

## **E-wallets as a Payment Instrument for Digital Nomads**

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### **Abstract**

**Aim:** The aim of the paper was to examine the determinants affecting the number of e-wallets (Stored Value Digital Wallets) owned by digital nomads, highlighting the features of digital wallets that differentiate them from other available money storage options.

**Methodology:** The research methods applied were literature analysis, in-depth interviews, and the Pearson correlation coefficient.

**Results:** When conducting the Pearson correlation analysis, it should be emphasised that the strongest correlation with the number of e-wallets owned was related to the number of countries visited by digital nomads in a year and the number of employers/clients. After analysing the in-depth interviews, the main determinant for having e-wallets was their usefulness, popularity, and ease of use.

**Implications and recommendations:** The conducted research may constitute the basis for further research on the use of new technologies by digital nomads.

**Originality/value:** The paper describes the identified research gap related to the use and perception of e-wallets by digital nomads.

**Keywords:** digital nomads, e-wallet, online payments

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## **1. Introduction**

The increasing significance of digital technologies and the generally progressing digitalisation is visible, among others, in the methods of payment and storing electronic money. The share of digital wallets is expanding annually, along with the number of users who, encouraged by its simplicity and convenience,

use such wallets as PayPal, Vise, Venmo and many others. Digital wallets can be seen as a kind of substitute for physical wallets used in cash payments. One of the distinguishing features of the above innovative solution is that the development of online payments allows to conduct transactions without relying solely on cash or credit cards as the exclusive means of payment. According to the published data, in 2020 there were more than 2.8 billion electronic wallets registered (Boku, 2021).

However, it is worth stressing the disadvantages of using such technology, for example the possible technical problems that may occur when wishing to make a transaction (Subaramaniam et al., 2020), and this has the potential to lead to transaction issues.

As a result of current trends, it is crucial to examine the importance of e-wallets for digital nomads, who are indicated as a group following the latest technologies. The aim of the paper was to examine the determinants affecting the number of e-wallets owned by digital nomads and highlighting the features of digital wallets that differentiate them from other available money storage options. Digital nomads are a collective characterised by their tendency to embrace technological solutions that allow them to work from almost anywhere in the world, and manage their budgets using digital technologies.

The research process consisted in verifying the following hypotheses:

(H1) Digital nomads are more likely to adopt an e-wallet if they perceive it as providing significant usability.

(H2) The amount of gross monthly income does not significantly affect the number of e-wallets held by digital nomads.

(H3) The number of e-wallets is significantly affected by the number of countries visited by digital nomads in a year.

(H4) The number of e-wallets is significantly affected by the number employers/clients.

The research methods used in the paper were literature analysis, in-depth interviews, and the Pearson correlation coefficient. The article aimed to show the range of reasons for using digital wallets within a specific research group.

## 2. Literature Review

The multitude of available platforms and apps that enable payment via the Internet makes the existing restrictions lose their importance. When analysing digital wallets as an element of digital finance, attention should be paid to a number of other technological solutions such as electronic banking (Arner et al., 2015). For the purposes of this study only digital wallets that allow to store money with a balance (Stored Value Digital Wallets) were examined.

The analysis of digital money as a component of the contemporary economy indicates that it contributes, among other factors, to an increase in consumption levels (Grzelczak & Pastusiak, 2020). For the purposes of this paper, a digital wallet was understood as “a platform that works like a physical wallet where users store electronic money that they top up with their mobile banking services (...)” (Kasirye et al., 2021). However, there are several definitions that take into account the division of digital wallets, and that proposed by Akhil Pai drew particular attention to the possibility of making transactions via the Internet (Pai, 2018). An e-wallet was also described as an app that can be installed on electronic devices such as a smartphone, computer, and tablet (Hamzah et al., 2023).

In the earlier research on e-wallets, one should note the study by Oanh Tran Thi Kim, Diep Van Nguyen, Van Ngoc Pham, which indicated a multitude of factors determining the use of this technology in Vietnam during the COVID-19 pandemic. After conducting research among 151 respondents (meeting the criteria of the study), the factors affecting the use of digital wallets included trust in this technology and the usefulness (Kim et al., 2023). More than half of the respondents were students, which has significance in the context of this paper. Regarding the determinants of the use of e-wallets, similar conclusions were provided by Anushia Chelvarayan, Sook Fern Yeo, Han Hui Yi, and Hazlaili Hashim,

who pointed to the usefulness of digital wallets, trust and risk among 140 Malaysian students (Chelvarayan et al., 2022). An important conclusion derived from their research was the negligible impact of e-wallet usability on the substantive engagement with and utilisation of this technology, proved by calculating a  $p$ -value that was higher than the assumed value of 0.05.

A study that identified the factors determining the use of digital wallets was carried out by Mohd Shafie Rosli, Nor Shela Saleh, Azlah Md. Ali and Suaib Abu Bakar, who conducted a survey among respondents from the Z generation (233 respondents). The study revealed the knowledge of e-wallets and their wide acceptance among the surveyed group (Rosli et al., 2023), and also showed that Generation Z is driven by the usefulness and value of having an e-wallet.

When examining the variables that determine the decision of a potential user to choose e-wallets, social factors should be included as described by Ahmed Taher Esawe, whose study was conducted among 576 users meet the specified conditions (in total 598 respondents). One of the conclusions emphasised by the researchers was the influence of the social factors on consumer decision-making (Esawe, 2022), where individuals with the potential to exert substantial influence on decision-making processes included family members.

Unlike the previously cited articles, the research carried out among digital nomads and concerning the importance of digital technologies should be distinguished, e.g. the study by Caleece Nash, Mohammad Hossein Jarrahi, W. Sutherland, and G. Phillip who grasped the important role of ICT for those group. Based on, among others, 22 interviews with digital nomads, the authors place importance on the significance of technology (Nash et al., 2018). The study stressed the critical importance of digital technologies that facilitate the work and operational dynamics of digital nomads: “digital technologies play a critical role in the work practices of digital nomads (...).” An example given by the researchers applied to storing information in the cloud and managing personal life. Furthermore, the authors emphasised the importance of work in the life of digital nomads who have to adapt to local conditions, including different time zones, travelling and work.

Nevertheless, digital nomads are considered to be a new trend, not sufficiently described as yet. This was pointed out by I. Reichenberger, who noted the lack of a clear definition of a digital nomad (Reichenberger, 2018). Their lifestyle descriptions often refer to the use of technology in a broad sense without exploring specific apps, platforms, and devices.

In acknowledging the phenomenon of digital nomadism, it is essential to understand who a digital nomad is and what distinguishes him/her, the issue addressed by O. Hannonen, who based on the analysis of the literature, named the differences between, among others, professional travellers, backpackers and flashpackers. The author concluded that digital nomads “are both highly mobile professionals and lifestyle travelers (...)” (Hannonen, 2020).

When examining the literature, the noted research gap related to digital nomads and e-wallets. To date the research concentrated on the factors that determined the choice of e-wallet without specifically referring to wallets that have a balance. Moreover, the group of respondents who identify themselves as digital nomads has not yet been thoroughly studied.

Commonly, digital nomads are identified with people who are no strangers to technology, and use the latest solutions that allow them to travel and work at the same time. Similar observations have been made by selected researchers. The importance of Internet platforms, apps, and the devices themselves that enable connection to the Internet has been emphasised many times (Nash et al., 2018). Moreover, according to the NomadList portal, about 34% of men (digital nomads) are professional Software Devs, whilst 16% of women are professionally involved in marketing (NomadList.com, 2023). This implies that those professions necessitate a level of technology proficiency.

Considering the above, it appears necessary to conduct a survey among this group of respondents who use the latest technologies, and are defined as “people who perform their work from a country which is not their country of residence and who do it thanks to the remote nature of their work and through the use of digital technologies (...)” (UNDP, 2020).

### 3. Methodology

For the purposes of the paper, the research method that allowed to obtain both quantitative and qualitative data was an in-depth interview. Interviews conducted with a designated research group allowed to understand the relatively new phenomenon of digital nomadism. The research sample consisted of Polish citizens who identify themselves as digital nomads. The interviews were conducted both by telephone and in the form of a face-to-face meeting. The research group consisted of 50 respondents.

The interview questionnaire was divided into three sections: identification questions, questions about e-wallets (including the number of accounts) and questions about the determinants of choosing a digital wallet. The total number of questions was 15, but due to the nature of the above research method, their number could be increased during the interview.

The respondents had to meet the following criteria: be of legal age (18 years and older), be a digital nomad, have paid work, and have at least one digital wallet with a balance. Prior to the interview, the respondents were informed about complete anonymity, namely no sharing of personal data that could be used to identify the respondent.

In order to identify the significant factors affecting the number of e-wallets owned by digital nomads, Pearson's correlation coefficient was used to distinguish how the variables were correlated with each other. The program used for the study was STATISTICA. The analysis of the literature and in-depth interviews contribute to distinguishing the variables used for the Pearson correlation coefficient, i.e. gross monthly income, number of visited countries during a year, number of clients/employers during a year and age of the digital nomad.

The data that contributed to the implementation of the study and allowed for the formulation of questions for in-depth interviews came from, among others, NomadList.com, scientific articles and reports.

The identified disadvantages of the use of in-depth interviews included the limited research sample, which did not allow to determine the correctness for a specific surveyed group. Furthermore, the information obtained from the respondents could not be verified; information regarding the gross monthly salary could have been inflated, but this was beyond the control of the researcher. However, conducting an interview also had a number of advantages, such as understanding the phenomenon of digital nomadism, respondents' motivation to travel and earn money at the same time as well as their needs.

The size of the sample (50 respondents) must be emphasised as the size of the sample is important, and the data obtained from a relatively small group ought to be carefully analysed (Dănăciță, 2017).

### 4. Results

The interest in modern technologies by digital nomads has been indicated by various experts, yet it appears crucial to examine not only the possession of an e-wallet, but also the number of accounts held by digital nomads. For the purpose to examine the determinants affecting the number of e-wallets held, the Pearson correlation coefficient was used.

In order to confirm the proposed hypotheses, the following factors were examined that may have significantly affected the number of digital wallets among the survey respondents: number of clients/employers, gross monthly income, number of countries visited in a year and respondent's age.

#### 4.1. The Pearson Correlation Coefficient

The Pearson correlation coefficient allowed to indicate which independent variables were correlated with the dependent variable. After performing calculations in the STATISTICA program, the strength of correlation was determined. The strength of the correlation between variables was based on following criteria (see Table 1).

Table 1. Strength of correlation

Define scope	Degree of correlation
0.8-1.00	Extremely strong correlated
0.6-0.8	Strong correlation
0.4-0.6	Moderately relevant
0.2-0.4	Weakly correlated
0.0-0.2	Very weak, no correlation

Source: Wang et al., 2023.

Table 2. The Pearson correlation coefficient

	Number of e-wallets	Number of employers/clients	Gross monthly salary	Number of countries visited per year	Respondent age
Number of e-wallets	1.000 $p = ---$	<b>0.705</b> $p = .000$	<b>0.479</b> $p = .000$	<b>0.798</b> $p = .000$	<b>-0.390</b> $p = .005$
Number of employers/clients	<b>0.705</b> $p = .000$	1.000 $p = ---$	0.177 $p = .219$	<b>0.685</b> $p = .000$	-0.190 $p = .187$
Gross monthly salary	<b>0.479</b> $p = .000$	0.177 $p = .219$	1.000 $p = ---$	0.237 $p = .097$	-0.187 $p = .193$
Number of countries visited per year	<b>0.798</b> $p = .000$	<b>0.685</b> $p = .000$	0.237 $p = .097$	1.000 $p = ---$	-0.185 $p = .198$
Respondent age	<b>-0.390</b> $p = .005$	-0.190 $p = .187$	-0.187 $p = .193$	-0.185 $p = .198$	1.000 $p = ---$

$p < 0.05000$ ,  $N = 50$

Source: own study.

Taking into consideration the criteria included in Table 1, the obtained Pearson correlation results could be ranked, and the highest correlation with the number of e-wallets owned by digital nomads was the number of countries they visited within one year (0.80 – strong correlation). Analysing the obtained results, it should also be noted that the dependent variable was strongly correlated with the number of employers/clients (0.71).

The respondents' age stood out as a negative correlation (-0.39). Consequently, the younger the respondents, the more e-wallets they had. This signifies that the two variables were inversely proportional, and was consistent with common sense. This was confirmed, among others, by a study conducted by the Pew Research Center, which showed that various types of innovations related to the use of technology were more often used by younger people (Faverio, 2022). The survey was conducted among 1,502 respondents in the United States. This may suggest that technology for younger generations is an inherent element of contemporary economy.

The obtained result regarding the correlation between the number of e-wallets and gross monthly salary confirmed the earlier research findings. The obtained correlation was 0.48, which means that it was moderately relevant.

## 4.2. In-depth Interviews

When analysing in-depth interviews, the main reason for having e-wallets was their usefulness, popularity, and ease of use. Figure 1 shows the answers to question 11 (What is the main reason for your use of digital wallets? Please name one).

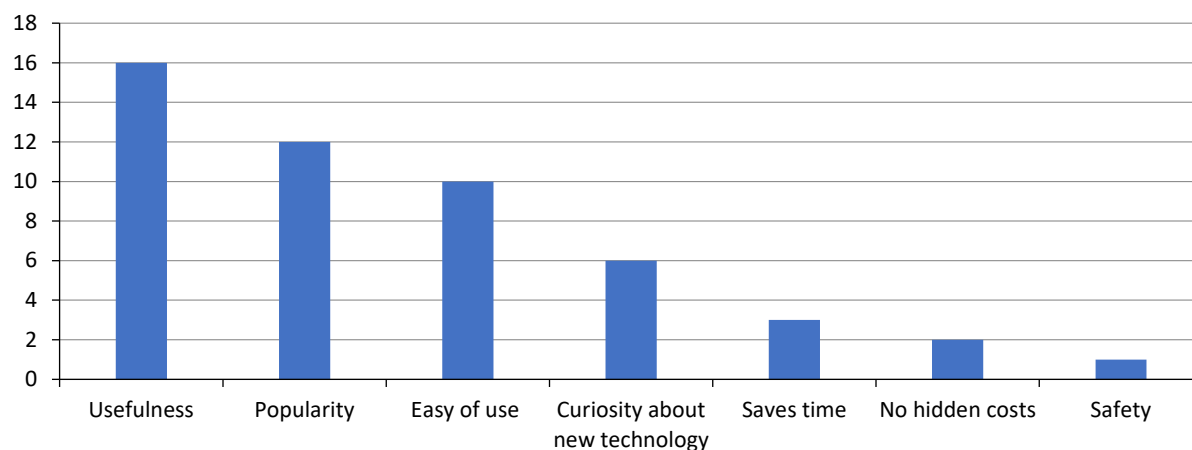


Fig. 1. Determinants for having an e-wallet for 50 respondents

Source: own study.

To ascertain the respondents' perspectives regarding the advantages and disadvantages of digital wallets, Table 3 shows a selection of statements from the research group, and their analysis allowed to understand the growing popularity of e-wallets and the motives for their use. Note that the main group of respondents comprised relatively young people aged 19 to 39.

Table 3. Determinants of using Stored Value Wallets

Question: What are the determinants of your choice of a digital wallet with a balance?	"After loading up my account, I can easily make purchases without the risk of spending more than I have in my wallet."
	"I use a digital wallet that has a balance because my friends encouraged me to use one. Moreover, it is very practical and saves time."
	"I believe that this type of wallet is the safest when it comes to my personal data."
	"This wallet allows me to keep my savings in many places. Diversification was my main goal. I think this is a good idea, because if I forget my cash or card, I always have access to my e-wallet."

Source: own study.

Referring to the division of e-wallets, one should indicate the respondents' answers to question 12, which clearly pointed to the wide range of digital services (Table 3). When deciding to have and use a digital balance wallet, the respondents pointed out the usefulness of such a solution and the absence of need to undergo numerous verification stages.

In identify the determinants of the behaviour of digital nomads regarding the use of a digital wallet, it is necessary to indicate, in addition to the usability criteria, the aspect of consumer behaviour. Referring to the areas of application of psychology in the analysis of consumer behaviour, the following can be indicated:

- Personality
- Perception
- Learning
- Cognitive process
- Emotions

- Motivation
- Attitudes

As suggested by K. Włodarczyk, “a final consumerism decision depends on the psychological traits of each individual (...)” (Włodarczyk, 2023). Therefore, when trying to identify the reasons for the growing popularity of e-wallets both among digital nomads and the general public, it is necessary to take into account not only aspects of usability, but also individual behaviour, which is not always rational.

## 5. Discussion and Conclusion

The significance of digital wallets is progressively rising each year. While some experts contend that this trend may be ephemeral, a thorough analysis of the data and relevant research revealed the sustained popularity of digital wallets, particularly among younger people. When analysing the formulated hypotheses, these should be verified one by one. The first hypothesis: *digital nomads are more likely to adopt an e-wallet if they perceive it as providing significant utility* was confirmed positively. Analysing the results from in-depth interviews revealed that it was the main reason for owning an e-wallet. However, a significant aspect was the increase in the number of users due to friends and family having an e-wallet. This is a social aspect and widely studied by sociologists, with examples including the herd effect, which can be observed in e.g. financial markets (Bikhchandani & Sharma, 2000).

To verify hypotheses H2, H3, H4, the Pearson correlation analysis was used. It is essential to underline that the strongest correlation with the number of e-wallets owned was related to the number of countries visited by digital nomads in a year. When seeking an explanation for such a strong correlation, one should note:

- availability of funds in a mobile app, which is usually easy to use,
- payment via among others PayPal is possible in numerous places around the world,
- balanced digital wallets allow to spend as much money as could be loaded into the wallet. This allows to control expenses and is relevantly safe.

The Pearson correlation analysis allowed to draw the conclusion that the older the person, the fewer e-wallets he/she has, and vice versa, the younger the person, the more e-wallets he/she has. The justification is certainly the openness of young people to new technologies and their knowledge.

What is somewhat surprising is the weak correlation between the number of e-wallets and gross monthly salary; however, the obtained result was consistent with the previous research.

There was a strong correlation between the number of e-wallets and the number of employers/clients, due to the different forms of work of the respondents. Two main groups can be distinguished within the research sample. The first comprised the respondents employed in the company under contract and working remotely, whereas the second group included those working under a contract or self-employed.

From the analysis performed, all hypotheses were confirmed. This study could be a starting point for further considerations regarding the importance of digital wallets for digital nomads and/or their use of new technologies.

## References

- Arner, D. W., Barberis, J. N., & Buckley, R. P. (2015). The Evolution of Fintech: A New Post-Crisis Paradigm? *SSRN Electronic Journal*, 2015/047. <https://doi.org/10.2139/ssrn.2676553>
- Bikhchandani, S., & Sharma, S. (2000). *Herd Behavior in Financial Markets: A Review*. <https://doi.org/10.5089/9781451846737.001>
- Chelvarayan, A., Yeo, S. F., Hui Yi, H., & Hashim, H. (2022). E-Wallet: A Study on Cashless Transactions Among University Students. *F1000Research*, 11, 687. <https://doi.org/10.12688/f1000research.73545.1>

- Dănăciță, D.-E. (2017). *Romanian Statistical Review – Supplement No. 2*.
- Esawe, A. T. (2022). Understanding Mobile E-wallet Consumers' Intentions and User Behavior. *Spanish Journal of Marketing – ESIC*, 26(3), 363-384. <https://doi.org/10.1108/SJME-05-2022-0105>
- Grzelczak, M., & Pastusiak, R. (2020). Cashless Payments and Economic Growth in Selected European Countries. *Annales Universitatis Mariae Curie-Skłodowska, Sectio H – Oeconomia*, 54(3), 33. <https://doi.org/10.17951/h.2020.54.3.33-46>
- Hamzah, M. I., Ramli, F. A. A., & Shaw, N. (2023). The Moderating Influence of Brand Image on Consumers' Adoption of QR-code E-wallets. *Journal of Retailing and Consumer Services*, 73. <https://doi.org/10.1016/j.jretconser.2023.103326>
- Hannonen, O. (2020). In Search of a Digital Nomad: Defining the Phenomenon. *Information Technology and Tourism*, 22(3), 335-353. <https://doi.org/10.1007/s40558-020-00177-z>
- Kasirye, F., Mahmudul, S., Masum, H., & Mahmudul, S. M. (2021). *The Effects of E-wallet among Various Types of Users in Malaysia: A Comparative Study*. <https://www.researchgate.net/publication/350452739>
- Kim, O. T. T., Nguyen, D. Van, & Pham, V. N. (2023). The Intentions To Use E-wallet Services during The Covid-19 Pandemic: Lessons From Vietnam. *Quality – Access to Success*, 24(194). <https://doi.org/10.47750/QAS/24.194.24>
- Mobile Wallets Report. (2021).
- Nash, C., Jarrahi, M. H., Sutherland, W., & Phillips, G. (2018). *Digital Nomads Beyond the Buzzword: Defining Digital Nomadic Work and Use of Digital Technologies* (pp. 207-217). [https://doi.org/10.1007/978-3-319-78105-1\\_25](https://doi.org/10.1007/978-3-319-78105-1_25)
- NomadList.com. (2023). *The 2023 State of Digital Nomads*. <https://Nomadlist.Com/Digital-Nomad-Statistics#work>
- Pai H., A. (2018). Study on Consumer Perception towards Digital Wallets. *IJRAR – International Journal of Research and Analytical Reviews*. <http://ijrar.com/>
- Reichenberger, I. (2018). Digital Nomads – A Quest for Holistic Freedom in Work and Leisure. *Annals of Leisure Research*, 21(3), 364-380. <https://doi.org/10.1080/11745398.2017.1358098>
- Rosli, M. S., Saleh, N. S., Md. Ali, A., & Abu Bakar, S. (2023). Factors Determining the Acceptance of E-wallet among Gen Z from the Lens of the Extended Technology Acceptance Model. *Sustainability*, 15(7), 5752. <https://doi.org/10.3390/su15075752>
- Subaramaniam, K., Kolandaisamy, R., Jalil, A. Bin, & Kolandaisamy, I. (2020). The Impact of E-wallets for Current Generation. *Journal of Advanced Research in Dynamical and Control Systems*, 12(1 Special Issue), 751-759. <https://doi.org/10.5373/JARDCS/V12SP1/20201126>
- UNDP. (2020). *Digital-Nomad-Scanner*.
- Wang, X., Rui, C., & Liu, H. (2023). Analysis of Sensitive Factors for Sidetrack Drilling in Water-Flooded Oil Reservoirs: Data Mining Based on Actual Field Data. *Frontiers in Energy Research*, 11. <https://doi.org/10.3389/fenrg.2023.1250336>
- Włodarczyk, K. (2023). Applications of Psychology in the Analysis of Consumer Behaviour – Selected Issues. *Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu*, 67(3), 142-152. <https://doi.org/10.15611/pn.2023.3.13>

## E-portfele jako instrument płatności cyfrowych nomadów

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### Streszczenie

**Cel:** Celem artykułu jest zbadanie determinant wpływających na liczbę e-portfeli (*Stored Value Digital Wallets*) cyfrowych nomadów oraz podkreślenie cech e-portfeli odróżniających je od innych dostępnych możliwości przechowywania pieniędzy.

**Metodyka:** Metody badawcze zastosowane w powyższym artykule to analiza literatury, wywiady pogłębione oraz współczynnik korelacji Pearsona.

**Wyniki:** Wykorzystując korelacje Pearsona, należy podkreślić, że najsilniejsza korelacja liczby posiadanych e-portfeli występuje z liczbą odwiedzanych krajów w ciągu roku przez cyfrowych nomadów oraz liczbą pracodawców, klientów. Po analizie wywiadów pogłębionych głównym powodem posiadania e-portfeli była ich użyteczność, popularność i łatwość obsługi.

**Implikacje i rekomendacje:** Przeprowadzone badanie może stanowić podstawę do dalszych badań dotyczących wykorzystania nowych technologii przez cyfrowych nomadów.

**Oryginalność/wartość:** Przeprowadzone badania opisują zidentyfikowaną lukę badawczą związaną z wykorzystaniem i postrzeganiem e-portfeli przez cyfrowych nomadów.

**Słowa kluczowe:** cyfrowi nomadzi, e-portfele, płatności online

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