Submitted: March 28th, 2024 Reviews completed: May 4th, 2024 Published: November 7th, 2024

Financial Law Review No. 34 [2]/2024

UNIVERSITY OF GDAŃSK • MASARYK UNIVERSITY • PAVEL JOZEF ŠAFÁRIK UNIVERSITY http://www.ejournals.eu/FLR

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PRAYER DISRUPTED BY PREOCCUPATIONS ABOUT MAKING A DONATION. PAYMENT INNOVATIONS IN THE CHURCH IN POLAND

Abstract

This study expands the knowledge about innovations in financial transactions, which could be applied in the Church, including sacral sites. The research aim was to indicate in what way one can improve the process of making financial donations for the Church. His hypothesis is: 1) the prayers of congregation members and other persons visiting sacral sites are often disturbed by the impossibility (or possibly difficulty) of making a financial donation due to the fact that its only expected and possible form is cash payment, 2) the financial support for the Church, including the functioning of sacral sites, would be greater if they had specialist ATMs installed accepting innovative instruments of non-cash payments. The authors described

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the modern methods of non-cash payment and the technological solutions facilitating this, and identified the areas of the Church operations in which their quick adoption is possible in order to improve the quality of praying and making financial donations in sacral sites. The study employed the methods of the critical analysis of literature and OSINT (Open Source Intelligence).

Key words: non-cash transactions, payments in church, ATMs, financial donations inside a sacral site, prayer

JEL Classification: D14, DI31, E42, 0186, 031, 033

1. Introduction

The financial sector is among these areas in modern economies which over the last five decades has undergone extensive innovation, mainly due to the popularisation of the process approach to the management of financial institutions and IT solutions. The changes resulting from these processes have increasingly transformed new sectors of the economy as well as areas of everyday life. During that period their activity has evolved several times as indicated by the applied terminology and technologies (initially, the terms 'computerisation' and 'informatisation' were used in relation to the activities of financial institutions).

The initial phase of the change involved the installation of the first computers and expanding areas of applying IT instruments to improve the functioning of the entities and their management [Nosowski 2005: 14-18]. The next stage included the centralisation of the implemented IT solutions and their synchronisation with the quickly progressing work on the implementation of the process approach to management [Gospodarowicz 2018: 12]. At the same time, the advent of the Internet and its growing popularity encouraged the migration of the operational activity to the Internet platforms [Stultz 2019]. That stage ended at the start of the new Millenium, and it resulted in the speedy acquisition of the available options, at first by using just the Internet, and later the Internet and mobile telephone technologies. The adoption in the financial sector of the web and mobile technologies, both supporting the increasing domination of non-cash transactions over cash ones, resulted in a leap in the development of the market of financial services - just as in the past when silver coins replaced gold ones in the monetary circulation, now non-cash payments are replacing cash transactions.

The essence of the ongoing processes referred to as the digitalisation of finance has become the passing of the relation client-financial institutions into the digital sphere, which led to the coining of the term 'the virtualisation of finance'. Owing to this, it has become possible to: 1) provide financial services ever quicker (the standard ones in practice online), 2) provide services in a safer way (increased level of security of the conducted transactions, of the money transferred, of the clients of financial institutions of the institutions themselves, 3) provide a growing number of services (digitalisation created revolutionary ways of providing financial services on the mass scale) [Kasiewicz, Kurkliński 2022: 42-44].

The digitalisation of finances appears in many areas of everyday life, and it is particularly visible in non-cash transactions. As a result, a reduction of direct contact between customers and the bank staff as the customers' visits to the stationary branches of banks are becoming increasingly rare. An ever larger number of payments are made online, which undoubtedly is more convenient, safer and cheaper. Moreover, customers are ever more convinced about being more empowered and independent, and about the confidentiality and security of the realised transactions. In the long term this means an increase in the number of users of digital payment systems and the dynamic growth of the value of non-cash payments, carried out by ever larger numbers of people.

Successive generations of payment transactions carry cash with them less and less often. Cashless settlements are a standard for them, including those carried out thanks to a device they practically never part with – a the smartphone. – the smartphone. But what is important, people who have been on the market for many years, now entering the senior age, have "grown up" together with these changes in the area of payments. While younger people use cashless payments out of convenience, they opt for them on the basis of the already experienced strengths and weaknesses of both forms. In their case, it is not only an expression of the evolution that banking has undergone, but also they along with it. The widespread use of non-cash transactions results in their lack of understanding for the exclusive use of cash in some areas of the economy, or by some entities. Unfortunately, the growing preference for non-cash payments means a loss of revenue for those who only accept payments in cash, and one of such very few entities being the Church.

Looking at the scale and type of transactions conducted between Church entities and internal sections of the Church (e.g. the curia, including the Roman curia, parishes, and Church organisations) and external entities (the state and its institutions and offices, entrepreneurs), the most frequently used instrument is a bank transfer of money. However, when dealing with members of the denomination and tourists who visit sacral sites, as well as parishioners making payments for the religious services executed by the clergy, the most universally employed form of payment is cash.

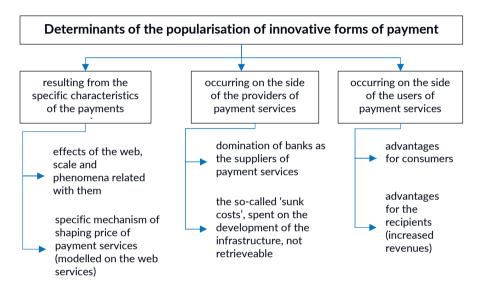
This study expands the knowledge about innovations in financial transactions, which could be applied in the Church, including sacral sites. The research aim was to indicate in what way one can improve the process of making financial donations for the Church. His hypothesis is: 1) the prayers of congregation members and other persons visiting sacral sites are often disturbed by the impossibility (or possibly difficulty) of making a financial donation due to the fact that its only expected and possible form is cash payment, 2) the financial support for the Church, including the functioning of sacral sites, would be greater if they had specialist ATMs installed accepting innovative instruments of non-cash payments. The authors described the modern methods of non-cash payment and the technological solutions facilitating this, and identified the areas of the Church operations in which their quick adoption is possible in order to improve the quality of praying and making financial donations in sacral sites. The authors employed the research methods of the analysis of financial literature, in particular dealing with non-cash payments, observation of behaviour of both the congregation and tourists when visiting sacral sites, as well as applying OSINT conducted in the media regarding publicly available information on the operations of the Catholic Church in Poland and worldwide.

2. Arrangements

2.1. Diffusion of innovation in non-cash transactions

The customers of financial institutions have a growing trust in the new technologies, with constant access to their bank accounts, up-to-date information about their bank balance but also to the structure of the payments already made and those planned in the near future [Kasiewicz, Kurkliński, 2022: 36]. The number of bank customers using innovative payment modes includes

entrepreneurs (producers, service providers, sellers), and also households. Hence, despite initial resistance, digital payments are made on an increasingly wider scale in restaurants and other points of sale, used to purchase tickets, pay for parking spaces, etc. Digital transactions have 'conquered' not only financial services but also medical, educational and transport. As a model, the determinants of innovation diffusion in the retail payments market are presented in Scheme 1.



Scheme 1. Determinants of the diffusion of innovation in the market of retail transactions

Source: based on [Harasim 2012: 244-250; Harasim 2014: 120].

At present, there are hardly any places where services for customers can be obtained only by paying cash. The widespread use of digitalised payments [Baszyński 2016: 32], enforces in a natural way the inclusion of non-cash transactions by a steadily growing number of institutions and entities. Those deciding to abstain become subject to a form of financial exclusion, which may be linked with a loss of revenue and the onset of financial difficulties [Harasim 2014: 120].

The dynamic progression of non-cash transactions has brought on a growing pressure of inclusivity, pushing all entities towards participation in non-cash transactions. This is particularly interesting in the case of Poland, which

at the point of its accession to the EU was not considered to be a leader in terms of the speed of such processes. Poles were seen as traditionalists with a fairly conservative approach to innovations, including those financial such as payments. In the initial period immediately after Poland's EU accession, one could clearly see the phenomenon of a 'cash culture' [Maison 2013: 85], which was later further reinforced by the crisis of trust in banks triggered by the global financial crisis in 2008. Innovation in the methods of payment were seen as interesting but still in the domain of curiosities and novelties.

The unstoppable progress in the popularity of Internet platforms, e-business and the New Economy contributed to changes in the attitudes of Poles towards the forms of carrying out payments, manifested by the growing number of newly opened bank accounts and the proliferation of bank cards [Porównanie... 2022: 36]. A breakthrough significance in this aspect was the introduction of contactless cards which facilitated payment and had a revolutionary impact on the scale of non-cash transactions (especially in terms of small amounts related to everyday expenses and single purchases).

Typically, non-cash transactions are associated mainly with card payments, however the pandemic opened the way for the development of mobile payments, which became the technological 'successors' of paying by card [Kaczmarek 2022: 64], and nowadays constitute the most widespread and fundamental kind of transactions. Moreover, such payments also provide greater security of transactions than bank cards, guaranteeing a similar convenience of use and, very importantly, can be introduced via smartphone apps.

A smartphone, and in particular the apps which can be used thanks to it, for many of us – especially young people – has become absolutely indispensable. A piece of plastic with a touch screen gives them a feeling of personal identity, belongingness to their generation, and conditions their self-realisation. It is a channel of communication which removes any barriers globally, and serves as a phone and also a telephone directory, a notebook, a photo album, a newspaper, TV and Internet connection with which anything can be viewed, bought, etc. Hence, it is no great surprise that persons around 30 and under can easily live without books, TV, papers, and many other popular items but simply cannot exist without their smartphones.

The excessive use of smartphones, and in particular of some apps, is highly disquieting – electronic 'Tamagotchi' have now become a font of knowledge, determinant of access to all kinds of services and goods, including mobile payments. In Poland these are made using the BLIK system (payment method offered in mobile applications of most banks operating in Poland), while globally such services are also offered primarily by Google Wallet (formerly Google Pay) or Apple Pay (applications associated with the so-called Bigtechs) [Gołąb, Monkiewicz 2021: 53]. These systems effectively eliminate bank cards from the area of non-cash transactions, offering even greater ease of making payments, at the same time taking advantage of the same banking terminals. It should be noted, however, that these processes do not occur in the same way in all countries, so they should be the subject of further research [Kotowski, Polasik 2021a: 3].

Thanks to contactless cards and mobile apps, payment has become easy, quick and convenient [Harasim, Klimontowicz, 2022: 47], it does not require remembering and confirming one's PIN number, therefore cash has lost its historical dominance. Obviously, the number and value of non-cash transactions in Poland has increased, and 2014 was the record year in this respect - from then on Poles have decidedly become fans of contactless payment, with a significant growth of this type of transactions [Ocena... 2023: 54]. In the following years, the growth factor turned out to be the development of the Fin-tech sector (PayTech... 2020: 10). These dynamic startups have intensified competition in the financial services market and brought about changes - especially in the Pay-tech segment - that have enabled the popularization of the next generations of payment innovations (e.g. mobile payment systems) [Casu, Girardone, Molyneux 2022: 41]. This time, the rapid development of the payment services market was accompanied by an adequate expansion of the financial supervision activities, inspired by changes in the law, whether at the EU or national level [Komunikat... 2020]. Financial innovations have become a characteristic feature of this period, taking into account the opportunities offered by modern technologies, "tailor-made" to specific users. Examples are: payments debited to the telephone bill, payments for the use of motorways, deferred payments, motor insurance for kilometers, etc. [PayTech... 2020: 44-53].

It is worth emphasizing here that the dominance of cashless payments in Poland took place several years before the Covid-19 pandemic. Its

beginning, due to the suddenness of events, was associated with a temporary, surprise and forced need to return to cash transactions. However, in the subsequent stages of the pandemic, cashless transactions convinced users with their undoubted, in pandemic circumstances, advantages (reduced risk of infection) [Bednarz, Markiewicz, Szmelter-Jarosz 2024: 136].

The outbreak of the pandemic in March 2020 caused a brief (only a few weeks) 'freeze' of non-cash payments. This was a period of increased demand for cash [Kotowski, Polasik 2021b: 14], which was being explained by fears about the difficulty in satisfying consumer needs in other forms, as well as the necessary feeling of security provided by cash reserves kept at home. However, when one of the restrictions introduced in Poland during the pandemic limited the number of interpersonal contacts and free access to goods and services (some outlets were closed down, while others could be visited in just a few permitted hour), the consumer market changed its orientation related to ways of providing goods and services, and of the payment for them. Non-cash transactions were then associated with hygiene - lacking in direct cash transactions - and thus also with security and safety, not only financial but also physical [Wiśniewski, Kotowski, Polasik, Moro 2021: 35]. At the time, no attention was paid to the growing dependence of all entities on the digital sphere and the risks associated with it. Interestingly, this phenomenon affected many people of varying ages, even including the over-65s, yet such a fact should not come as a surprise, bearing in mind that this was a generation of active, open-minded people who in 2004, the year of the EU accession of Poland, i.e. 16 years earlier, were under 50 years of age and attentively observed changes then taking place in Poland and noting the advantages of non-cash transactions in the conditions of the pandemic. This is confirmed by the data presented in Figures 1, 2 and 3.

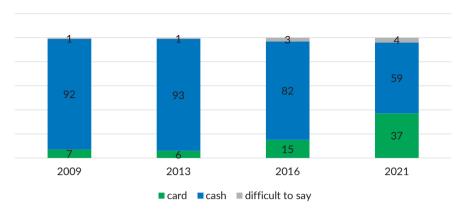


Figure 1. Answers of the respondents regarding the chosen form of payment of the amounts of PLN 0-10 (in %)

Own elaboration based on: [Maison 2021: 22].

The presented survey was commissioned by the National Bank of Poland (NBP) in the years 2009, 2013, 2016, and 2021, each time on a sample of 1000 respondents [Maison 2021: 134; Zwyczaje... 2021]. The data in Figure 1 suggest that in 2009 merely 7% of those questioned used a bank card to make small payments up to the value of PLN 10 (which did not require the use their PIN). A significant increase in such payments occurred between 2013 and 2016, whilst in 2021 over 37% of transactions below PLN 10 were made this way, and for higher amounts (PLN 10-50) the tendency to use cards was much higher (Figure 2).

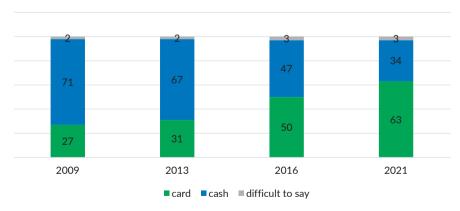


Figure 2. Answers of the respondents regarding the forms of payment of the amounts of PLN 11-50 (in %)?

Own elaboration based on [Maison 2021: 22].

Figure 2 shows that in 2009 only 27% of the respondents used their bank card when making small payments (PLN 11-50), which also did not require the use of their PIN in the ATM. A notable increase in such transactions was recorded between 2013 and 2016, reaching in 2021 the level of 63% of the value of these payments. One should also note the results regarding the use of contactless cards in payments made by persons of all ages (Figure 3).

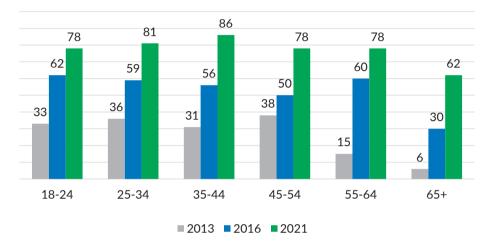


Figure 3. Answers of the respondents regarding the frequency of payments with contactless cards according to their age group (in %)

Own elaboration based on [Maison 2021: 26].

Figure 3 shows the growing popularity of payments by bank cards in all age categories, indicated for the selected years. However, the highest increase was observed for persons of 65 and over (62% in 2021, whilst 'only' 30% in 2016, and 6% in 2013). Such a large increase in the popularity of card payments among senior citizens is not a mere coincidence since in 2016 persons from that age group were aged 55–64, with the frequency of using bank cards at around 60%. This is relevant, as along with the ageing of these groups, the popularity of non-cash payments among these persons will be also increasing (presumably even up to the level of about 86%).

The findings of other surveys commissioned by the NBP [Porównanie... 2022: 23] confirm that Poles are among the greatest enthusiasts of non-cash payments in Europe, resulting from their satisfaction with such a form of payment and the increased level of the self-assessment [Postawy... 2022:

11]. In addition, it is pleasant because we unequivocally associate it with innovation and the fact that we can be independent in this (we choose the form of payment ourselves and use it). Other EU nations, especially those considered wealthy, do not share Polish enthusiasm for non-cash transactions [Postawy... 2022: 32]. Unlike Poles, they prefer professional service offered by financial service providers to independence.

The described trends point to highly promising future for non-cash transactions in Poland, which will also progress towards mobile payments offering the relatively highest level of independence, higher than bank card payments (even for contactless transactions), whilst also being most popular among young people entering adulthood and the labour market, and with time moving on to more advanced age groups [Kaczmarek 2022: 64; Kaczmarek 2023: 228].

In this context, it appears surprising that non-cash transactions are absent in the relations between the Church and persons frequenting sacral sites. It would seem that also in this area such transactions should become commonplace in a fairly natural way, and would even increase. In view of the described trends, it can be said that the Church authorities in Poland have no other choice but to decidedly accept these processes also in the area of contributions made by their congregations and persons visiting sacral sites for other reasons, as well as by those participating in pilgrimages.

2.2. The Church versus digital challenges in finance – advantages and disadvantages of using innovation in non-cash transactions within sacral sites

The use of these systems and settlements as part of cashless payments has become so common that wherever they cannot be used, there is a problem with making payments. Both young consumers and those of a 'young mindset' increasingly do not carry a wallet containing cash or even a bank card, hence they are unable to make payments in places which only accept cash, such as churches.

Sacral objects are places of prayer for people of many nationalities (".... my house shall be called a house of prayer for all peoples" – NAB 2012, Isaiah 56:7) who gather in them or come to them to feel closer to God ("For where two or three are gathered together in my name, there am I in the midst of them". – NAB 2012, Matthew 18:20). Presence in the temple

is an opportunity to make a gift – a sacrifice, which nowadays has a financial dimension.

"Honor the LORD with your wealth, with first fruits of all your produce;
Then will your barns be filled with grain, with new wine your vats will
overflow."

Proverbs 3:9-10 [NAB 2012]

"A man's gift clears the way for him, and gains him access to great men."

Proverbs 18:16 [NAB 2012]

"He who confers benefits will be amply enriched, and he who refreshes others will himself be refreshed." Proverbs 11:25 [NAB 2012]

"Refuse no one the good on which he has a claim when it is in your power to do it for him."

Proverbs 3:27 [NAB 2012]

However, in order for anyone who wishes to make a financial offering in sacral objects to do so, there must be suitable conditions. It certainly doesn't make it any easier lack of facilities for making cashless payments in sacral buildings, resulting on the one hand in discomfort for visitors and on the other hand in damage to the revenues of church authorities.

The lack of facilities enabling non-cash payments in sacral sites causes, on the one hand, discomfort for the visitors, and on the other, loss of revenue for the Church. Congregation members arriving to participate in various religious services, or simply to say their prayers, feel anxious when realising that they do not have any cash with them (in general or of the appropriate denomination), have left their wallet/purse at home, or do not have a bank card with them, and yet (because they normally do so) wish to leave some money 'for the Church' or pay for the provided service (saying the mass in a special intention, receiving a sacrament). This feeling is also familiar to tourists visiting such sites, who frequently wish to leave some money to light a candle for someone/something, or just make a payment towards the restoration of the site they are visiting and where they can say their prayers, whilst not having with them cash (especially in the appropriate

foreign currency), but only their smartphones with which they are taking pictures there.

The described lack of ready cash among visitors to sacral sites, including the lack of the appropriate foreign currency, results in the reduction of revenue for the owners of these sites (parishes). In the case of sites of no historical importance, located in rarely frequented places, such losses may be insignificant, whereas for those which are historical monuments located in very popular places and also visited by pilgrims, often from countries using other currencies, such losses can be very high. In both these cases, one can note lost opportunities – for the former group (visitors) this could be linked with loss of a spiritual nature, while for the latter (the owners of such sites) – financial losses.

The media dealing with the economy and finance, even before the outbreak of the pandemic started to publish enthusiastic news items about the installation in sacral objects (churches, etc.,) of the first ATM-style appliances to accept donations ("donation machines", "e-tacs"). These are small devices, resembling a pulpit, in the colors of noble brown or classic black, often with the logo of the parish, placed in the quiet privacy of churches (usually in the porch), equipped with clear touch screens. Most often, they present content in two alternative language versions (Polish and English), although you can also find devices with more of these versions [Datkomat... 2020]. They are used to make payments with contactless cards, but also allow for mobile payments (BLIK), in order to make a donation for the maintenance of a religious building, as well as often to support selected charity campaigns. Payments are made in suggested, usually small amounts (see Photo 1). However, there are more and more donation machines where it is possible to make a donation in amounts higher than PLN 100 (see Photo 2), i.e. requiring the use of a PIN code. A feature of this type of device is discreet operation. They are quiet and do not clutter the environment (they do not print confirmations, but display an individually prepared thank you note on the screen of the device and (optionally) a short text message confirming the transfer of the victim). They operate on the basis of wireless solutions, have a built-in signal amplification system and - what is important - are monitored around the clock [Datkomat... 2023].

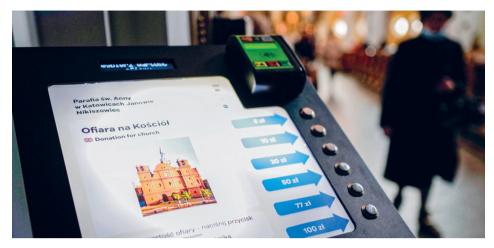


Photo 1. ATM for donations in the Church of St Ann in Katowice in Poland

Photo: PAP/Andrzej Grygiel)

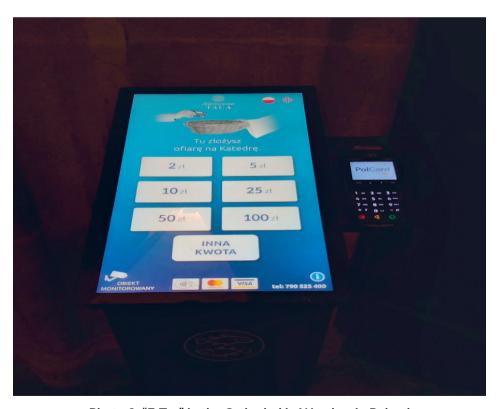


Photo 2. "E-Tac" in the Cathedral in Wroclaw in Poland
Own photo.

In 2019, prior to the pandemic, the media in Poland reported that there were over 100 such devices installed in Polish churches [Tomaszewski 2019], and this was the first step on the path to the popularisation of non-cash donations made in sacral sites [Starzyńska-Rosiecka 2019]. Unfortunately, following the outbreak of the COVID-19 pandemic, churches were deserted, and later only limited access was permitted (for a small number of people at the same time), thus putting a stop to this process. However, one should remember the specificity of the group visiting churches and other sites during the pandemic.

Despite the fact that the elderly were acknowledged as those most threatened by infection with the Sars-Cov-2 virus, and the most seriously affected by it, in fact they were the most dedicated to frequenting churches and religious services (even though in reduced numbers due to the introduced restrictions). These were not the true fans of non-cash payments (did not have bank cards and smartphones with mobile apps), and thus it was not surprising that the initiative to install ATMs for donations in churches was postponed. The introduction of the described modern methods into the transactions between congregations/tourists and the Church offers – despite certain weaknesses – numerous advantages to both sides, as shown in Tables 1 and 2.

Table 1. Advantages and disadvantages of the instruments for non-cash transactions in using ATMs for donations – the user's perspective

Advantages for users	Disadvantages for users
convenience – a donation is made by choosing the amount and tap- ping your card or smartphone with the activated contactless payment app (e.g. BLIK)	Necessity of bringing to church a contactless card or smartphone (especially using the latter can be negatively received by other members of the congregation).
speed – transaction is conducted on-line and does not require network connection	One has to select the amount, which can be seen by others thus risking the loss of the confidentiality of the donation.
certainty - the money will be paid directly into the parish account	ATM for donations has to installed in a place easily accessible for the congregation.

Advantages for users	Disadvantages for users
No need to carry cash to church.	Going to a church service, it is not clear when to make a donation using the ATM (before or after the service).

Own elaboration.

Installing ATMs for donations (or any similar devices) in sacral sites becomes not only a technical challenge, but also directs attention towards the enforcement of the necessary changes in the mentality of the clergy, believers and tourist; this process will not be easy.

Table 2. Advantages and disadvantages of non-cash instruments in using ATMs for donations – the financial beneficiary's perspective

Advantages for the owner of the sacral object	Disadvantages for the owner of the sacral object
Convenience and automation in making donations, without the need to involve additional persons.	Handling a smartphone in church does not meet with acceptance of other members of the congregation.
Transactions are carried out without any extra sound or disruption which can annoy those praying.	ATM for donations has to be located in the appropriate place in order that using it should not disrupt concentration of others.
Certainty – the money will be transferred directly into the owner's account.	The appliance has to be installed and serviced which brings additional costs.
Installing ATMs for donations should increase the percentage of the believers and others making donations and also raise their value.	It is necessary to establish when one should make ATM donations so it does not interfere with the religious service and prayers of others, etc. (making donations at any time is possible only when the ATM is placed out of sight of the congregation).
Security due to not collecting money in money boxes which can be burgled.	Other necessary costs involve protection of ATMs from vandalism.

Own elaboration.

There is a general, and quite understandable, lack of acceptance for using any electronic devices in churches because they detract the congregation from concentration and prayer. Many priests reprimand teenagers for 'fiddling with' their smartphones in their pockets or hiding them under the pews, which results from associating these appliances with playing and excessive surfing in the domains of the Internet, including those forbidden to them. However, it is not possible to put the clock back for some phenomena, but rather to point out a 'good' and productive way of using them by others.

Smartphones are with us practically all the time, they count our steps, analyse any activities, and also monitor the work of certain organs (heart, lungs), therefore it is not strange that even in church we keep them in our pockets or bags. When kept silent, they do not disturb persons in our vicinity in their concentration and prayer, and the same could be the case when making a donation (this can be done in a completely silent way, more discreet than dropping coins onto the collection tray during a religious service).

2.3. Time for change

The period of the pandemic introduced and reinforced changes in the structure of the forms of monetary transactions which now cannot be pushed back. The advantages of non-cash payments are undeniable and ensure sufficient convenience to permanently retain the introduced changes. These changes are irreversible, even though frequently the fears about financial liquidity and efficiency of the financial system of a given country may encourage its citizens to the temporary possession of limited financial resources in cash (for a so-called 'rainy day').

In order to accept the appearance of innovative modes of payment in sacral sites, a change of mindset is required among the congregations and also the clergy responsible for the sites' functioning. Such a change is not easy, because it is difficult to alter habits and attitudes, especially concerning persons for whom these new forms are new, and who so far have not felt the need to use certain solutions. This applies in particular to very old people, who nowadays are almost the only visitors in many sacral sites. However, the spread of innovation into the Church cannot be stopped, as in few years' time the active players in the market, using the goods and services it provides, will be people familiar with digital mobility from their early days [Kaczmarek 2023: 228]. For these generations, the reluctance of the elderly (already

adults at the time when the indicated solutions are entering into common use), to acknowledge smartphones as useful appliances is incomprehensible and impossible to accept; this also applies to contactless cards. Therefore, although today the use of the discussed tools and appliances in sacral sites causes some astonishment and disapproval, in the not so distant future it should become generally accepted and not arouse negative emotions. In practice, in the past there were similar reservations in some areas and milieus (e.g. the usage of mobile phones in universities). With the passage of time, nowadays these devices not only do not meet with any disapproval and their use is not banned, but in fact it is recommended to benefit from their capabilities in the educational process (in line with the principle that if one cannot eliminate something, instead it should be made useful).

The change of the mindset will require the cooperation of the Church authorities and the institutions involved in maintaining non-cash payments (banks, clearing agents, settlement agents, etc.), as well as between the clergy and their congregations and service personnel in sacral sites. The indicated mutual advantages brought on by the popularisation of the postulated payment modes will certainly reward the effort involved and have a positive impact on the improvement of the financial condition of the Church, including its individual parishes, which is particularly important when they are responsible for the state of a sacral historical monument. This will not be a short-term process, yet in the end the introduction of these changes into such sites will mean that eventually the devices installed there to facilitate making donations will not detract members of the congregation from the purpose of their visit, namely prayer.

3. Conclusions

The presented information suggests that in the future making payments will decidedly take on a non-cash form in the majority of cases. Importantly, this form will dominate not only in terms of the value of the executed transactions but also their number. Moreover, it would be difficult to envisage the areas where this trend could differ, hence it is to be expected that the Church will also have to face the challenge of accepting digital payments. This will mainly apply to small financial flows of money from persons frequenting sacral sites, since the numerical data demonstrate that they make increasingly rare use of cash and only carry with them a multifunctional smartphone.

Based on the conducted analyses and the obtained findings, it should be stated that the research aim of the study was realised and the posed hypothesis was verified. The authors proved that it is possible to facilitate the process of making financial donations in church using the popular methods of digital payments. However, in the authors' opinion, these issues require further in-depth studies to provide, among others, relevant information about the age structure of persons interested in making their donations in digital form. It would also be important to find out, at least approximately, what amounts they would be willing to donate in this way and what motives would encourage them to do so. Such research can be conducted in many countries (and thus have a supra-national and supra-religious character), and their results could be used to prepare generalised multifaceted analyses in the described area. The authors hope that this study corresponds with such a research trend, indicating new, potentially interesting areas of research.

References

Baszyński, A.: Zmiana technologiczna jako determinanta struktury konkurencyjnej rynku usług bankowych. Zeszyty Naukowe Wydziału Zamiejscowego w Chorzowie Wyższej Szkoły Bankowej w Poznaniu, 2016, Nr 18, 24-36.

Bednarz, J., Markiewicz, M., Szmelter-Jarosz, A.: Digital payments during the COVID-19 pandemic in Poland: An initial insight on the consumer perception of security and convenience. Argumenta Oeconomica, Year 2024, Vol. 52, No. 1.

Casu, B, Girardone, C., Moluneux, Ph.: Introduction to banking, Third edition, Pearson, 2022.

Datkomat...: Datkomat Mastercarda, Caritas i PeP, 2020, https://www.cashless.pl/8593-datkomat-mastercard-caritas-pep (accessed: 15.06.2024).

Datkomat...: Datkomat – gdzie go spotkasz i jak go obsłużyć?, 2023, https://polskabezgotowkowa.pl/dla-ciebie/artykuly/datkomat-gdzie-go-spotkasz-i-jak-go-obsluzyc/ (accessed: 10.06.2024).

Gołąb, P., Monkiewicz, J.: Finanse cyfrowe: ramy teoretyczne, w: Finanse cyfrowe: informatyzacja, cyfryzacja i danetyzacja. Warszawa: Oficyna Wydawnicza Politechniki Warszawskiej, 2021.

Gospodarowicz, A.: Bankowość elektroniczna. Istota i innowacje. Warszawa: Wydawnictwo C.H. Beck, 2018.

Harasim, J.: Determinanty upowszechnienia się innowacji płatniczych. Annales UMCS Lublin, 2012, Vol. XLVI, 4, Sectio H, 243-252.

Harasim, J.: Skłonność Polaków do stosowania innowacyjnych instrumentów płatniczych. Annales UMCS Lublin, 2014, Vol. XLVIII, 3, Sectio H, 119-127.

Harasim, J., Klimontowicz, M.: Payment Features and Incentives as Drivers for Non-Cash Payments Usage – the Evidence from Poland. Annales UMCS Lublin, 2022, Vol. LVI, 3, Sectio H, 37-59; DOI:10.17951/h.2022.56.3.37-59.

Kaczmarek, M.: Konsument na rynku bankowości mobilnej w Polsce. Podobieństwa i różnice międzypokoleniowe. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, 2022.

Kaczmarek, M.: Przynależność do kohorty pokoleniowej jako determinanta korzystania z BLIK-a. Bank i Kredyt, 2023, Nr 54(2), 221-238.

Kasiewicz, S., Kurkliński, L.: Bankowość internetowa i mobilna, [w:] Gąsiorkiewicz, L. | Monkiewicz, J. (red.). Finanse cyfrowe. Perspektywa rynkowa. Warszawa: Oficyna Wydawnicza Politechniki Warszawskiej, 2022.

Komunikat...: Komunikat Rady Europejskiej, Rady, Europejskiego Komitetu Ekonomiczno-Społecznego i Komitetu Regionów w sprawie unijnej strategii w zakresie płatności detalicznych z dnia 24.09.2020 r., (2020), COM(2020) 592, eur-lex.europa. eu/legal-content/PL/TXT/PDF/?uri=CELEX:52020DC0592&qid=1721212182646 (accessed: 15.12.2023).

Kotkowski, R, Polasik, M.: COVID-19 pandemic increases the divide between cash and cashless payment users in Europe. Econ Lett. 2021 Dec;209:110139. doi: 10.1016/j.econlet.2021.110139. Epub 2021 Nov 2. PMID: 34744221; PMCID: PMC8561752.

Kotkowski, R., Polasik, M.: Working Paper No. 339. COVID-19 pandemic increases the divide between cash and cashless payment users in Europe, 2021 https://static.nbp.pl/publikacje/materialy-i-studia/339_en .pdf.

Maison, D.: Polak w świecie finansów, Warszawa: Wydawnictwo Naukowe PWN, 2013.

Maison, D.: Postawy Polaków wobec obrotu bezgotówkowego. Raport z badania 2021 i analiza porównawcza z danymi z 2009, 2013 i 2016 roku. Narodowy Bank Polski 2021; https://nbp.pl/wp-content/uploads/2022/09/obrot-bezgotowkowy-2021. pdf (accessed: 12.12.2023).

NAB: The New American Bible (NAB). Revised Edition. The Leading Catholic Resource for Understanding Holy Scripture. New York: Harper Collins Publishers, 2012.

Nosowski, A.: Geneza bankowości elektronicznej, [w:] Gospodarowicz, A. (red.), Bankowość elektroniczna. Warszawa: Polskie Wydawnictwo Ekonomiczne, 2005.

Ocena...: Ocena funkcjonowania polskiego systemu płatniczego w I półroczu 2023 r. Warszawa: Departament Systemu Płatniczego NBP 2023; https://nbp.pl/system-platniczy/dane-i-analizy/ocena-funkcjonowania-systemu-platniczego/(accessed: 15.12.2023).

Ofiaromat: https://ekai.pl/ekonom-kep-terminale-platnicze-dla-wiernych-i-dla-kosciola/ (accessed: 12.03.2024).

PayTech...: PayTech – innowacyjne rozwiązania płatnicze na rynku polskim, (2020,) Departament Systemu Płatniczego NBP, Warszawa; źródło: https://nbp.pl/wp-content/uploads/2022/09/paytech.pdf (accessed: 11.12.2023).

Porównanie...: Porównanie wybranych elementów polskiego systemu płatniczego z systemami innych krajów Unii Europejskiej za 2021 r. Warszawa: Departament Systemu Płatniczego NBP 2022; https://nbp.pl/wp-content/uploads/2023/01/porownanie_UE_2021.pdf (accessed: 14.12.2023).

Postawy...: Postawy wobec form płatności. Raport Visa, E-service. Warszawa 2022: https://www.eservice.pl/badania/ (accessed: 15.12.2023).

Reich, G.: Online and mobile banking adoption soars, setting new benchmarks for 2021. The Financial Brand. https://thefinancialbrand.com/107582/garret-online-mobile-banking-adoption-rates-covid/ (accessed: 22.12.2023).

Starzyńska-Rosiecka, D.: Płatności bezgotówkowe w Kościele. "Nie boimy się nowoczesnych rozwiązań", Bankier, 2019, https://www.bankier.pl/wiadomosc/Platnoscibezgotowkowe-w-Kosciele-Nie-boimy-sie-nowoczesnych-rozwiazan-7789593. html, (accessed: 1.12.2023).

Stultz, R.: Fintech, Bigtech and the future banks. Ohio: State University, Fisher College of Business 2019, Working Paper Series, https://doi.org/10.1111/jacf.12378.

Tomaszewski, J.: Przeżegnać się, PIN i zielonym. Elektroniczna taca wchodzi do polskich kościołów 2019, https://innpoland.pl/156875,zblizeniowe-platnosci-w-kosciele-elektroniczna-taca-w-110-parafiach-polski (accessed: 2.12.2023).

Wiśniewski, T. P., Polasik, M., Kotkowski, R., Moro, A.: Working Paper No. 337. Switching from cash to cashless payments during the COVID-19 pandemic and beyond, 2021, https://static.nbp.pl/publikacje/materialy-i-studia/337_en.pdf.

Zwyczaje...: Zwyczaje płatnicze w Polsce w 2020 r. Warszawa: Departament Systemu Płatniczego NBP 2021; https://nbp.pl/wp-content/uploads/2022/09/zwyczaje_platnicze_Polakow_2020p.pdf (accessed: 15.12.2023).