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## Contactless Payments in Poland : The Survey of Students in the Region of Lodz

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## **Contactless Payments in Poland. The Survey of Students in the Region of Lodz**

**Summary:** Contactless payments in the past two years become a frequent topic appearing in different media. They had also cause a lot of discussion. On the one hand, contactless payments bring comfort and increase the speed of transactions. On the other hand, these payments raise questions about the safety of their use. The collision of two major groups of issues makes contactless payments are subject to continuous analysis. This analysis seeks to answer the question of whether this form of payment is accepted and becomes a widely used? Finding (even simplified) answer to this question is also the main objective of this article.

In article author examines the contactless payments in Poland. The basis for analysis is the study of student opinions. Author focused mainly on finding replying to a question whether contactless payments will be a commonly accepted form of payment. Author also has tried to identify the potential advantages and disadvantages of contactless payments.

**Keywords:** contactless payments, e-commerce, students, Lodz.

### **Introduction**

Contactless payments in the past two years become a frequent topic appearing in different media. They had also cause a lot of discussion. On the one hand, contactless payments bring comfort and increase the speed of transactions. On the other hand, these payments raise questions about the safety of their use. The collision of two major groups of issues makes contactless payments are subject to continuous analysis. This analysis seeks to answer the question of whether this form of payment is accepted and becomes a widely used? Finding (even simplified) answer to this question is also the main objective of this article.

In relation to this main objective, author makes the following detailed hypotheses:

- Method for making contactless payments is known and understood.
- Indicated disadvantages of making contactless payments are due mostly out of ignorance.

— The advantages of contactless payments should be more important than the disadvantages (and therefore users are willing to use contactless payments).

In order to verify the hypotheses, author takes into consideration assumption, that the key to the success or failure of contactless payments will be reception by users. Analysing the received outcome, the author assumes that we can get closer to understanding whether the contactless payments are actually already accepted by the users and if we should not have to worry about the future development of this class of payments.

## 1. Contactless payments – the general situation in Poland

Contactless payments is a rapidly growing class of payments on the Polish market (especially in the last 24 months). Although the data analysis shows that this development would slow down a little, it is still very significant (see table below).

**Table 1.** Development of contactless payments in Poland - based on the number of issued contactless payment cards and terminals.

	2011 Q1-2	2011 Q3-4	2012 Q1-2	2012 Q3-4	2013 Q1
number of contactless-payment cards (in thousands)	5900	9400	11500	15100	16300
dynamics (from period to period)	—	59,32%	22,34%	31,30%	x
number of terminals (in thousands)	25	48	77	105	120
dynamics (from period to period)	—	92,00%	60,42%	36,36%	x

Source: Own research based on [18].

Similarly interesting and significant are the results for the number of contactless transactions in Poland (see table below).

**Table 2.** Development of contactless payments in Poland – based on the number of contactless payment transactions.

	March 2011	March 2012	March 2013
number of contactless payment transactions (in thousands)	about 80	about 900	about 3000
dynamics (from period to period)	—	1025,00%	233,33%

Source: Own research based on [1].

As illustrated by Visa – in Poland is carried out most contactless payments in Europe (in II 2012 there has been more than 2 million operations) – the number of terminals reached 120 000 units [20]. About 60% of issued contactless payment cards, has a VISA logo (according to the Open Finance [17]), but other sources give equal distribution of market (according to the Polasik Research [9]). Of course payment card is not the only one instrument for contactless payments – contactless payment feature can be implemented in the form of labels, watches, mobile payments etc. Author does not deal with other instruments because payment cards – at the moment – cover 99.5% market share in Poland [2].

We can assume, that contactless payments have been widely popularized by the advertising campaigns carried out in the press and television. Not without significance is the fact, that now often people get new payment cards with contactless payment functionality without asking. At the end of the third quarter of 2011, 86% of issued contactless payment cards came from five banks – PKOBP, Pekao, ING Bank Slaski, BZ WBK and Citi Handlowy [11].

## **2. Research method**

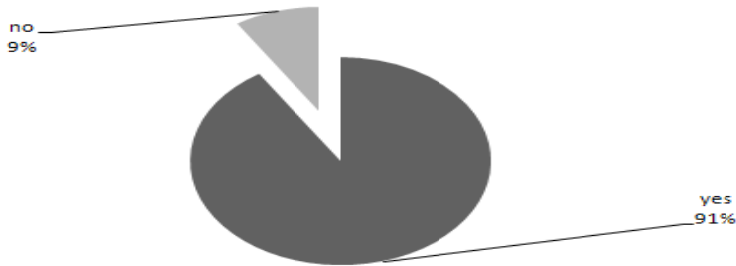
Author assumed that the survey will be conducted on a large group of students of economics (and preferably if a field of study is a bit related to IT). Author decided to make such selection, assuming that these students should have at least basic knowledge related to the subject of electronic commerce (and electronic payments too). Significant impact on the choice of the group was the fact that the new solution accept earliest younger users ([6]).

The study was organized in two faculties of the University of Lodz – Faculty of Economics and Sociology, and Faculty of Management. The study took place in two rounds and consisted of completing an electronic questionnaire. The first part of the study was conducted in December 2011 (some of the results, author presented in the article [13]), the second was conducted in May 2012. The study invited a group of about a thousand students. The author received about a quarter of a thousand responses (in the rest of the paper, author presents the exact number of responses for each of the survey questions).

## **3. Results**

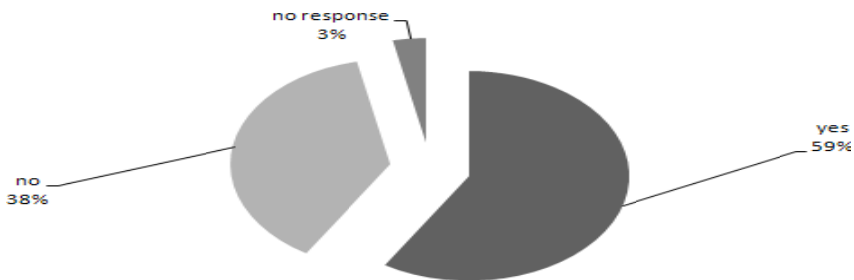
The research focused on several aspects of contactless payments (presented below).

### 3.1. General awareness of the term “contactless payment”



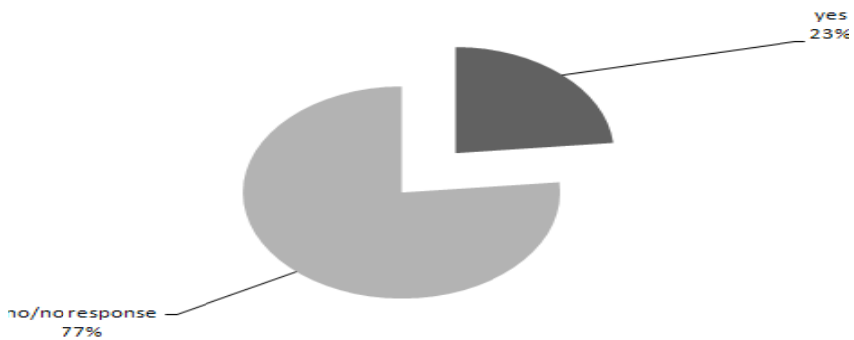
**Chart 1.** Do you know the term „contactless payment”? N=238

Source: Own research.



**Chart 2.** Can you recognize the graphic sign which indicates the place where you can make contactless payment? N=209

Source: Own research.



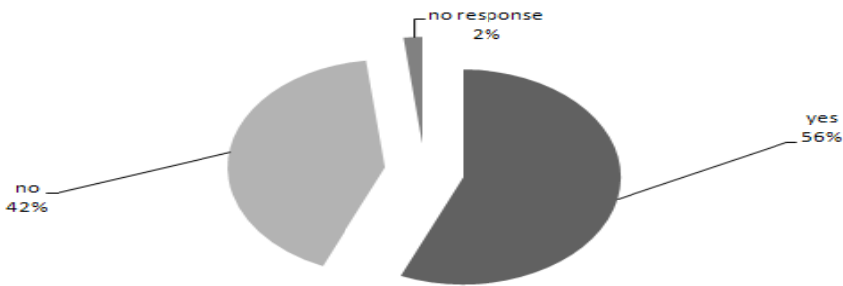
**Chart 3.** Do you know which organization uses the symbol PayPass? N=209

Source: Own research.



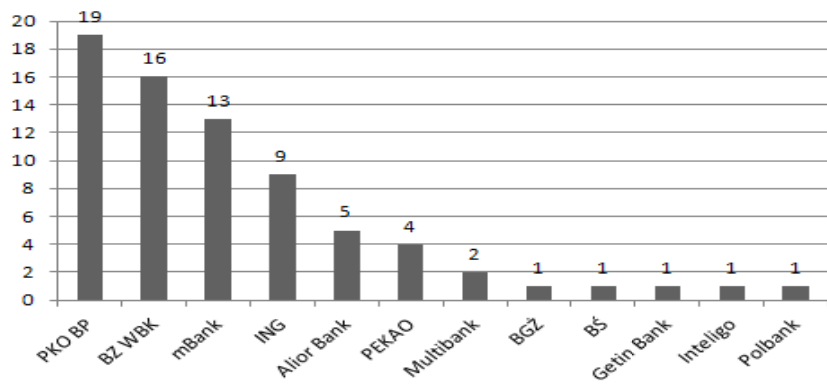
**Chart 4.** Do you know which organization uses the symbol PayWave? N=209

Source: Own research.



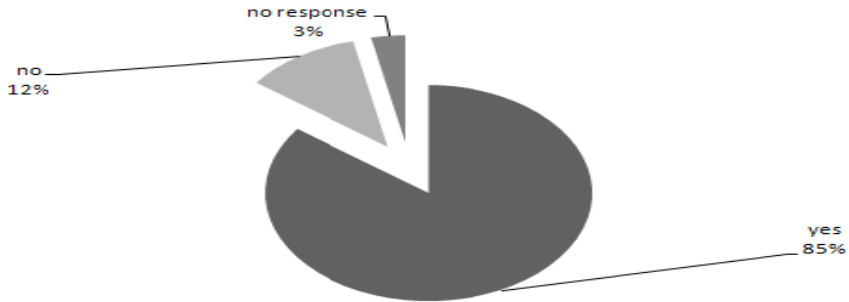
**Chart 5.** Do you recall any advertising campaign related to the contactless payments (eg. on TV)? N=209

Source: Own research.



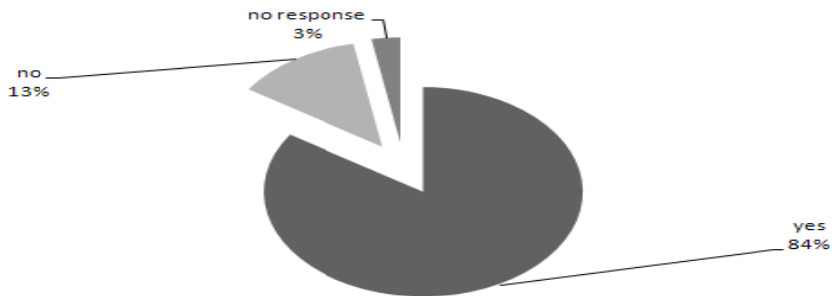
**Chart 6.** Do you have any instrument for contactless payments (if so, from which bank)? N=209

Source: Own research.



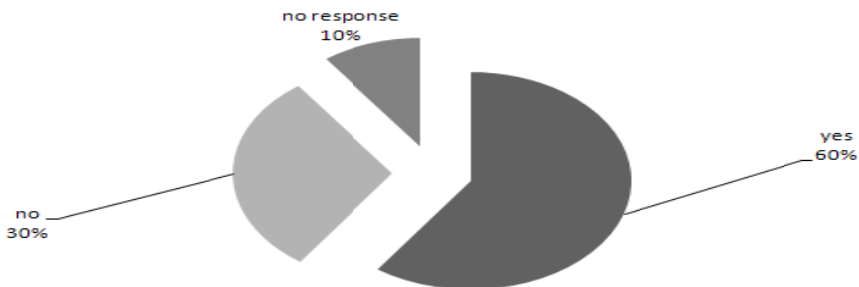
**Chart 7.** Do you know how to use a contactless payment card to make a payment? N=209

Source: Own research.



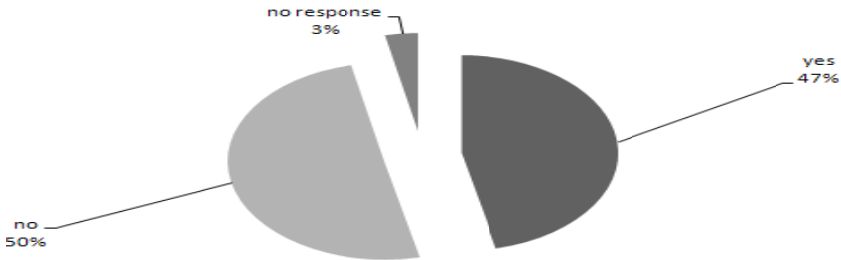
**Chart 8.** Do you know, that you can make contactless payments without a card PIN code? N=209

Source: Own research.



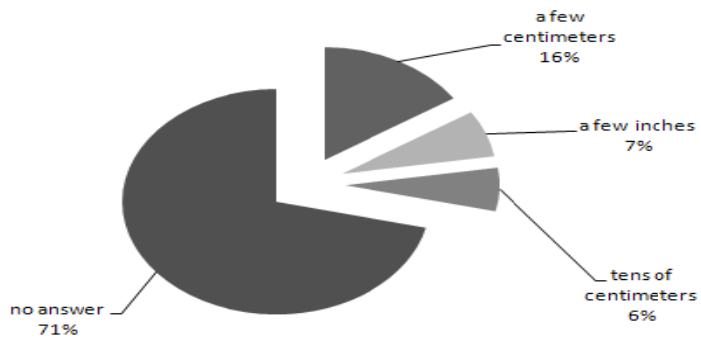
**Chart 9.** Do you know that there is an upper cash limit for which you do not need to enter PIN code to make contactless payment? N=209

Source: Own research.



**Chart 10.** Do you know, that there are limits on the number of daily transactions without a need to enter PIN code? N=209.

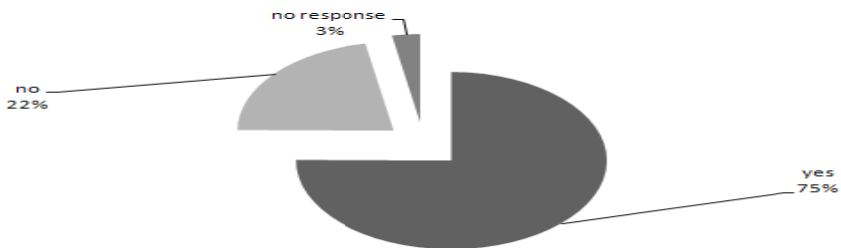
Source: Own research.



**Chart 11.** Do you know what could be the maximum distance from the card to payment terminal (please, evaluate this distance in cm)? N=209

Source: Own research.

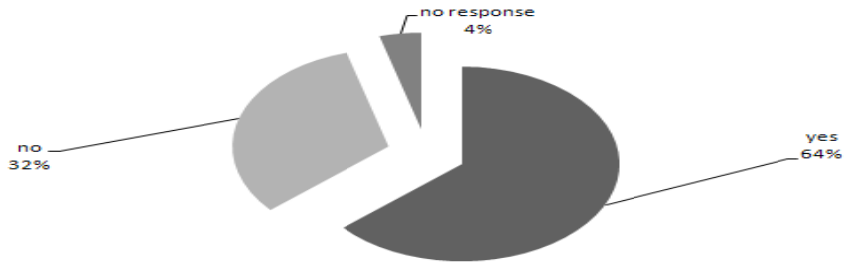
### 3.2. Concerns about contactless payments



**Chart 12.** Do you find potentially dangerous situation when you do not need to enter PIN code to authorize at least some payment operations? N=209

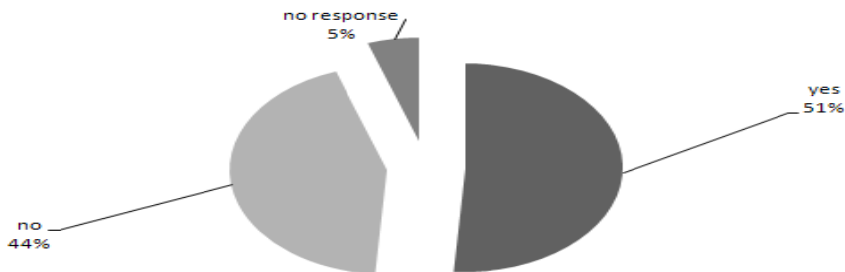
Source: Own research.





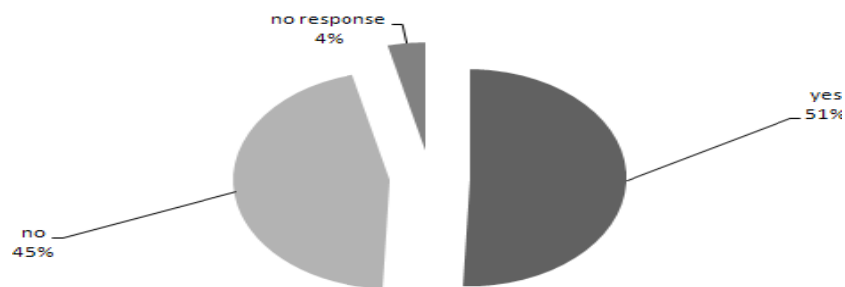
**Chart 13.** Are you afraid of stealing your money by bringing a special terminal to the contactless payment card (for example, when you have a card in your pocket)? N=209

Source: Own research.



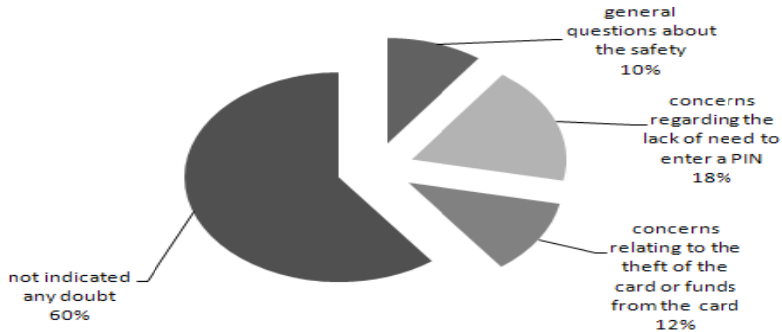
**Chart 14.** Do you think it would be possible to read data from the contactless payment card without your knowledge (for example, by a fraudulent postal employee)? N=209.

Source: Own research.



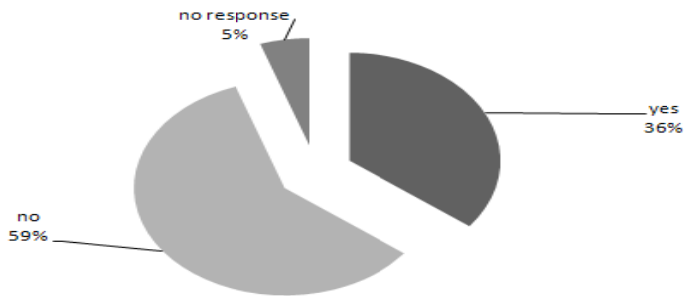
**Chart 14.** Do you have any doubts about whether contactless payment card will not be used to collect information about you / your behaviour / preferences? N=209

Source: Own research.



**Chart 16.** Do you have any doubts about safety in making contactless payments? N=209

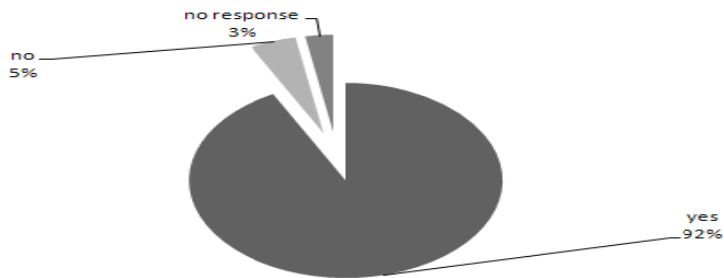
Source: Own research.



**Chart 17.** If we assume, that the banks will issue only payments cards with contactless payment functionality, would you like to disable this feature? N=209

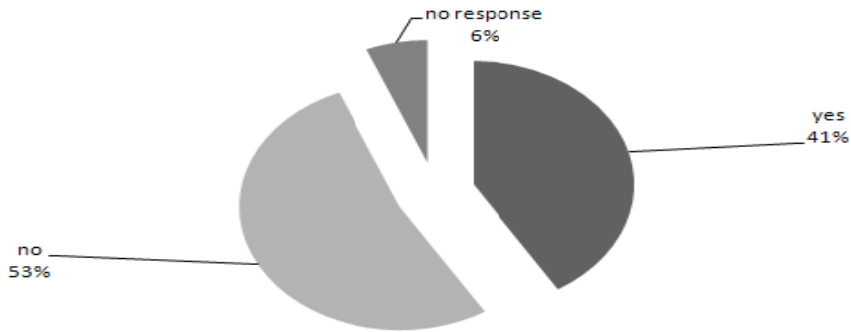
Source: Own research.

### 3.3. Expected benefits of contactless payments



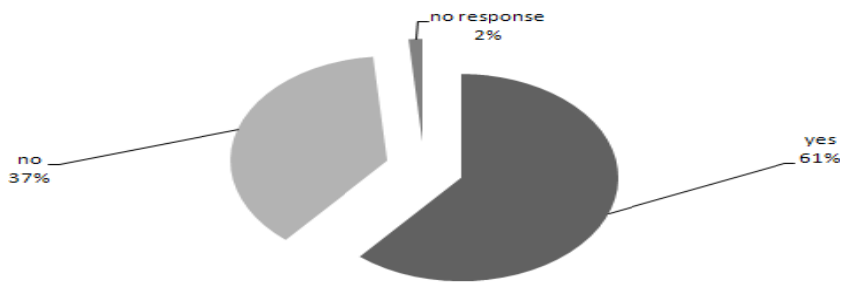
**Chart 18.** Do you think that contactless payment cards are faster than the traditional payment cards? N=209

Source: Own research.



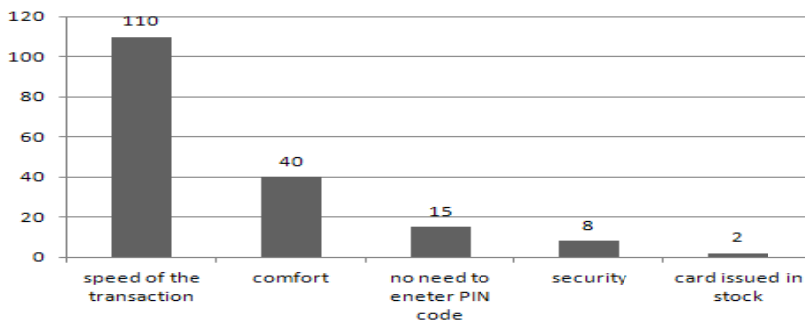
**Chart 19.** Do you think, that fact that you do not need to give the card directly to a seller will raise the level of transaction security? N=209

Source: Own research.



**Chart 20.** Do you find contactless payment card so comfortable that it should replace traditional payment card? N=209

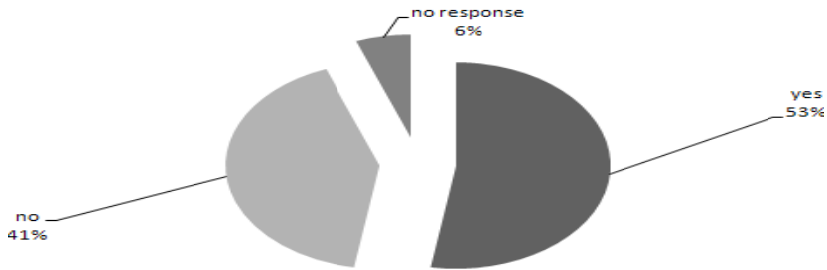
Source: Own research.



**Chart 21.** Please write the most important features that make attractive contactless payments.

Source: Own research.

### 3.4. Desire to possess cards with contactless payment functionality



**Chart 22.** What do you think – could you resign from cash payments and choose only contactless payments (if they were fully common)? N=209

Source: Own research.



**Chart 23.** If you do not have a contactless payment card – would you like to have it? N=209

Source: Own research.

## 4. Conclusions from the study

As we can see, despite the fact that 40% of respondents did not remind himself any advertising campaign related to contactless payments (Chart 5), as many as 90% can identify the term “contactless payments” (Chart 1).

Interestingly – about 33% of respondents said that they already have contactless payment cards (Chart 6) – the most popular issuer banks are: PKO BP, BZ WBK, mBank and ING (which is not surprising considering the data from the second page of this article). 85% of respondents (Chart 7) declare that they know how to make contactless payments. Unfortunately, more specific questions reveal that this knowledge is insufficient. While still 60% of respondents know how to look like a symbol indicating a place where we can make contactless payment (Chart 2), respondents poorly identify symbols PayPass or payWave (identify it

every fourth respondent – Charts 3 and 4). The knowledge that we do not need enter PIN code (for each transaction) characterize a broad group of 85% of respondents (Chart 8). Unfortunately, less than 50% of respondents know, that we can perform only a few day operations without a PIN code (Chart 10). In the contrary – the existence of the limit when PIN is required is quite well known (60% – see Chart 9). The knowledge, what may be the maximum distance from the contactless payment card to terminal is not common – only 16% of respondents indicated the correct answer (Chart 11).

Therefore, we cannot wonder that there are concerns about the safety of the wider use of contactless payment cards:

- over  $\frac{2}{3}$  of respondents were worried about the lack of having to enter the PIN (as a consequence, the respondents were afraid of losing money – Charts 12 and 13),
- more than half had doubts about confidentiality of own personal data (Charts 14 and 15).

However, only  $\frac{1}{3}$  of respondents declared their willingness to block the function contactless payments on their payment cards (Chart 17).

Despite these concerns, the respondents strongly emphasized the advantages of contactless payments:

- speed of transactions (over 90% – see Chart 18),
- convenience in use (more than 60% – see Chart 20).

Therefore, there may raise a presumption, that the respondents general express their opinions based on information presented in the media (despite earlier statements, that they often do not remember any ads – Chart 5).

It also turns out, that the respondents are not confident about the necessity of having a contactless payment card (see Chart 23). Respondents also see no sufficient reason to replace cash payments by contactless payments (Chart 22).

Based on the results we can see that hypotheses posed in the article, are quite difficult to evaluate.

First hypothesis is the easiest in the evaluation (method for making contactless payments is known and understood). Users generally know what means the term “contactless payments” (Chart 1 and 7). However in the more specific questions, the respondents often served incorrect answers or did not give any answer (Chart 2, 3 and 4, and 11). Probably a big impact on the relatively correct knowledge (but inaccurate knowledge) have advertising campaigns on television (Chart 5). In summary, the first hypothesis – beyond the mentioned objections – seems to be true.

In the case of the second hypothesis (indicated disadvantages of making contactless payments are due mostly out of ignorance), the conclusions are less clear but also lead to a particular conclusion. Visible problems in the use of contactless payments (Chart 12, 13, 14 and 15) may result from insufficient user knowledge about the technical details of the operation of contactless payments (that

suggests chart 10 and 11 and partially chart 9). Also, in case of this hypothesis, we can assume that it is true.

Third hypothesis (the advantages of contactless payments should be more important than the disadvantages – and therefore users are willing to use contactless payments) is the most difficult for evaluation. Although the scope of the benefits of contactless payments is well known to users (Chart 18 and 20), but probably advantages do not overshadow the disadvantages. General knowledge of and attitudes toward contactless payments among the study group (people who – generally – should be interested in using modern solutions) paradoxically points to the limited success of the promotion (as well as assessment of the benefit) of the contactless payments (Chart 22 and 23). Thus, in the case of this hypothesis, there is no strong basis for acceptance.

As a final conclusion the author can make the following statement – the popularity of contactless payments – after the big increase – can go into a state of stagnation.

Maybe, we can see now the place for the development of other types of contactless payments (not based on payment cards) – such as mobile payments. However, these considerations are outside the scope of this article.

## **Final remarks**

Of course presented detailed results of the research can not be the basis for generalization to the whole population of contactless payments users in Poland. This is due to the specific selection of the research group. However, the author believes that the main conclusions of the study are valuable and lead to significant conclusions regarding the future of contactless payments in Poland. This occurs due to the mentioned assumptions made in section 3. It's about the fact, that contactless payments are directed rather to the young people. Young people are more likely to use the novelties and are more familiar with modern technologies. So it seems that the success of contactless payments in the study group will be reflected in the success of contactless payments at all. But, of course, such certainty we can not have, and therefore author assumes the necessity of further research on the topic (study based on a wider group of users). Without a doubt, the results of these studies will be interested not only the institutions issuing the tools to make contactless payments, but all kinds of financial institutions and quasi financial. Taking into account the conclusions presented in the article, the main area of future research should be to analyze the security of contactless payments. Notable is also the study of the use of contactless payment in mobile payments.

## Literature

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### **Płatności zbliżeniowe w Polsce. badania studentów regionu łódzkiego**

**Synopsis:** W artykule autor analizuje płatności zbliżeniowe w Polsce. Podstawą analizy jest badanie opinii studentów. Autor koncentruje się głównie na znalezieniu odpowiedzi na pytanie, czy płatności zbliżeniowe staną się powszechnie akceptowaną formą płatności. Autor stara się również zidentyfikować potencjalne wady i zalety płatności zbliżeniowych.

**Słowa kluczowe:** płatności zbliżeniowe, handel elektroniczny, studenci, Łódź.