treasury department, due to the specificity of the work tasks, the option of working from home makes it impossible to complete some of the activities performed in the office. Their work tasks are closely related to activities that involve working with cash that cannot be completed remotely. Due to the nature of their work, they were able to perform only part of their work duties while working from home, which did not involve cash transactions. As a result, they were able to use the opportunity to work in rotation as an appropriate model of workplace reorganisation. Taking this into account, process automation and digitalisation were very important factors.

From the obtained results in our research, it can be stated that bank employees are not ready for a permanent change, i.e., reorganisation of working hours, after the end of the pandemic, i.e., 72% of the employees do not want any reorganisation, and only 16.7% of the respondents think that continuous work from home can be introduced if there are conditions for that. Only 22% of the employees were more productive while working from home, and 78% said they were more productive at the office. About 11% of the respondents answered that they have a higher level of stress when working from home. The reasons that are stated to cause increased stress are risk of infection as a result of contact, feeling of discomfort when working with personal protective equipment, inability to perform work duties due to a small number of employees, inability to respond to customer requests by phone or e-mail, difficult communication with customers and independent decision-making. The answers given regarding the changes that have occurred in the private lives of the employees regarding the reorganisation of working hours show that there is no distinction between professional and private life. Regarding the question of whether the use of personal protective equipment that would reduce the risk of contact with the COVID-19 virus complicates the normal performance of work tasks and how, 78% of employees answered that the use of personal protective equipment complicates the work, and the given reasons were that the use of a mask makes it difficult for them to breathe, they have headaches, they have to stop the work process (disinfection time), they have a problem using gloves, they have a reduced sense of touch and communication and there is no possibility to hold a meeting in one office (keeping distance). The other 22% of the employees gave the opposite answer regarding the ninth question and stated the use of personal protective equipment as an advantage.

The lower exposure to the virus as a result of reduced contact with employees and customers is the working from home benefit with the highest mean (4.94), followed by saving time and money on the way to and from work (4.89), better conditions for hygiene and a healthier diet (4.78), etc. (Table 1).

Table 1. The Benefits of Working from Home.

The Benefits of Working from Home	Mean
There is less exposure to the virus as a result of reduced contact with employees and customers	4.94
Saving time and money on the way to and from work	4.89
Better conditions for hygiene and a healthier diet	4.78
Flexibility in terms of breaks	4.00
Informal clothing	4.00
More time spent with the family	4.00
No restrictions in terms of the completion of work obligations	3.78
Higher level of concentration and focus on work	3.50
Increased productivity and efficiency	3.50
Holding online meetings or electronic communication	3.44
Less stress	3.33
The possibility of making independent decisions	2.94

On the other hand, the working from home disadvantages with the highest mean are the need for physical presence for problems that cannot be solved by phone or e-mail (4.28), and the inability to archive the prepared documentation (4.06) (Table 2).

Regarding the use of alternative distribution channels by the employees during the pandemic, all respondents used electronic/mobile banking and debit cards. More than half of the respondents (56%) used credit cards, and 39% also used mobile phones to make payments. Only 11% of respondents used ATM transactions. In terms of the benefits of using non-cash payment in pandemic conditions, 67% of respondents mentioned the savings in commissions and reduced contact with the bank, 56% reduced contact with money, 28% insight into the balance of funds, and finally, 11%, the lower risk of losing money and the opportunity to deactivate products as well as continue to use them after the pandemic. That money is a vector of disease, 67% answered positively, and from here it can be seen what the reason is for the reduced use of cash payments during the pandemic.

The answers obtained from the AHP questionnaire in order to select the most appropriate working hours in conditions of a pandemic caused by the COVID-19

Table 2. Disadvantages of Working from Home.

Disadvantages of Working from Home	Mean
The requirement for physical presence for problems and work tasks that cannot be resolved over the phone or via e-mail	4.28
Inability to archive documentation	4.06
Technical problems and interruption of the internet connection	3.83
Desocialisation	3.78
Incomplete and difficult communication with colleagues or clients	3.44
Working overtime	3.44
Responsibility for decision-making	3.11
Cost savings	2.83
Reduced concentration	2.83
Lower level of productivity	2.78

Table 3. A Description of the Best Alternative for Working Hours.

Description of the Alternative	Mean
Working from home	4.22
Rotation (one week working from home, one week working in the office)	3.50
Four-hour workday	3.33
Flexible working hours	2.33
An eight-hour workday with the optimal number of employees according to the capacity of the offices	2.06

virus correspond to the answers given in the fourth question of the second round of the Delphi method, where the same ranking of alternatives is obtained. Working from home is the most appropriate alternative for working hours, and last in line is the eight-hour workday with the optimal number of employees according to the capacity of the offices (Table 3).

Regarding the criteria, the most important criterion for choosing an alternative in relation to the set goal is lower exposure to the virus. The other criteria have the following rankings: exposure to stress, communication with colleagues, saving time and money on the way to and from work and timely performance of work tasks. When choosing the most favourable alternative for payment in a pandemic caused by the COVID-19 virus, the most important criterion is the lower exposure to the virus, followed by payment security, established habits, commissions and transaction speed. The debit card is chosen as the most favourable alternative for payment, followed by the credit card, the contactless payment by mobile phone, the contactless payment by smartwatch and lastly, the cash payment.

CONCLUSION

This research provides an answer to the readiness of the employees in the banking sector in the Republic of North Macedonia to adapt to the reorganisation of working hours while using the safest payment methods, i.e., the most appropriate working hours, as well as choosing the most favourable payment alternative in the event of a pandemic caused by the COVID-19 virus. From the extensive analysis performed, it can be concluded that the employees in the banking sector had a harder time adapting to the imposed conditions for working remotely during the pandemic caused by the COVID-19 virus. Any adjustment is a problem if we are facing it for the first time. The nature of most bank employees' work does not allow a complete physical absence from work. Working from home in real conditions when there is no threat to the health of employees is not a desirable option for the regular performance of work tasks. Performing daily work tasks from home has resulted in reduced productivity as a result of difficult and incomplete communication, i.e., a lack of experience of working from home.

The direct impact of the virus has imposed the need for reorganisation of human resources in banking institutions in the shortest period of time. Many countries in the world have the experience and knowledge to apply remote

operations, and therefore their adaptation to pandemic conditions has not made drastic changes. The Republic of North Macedonia lags behind in the practical application of remote operations due to a lack of education among the population and an incorrectly presented picture of the positive and negative effects of the operation. In conditions of reorganised working hours, some of the workers faced additional stress as a result of the imposed situation, but also changes in efficiency and productivity in their work.

In order to protect banking workers from the impact of the COVID-19 virus, in addition to the reorganisation of working hours, the need to improve the digitalisation of banking products was imposed as a possibility to reduce social distance. On the other hand, through the results obtained from the research, we can see the willingness of the banks to offer alternative payment channels as well as greater digitalisation during a pandemic caused by the COVID-19 virus. The Republic of North Macedonia is not lagging behind in the global trend of using digital distribution channels. The high digitalisation of the banks in the country has enabled clients to enjoy uninterrupted service and the safety of their health. The banking sector in the country has successfully overcome the challenges and achieved positive results in its operations. The stated changes in the method of payment had an equivalent effect on reducing the risk of infection as the changes related to the adjustment of the working methods of the bank employees. The COVID-19 pandemic has reduced the use of ATMs and the use of cash as a means of payment by consumers. Contactless credit and debit cards, as well as the use of other distribution channels, put cash payments in the background for the majority of the population. Due to the imposed situation, consumers replaced the traditional way of shopping with online shopping and reduced the use of cash and ATMs during the pandemic.

The Republic of North Macedonia, as a developing country, needs to work on the development of plans and strategies for working from home or reorganisation of working hours to be more acceptable to employees, emphasising its benefits for both employees and employers. Raising public awareness of the acceptance of the alternative of working from home will help the country to be in step with other countries that have positive experiences and are more easily adapted to the changes that have taken place.

This study provides the first research showing the impact of the COVID-19 virus pandemic on the digitalisation of the banking sector in the Republic of North Macedonia, with special reference to the reorganisation of working hours and non-cash payment by using a combined Delphi-AHP approach. This study opens the door for researchers interested in this field to conduct similar studies. In our further study, we plan to investigate the performance of employees in the banking sector during the COVID-19 pandemic and identify its determinants.

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