The use of mobile applications in logistics of services

Marian Diřes, Sona Chovanova Supekova

Keywords: management and logistics, revisions, innovation, technical equipment, innovation, service provision.

Abstract: The article focuses on the importance of mobile applications in enterprises with a focus on logistics in the service sector. In the theoretical part, individual software applications in the field of occupational health and safety, fire protection, which are used in Slovakia and the Czech Republic are clearly described. The article contains a brief overview of the legislative regulations on the basis of which the obligations for management decisions in enterprises arise. A telephone survey was conducted in 110 micro, small and medium-sized enterprises between 2022 and 2023 in order to determine the use of software solutions in ensuring the fulfillment of obligations in the field of occupational safety and health and fire protection. To collect data, research questions were set and a questionnaire was developed, which included 6 merit questions, identification questions and a specific question aimed at finding out the prioritisation of the most preferred mobile application features in the study area. The questions were closed-ended, with options where the respondent could choose only one answer. SPSS for Windows version 21.0 was used for statistical analysis and processing of the collected data. We used methods of statistical description, analysed using relative abundance, arithmetic mean, standard deviation and median. At the level of statistical inference, we used chi-square goodness-of-fit tests to analyse categorical variables. We also used nonparametric tests, Friedman analysis of variance, 3D pie charts, and 3D group bar charts. We found that business representatives had a significantly higher preference for the functionality "record of initial and recurrent BOZP and PO training", followed by the second most preferred functionality "OSH inspections and fire prevention inspections". The research focused on logistics enterprises.

1 Introduction

Fulfilment of obligations in the area of safety and health protection at work and fire protection are important preventive measures for the protection of life, health and property of persons. The aim of this article is to point out the possibilities of simplifying the fulfilment of the above obligations. Our first step is theoretical research, in which we describe the possibilities of the current software security of services of safety and health protection at work and fire protection (hereinafter referred to as BOZP and PO). We have found that there are specialised software systems that primarily deal with either the BOZP issue or the PO issue separately. When analysing the offer, our aim was to find out what mobile applications specialised companies offer. We found that in Slovakia and the Czech Republic, there is an insufficient offer of mobile applications that would integrate the management of the fulfilment of BOZP and PO obligations. In the next theoretical part, we describe the legislative regulations, in the field of BOZP and PO, which impose obligations on enterprises, which the enterprise is obliged to monitor and subsequently ensure at specified time intervals. We primarily deal with national legislation valid on the territory of the Slovak Republic. Based on the findings of the theoretical part, we established research questions and research hypotheses. We also developed a questionnaire and conducted a questionnaire survey in micro, small and medium-sized enterprises. Our goal is to point out the insufficient offer of mobile applications that would integrate the fulfilment of obligations in the field of BOZP and PO. Determination of the prioritisation of the functionality of individual applications, which points to possible problem areas in the fulfilment of BOZP and PO obligations. We also point out the demand of enterprises for the mentioned mobile applications.

2 Theoretical research

2.1 Availability of BOZP and PO software applications in the Slovak and Czech Republics

Modern software solutions take into account the requirements that are given by the individuality of individual processes in companies. Software solutions must be adapted to the legislative requirements of each state. This means that the internal legislation of individual states differs. Therefore, even software solutions can have different requirements for individual duties. In Slovakia, there are many companies that deal with the development and application of software in the field of safety and health protection at work and fire protection.

The company Besoft offers BTS software, which consists of 14 modules.
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The BWSS software allows the user the possibility of linking the training agenda as well as the revision function and organisation. Only a correctly set course of the implementation process will guarantee the correct integration of the information system with the company [5].

The information system of the supplier method of revision has its fundamental justification and brings time savings and the seamless transfer of information between individual subjects performing tasks in the area of safety and health protection at work, as well as work inspections. The issue of revision and controls should be identified with the idea of Industry 4.0 [6,7].

The goal of digitisation in logistics is to speed up all processes and make them more accurate and smoother [8]. In the processes of activity of fire protection technicians, accuracy means reducing the risk of fires to a minimum. Innovations play a significant role in the success of the company as well as central state administration bodies.

Nowadays, innovations are becoming an important factor in the success of the company. Their legal implementation can put the company ahead of the competition [9].

Given that the key drivers of a logistics system include products, preferences of customers, technology innovation, globalisation, sustainability, infrastructure, and cost, it can be assumed that a logistics service can create a competitive niche in terms of how it can respond to the key drivers [10].

Based on experience using mobile solutions and various hardware suites to support logistics and transport processes such as booking of vehicles, invoicing, and payment services, tracking of deliveries, exchange of typical sets of information between participants [11].

2.2 Legislative obligations

Operation of individual objects and mandatory conditional legislative conditions in the area of fire protection. The basic law in the field of fire protection is Act No. 314/2001 Coll. on fire protection and on the amendment of some laws as amended by later rewrites [12]. The implementing decree of this law is the Decree of the Ministry of the Interior of the Slovak Republic no. 121/2002 Coll. on fire prevention [13].

Fire equipment division, fire engineering equipment (PTZ):

a) Fire extinguishers,
b) Fire shutters,
c) Equipment for extinguishing sparks in PD, equipment for the supply of water for extinguishing fires, equipment for the permanent supply of electricity in the event of a fire, evacuation and emergency lighting, other equipment for the evacuation of people and intervention [14].

Fire engineering is stable extinguishing equipment and semi-stable extinguishing equipment. There are also devices for removing combustion products and electric fire alarm along with voice fire alarm [14].

In our article, we will deal with the records of fire extinguishers, fire shutters, hydrants and electric fire equipment.
alarms and their central voice offices. We will describe which necessary data the operator is obliged to register. Basic legislative regulations in the area of:

a) Fire extinguishers are a Decree of the Ministry of the Interior of the Slovak Republic no. 347/2002 Coll. on the properties and conditions of operation, marking and ensuring regular inspection of fire extinguishers [14].

b) Fire shutters are a Decree of the Ministry of the Interior of the Slovak Republic no. 478/2008 Coll. on the properties, specific conditions of operation and ensuring regular inspection of the fire shutter [15].

c) Hydrants are a Decree of the Ministry of the Interior of the Slovak Republic no. 699/2004 Coll. z. on the provision of water for firefighting [16].

d) The electronic fire alarm is a Decree of the Ministry of the Interior of the Slovak Republic no. 726/2002 Coll., which establishes the properties of an electric fire alarm, the conditions for its operation and ensures its regular inspection [17].

The Ministry of the Interior of the Slovak Republic is the operator of facilities, where facilities are operated by the economy section and individual support centres located in regional cities [18].

The fire technician and the designated operator of the facility need to know the individual fire equipment for their work. Unlike reserved technical equipment [19], they are usually characterised by a larger number. The basic knowledge that the operator and fire technician must know includes, in particular, data on the location, data on the type of fire equipment, inspection interval, revision, date of the last and subsequent inspection, the validity of the inspection, or a higher test, requirements for ensuring inspection, or service. For this, it is necessary to have accurate records of employees, data on initial training in the fire protection section, data on repeated training in the fire protection section, and a schedule of preventive fire inspections. However, the problem may arise for operators with a higher number of employees or facilities. For operators with a lower or low number of employees or facilities, the process of securing mandatory obligations is easier. In this case, there is easier control and provision of supplier assurance of training, inspections and service. It is also necessary to draw attention to the problem of public procurement of these services, as state organisations are obliged to proceed according to the Public Procurement Act no. 343/2015 Coll. on public procurement and on amendments to certain laws [20]. Public procurement is controlled by the Public Procurement Office. It is a process that is of interest to the public, the media and the like. Therefore, it is necessary for this process to be transparent and in accordance with individual legislative standards [21,22]. However, this requires that the individual descriptions of the objects of the contracts be determined as accurately as possible. In the case of central public procurement, precisely the data generated by the software will simplify the public procurement process. Also, the entire process of securing individual inspections according to the above-mentioned legislative regulations. In this, the software can enter the process, which accurately evaluates the required data and makes the process more transparent. As we have mentioned, fire protection processes are guided by many legislative regulations of different legal forces, which follow the main purpose of protecting people and property from fires. The main purpose is the protection of human life, followed by the protection of property.

3 Methodology

3.1 Composition of the research group

We conducted a questionnaire survey in the Slovak Republic in enterprises engaged in the provision of services.

The survey took place in the regions (a total of 110 enterprises):

1. Bratislava region - 20 surveyed enterprises,
2. Trnava region - 10 surveyed enterprises,
3. Nitra region - 15 surveyed enterprises,
4. Trencín region - 15 surveyed enterprises,
5. Banská Bystrica region – 10 surveyed enterprises,
6. Žilina region - 15 surveyed enterprises,
7. Prešov region - 10 surveyed enterprises,

Representatives of micro-enterprises predominated in the research group, representing up to 60% of the research group (N = 66). In terms of number, they were followed by representatives of small enterprises, who made up 37.3% of the research group (N = 41). The least numerous group were representatives of medium-sized enterprises, which represented only 2.7% of the research group (N = 3). The composition of the research group in terms of enterprise size is summarised in Table 1.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>N</th>
<th>N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of your enterprise according to the number of employees</td>
<td>1 to 9 (micro-enterprises)</td>
<td>66</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>10 to 49 (small enterprises)</td>
<td>41</td>
<td>37.3</td>
</tr>
<tr>
<td></td>
<td>50 to 249 (medium-sized enterprises)</td>
<td>3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

3.2 Data collection methods

In order to collect the data necessary to answer our research questions, or verification of our research hypotheses, we compiled a questionnaire that included 6 items.

The first questionnaire item, "The size of your enterprise according to the number of employees", allowed us to analyse what part of our research group is micro-enterprises, small enterprises and medium-sized enterprises.

With the help of the second item, "Do you use a software solution for securing BOZP and PO services?",...
we determined the rate of use of the given PCs, or mobile software solutions.

The third item, "What is your attitude towards mobile applications whose solutions simplify the management of the fulfilment of obligations?" allowed us to identify the attitude of enterprises towards the given mobile applications, regardless of whether they currently use the given mobile applications or not.

With the help of the fourth item, "Do you know special mobile applications that would integrate the management of BOZP and PO services?", we investigated the knowledge of enterprises about the existence of the given mobile applications, regardless of whether they currently use the given mobile applications or not.

The fifth item, "If mobile applications that integrate the management of BOZP and PO services were commonly available on the market, would you purchase them?" allowed us to identify the interest of enterprises in the given mobile applications in case of their better availability, and at the same time point out the fact that whether or not the availability of mobile applications is one of the main reasons for not using them.

Within the sixth item, "Which functions should the functionality of mobile applications for the management of BOZP and PO services provide?" the respondents had the task of ranking the individual functionalities of the given mobile applications according to priority, respectively importance, and thus point out the functionalities that would convince enterprises to the highest extent to acquire the given mobile applications.

3.3 Methods of statistical processing and data analysis

For the purpose of statistical analysis and processing of collected data, we used the program SPSS for Windows version 21.0.

We analysed the obtained data at the level of statistical description using numerousness (N), relative numerousness (NR), arithmetic mean (AM), standard deviation (SD) and median (Mdn).

At the level of statistical inference, we used chi-square goodness-of-fit tests to analyse categorical variables. Due to the ordinal nature of the remaining variables, we decided to use nonparametric tests, namely Friedman’s analysis of variance.

In order to graphically represent the results of the analyses, we used 3D pie charts and 3D group column charts.

4 Result and discussion

4.1 Testing research hypotheses

RH1: We assume that significantly more micro, small and medium-sized enterprises do not use mobile applications that integrate the management of BOZP and PO obligations.

We verified the assumption that significantly more micro, small, and medium-sized enterprises do not use mobile applications that integrate the management of BOZP and PO obligations using frequency analysis followed by chi-square goodness-of-fit tests. Frequency analysis enabled us to determine the absolute and relative number of individual responses from enterprise representatives to questions regarding mobile applications for the management of BOZP and PO services. Chi-square goodness-of-fit tests allowed us to determine whether positive and negative answers to individual knowledge questions occurred significantly more often than incorrect answers.

In the case of the question "Do you use a software solution for securing BOZP and PO services?", the results of the frequency analysis showed that the most frequently chosen answer was "Yes, our company has purchased the given software, which is installed on the PC", which was given by up to 40% of respondents. The answer "No, we do not use the given software solutions" was chosen by 31.8% of enterprise representatives. In terms of frequency, the answer "Yes, we use the given software solutions that we have installed in the PC and in the MA" followed, which was given by 14.5% of the respondents. The least frequent was the answer "Yes, we use the given software solutions in MA", which was chosen by only 13.6% of enterprise representatives. It can be summarised that only 28.2% of enterprises used mobile applications that integrate the management of BOZP and PO obligations. The remaining 71.8% of enterprises did not mention the use of the mentioned mobile applications. According to the results of the chi-square goodness-of-fit test, the mentioned difference was statistically significant, \( \chi^2 = 20.945, p < .001 \). From the above, it follows that the number of enterprises that use mobile applications integrating the management of BOZP and PO obligations is significantly lower than the number of enterprises that do not use these mobile applications.

In the case of the question "What is your attitude towards MA, the solutions of which simplify the management of the fulfilment of obligations?", the results of the frequency analysis showed that the most frequently chosen answer was "Our company has a positive attitude towards MA, that's why we mainly use paid versions", which was given by 62.7% of respondents. 29.1% of enterprise representatives chose the answer "Our enterprise does not use MA". In terms of frequency, the answer "Our enterprise does not have a positive relationship to MA" followed, which was given by 5.5% of respondents. The least frequent answer was "Our enterprise only uses free versions", which was chosen by only 2.7% of enterprise representatives. It can be summarised that up to 65.5% of enterprises have a positive attitude towards mobile applications that integrate the management of BOZP and PO obligations. The remaining 34.5% of enterprises had a negative attitude towards mobile applications that integrate the management of BOZP and PO obligations. The remaining 34.5% of enterprises had a negative attitude towards mobile applications that integrate the management of BOZP and PO obligations. According to the results of the chi-square goodness-of-fit test, the mentioned difference was statistically significant, \( \chi^2 = 10.509, p = .001 \). It follows from the above that the number of enterprises that have a
positive attitude towards mobile applications integrating the management of BOZP and PO obligations is significantly lower than the number of enterprises that have a negative attitude. The described finding supported our research hypothesis.

In order to gain insight into the reasons for not using mobile applications integrating the management of BOZP and PO services, we decided to also analyse the answers of enterprise representatives to questions regarding their attitude towards these mobile applications, their level of knowledge of these applications, and also their potential future interest in purchasing these mobile applications under the assumption of their better availability.

In the case of the question, “Do you know a special MA that would integrate the management of BOZP and PO services?”, the results of the frequency analysis showed that the most frequently chosen answer was “Yes, I know”, which was given by up to 80.9% of respondents. Only 19.1% of enterprise representatives chose the answer “No, I don’t know”. According to the results of the chi-square goodness-of-fit test, the mentioned difference was statistically significant, $\chi^2 = 42.036$, $p < .001$. From the above, it follows that the number of enterprises that are aware of special mobile applications integrating the management of BOZP and PO obligations is significantly higher than the number of enterprises that are not aware of these applications.

In the case of the question “If MA, integrating the management of BOZP and PO services, were commonly available on the market, would you purchase them?”, the results of the frequency analysis showed that the most frequently chosen answer was “Yes, I would purchase”, which was stated by up to 78.2% of respondents. The answer “I would decide later” was chosen by 13.6% of enterprise representatives. In terms of frequency, the answer “We have purchased it” followed, which was given by 8.2% of respondents. The least frequent answer was “No, I would not purchase”, which was chosen by none of the enterprise representatives (0%). It can be summarised that up to 86.4% of enterprises would acquire mobile applications that integrate the management of BOZP and PO obligations, assuming their better availability. The remaining 13.6% of enterprises would only consider buying them. According to the results of the chi-square goodness-of-fit test, this difference was statistically significant, $\chi^2 = 58.182$, $p < .001$. It follows from the above that the number of enterprises that would acquire mobile applications integrating the management of BOZP and PO obligations is significantly lower than the number of enterprises that would only consider it, while there was no enterprise in our research group that would certainly not purchase such a mobile application.

It can be summarised that the number of enterprises that use mobile applications integrating the management of BOZP and PO services is significantly less than the number of enterprises that do not use these applications, but the reason is neither a negative attitude, nor ignorance, nor lack of interest in the case of better availability. The above indicates that the main reason for these findings is the unavailability of the given mobile applications. The results are summarised in Table 2, Table 3 and graphically represented in Figure 1.

**Table 2** Frequency analyses of responses of respondents from among micro, small and medium-sized enterprises to questions regarding the use of mobile applications for the management of BOZP and PO services ($N = 110$)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
<th>$N$</th>
<th>$N_R$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Do you use a software solution for securing BOZP and PO services?</strong></td>
<td>Yes, our company has purchased the given software, which is installed on the PC</td>
<td>44</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>Yes, we use the given software solutions that we have installed on the PC and in the MA</td>
<td>16</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>Yes, we use the given software solutions in MA</td>
<td>15</td>
<td>13.6</td>
</tr>
<tr>
<td></td>
<td>No, we do not use these software solutions</td>
<td>35</td>
<td>31.8</td>
</tr>
<tr>
<td><strong>What is your attitude towards MA, the solutions which simplify the management of the fulfillment of obligations?</strong></td>
<td>Our company has a positive attitude towards MA, which is why we mainly use paid versions</td>
<td>69</td>
<td>62.7</td>
</tr>
<tr>
<td></td>
<td>Our enterprise does not use MA</td>
<td>32</td>
<td>29.1</td>
</tr>
<tr>
<td></td>
<td>Our enterprise uses only free versions</td>
<td>3</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Our enterprise does not have a positive relationship with MA</td>
<td>6</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>Do you know a special MA that would integrate the management of BOZP and PO services?</strong></td>
<td>Yes, I know</td>
<td>21</td>
<td>19.1</td>
</tr>
<tr>
<td></td>
<td>No, I don’t know</td>
<td>89</td>
<td>80.9</td>
</tr>
<tr>
<td><strong>If MA that integrated the management of BOZP and PO services were commonly available on the market, would you purchase them?</strong></td>
<td>Yes, I would purchase</td>
<td>86</td>
<td>78.2</td>
</tr>
<tr>
<td></td>
<td>No, I would not purchase</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>We have purchased</td>
<td>9</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>I will decide later</td>
<td>15</td>
<td>13.6</td>
</tr>
</tbody>
</table>

$N$ – observed numerosness, $N_R$ – relative observed numerosness in %, MA – mobile application.
Table 3 Comparison of respondents' answers to questions regarding the use of mobile applications for the management of BOZP and PO services (N = 110)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Categories</th>
<th>N</th>
<th>N_R</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you use MA to provide BOZP and PO services?</td>
<td>No</td>
<td>79</td>
<td>71.8%</td>
<td>20.945</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>31</td>
<td>28.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your attitude towards MA, the solutions which simplify the management of the fulfillment of obligations?</td>
<td>Negative</td>
<td>38</td>
<td>34.5%</td>
<td>10.509</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>72</td>
<td>65.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you know special MA that would integrate the management of BOZP and PO services?</td>
<td>No</td>
<td>21</td>
<td>19.1%</td>
<td>42.036</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>89</td>
<td>80.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If MA that integrate the management of BOZP and PO services were commonly available on the market, would you purchase them?*</td>
<td>Yes</td>
<td>95</td>
<td>86.4%</td>
<td>58.182</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Probably</td>
<td>15</td>
<td>13.6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N – observed numerosness, N_R – relative observed numerosness in %, $\chi^2$ - chi-square goodness-of-fit test, p – level of statistical significance.

* Respondents had the option to choose the answer “no”, but no one chose it.

RH2: Micro, small and medium-sized enterprises prefer to the most significant extent the functionalities "records of initial and repeated training of BOZP and PO" and "BOZP checks and preventive fire inspections" in the framework of mobile applications for the management of BOZP and PO services.

We verified the assumption that micro, small and medium-sized enterprises prefer to the most significant extent the functionality "records of initial and repeated training of BOZP and PO" and "BOZP checks and preventive fire inspections" in the framework of mobile applications for the management of BOZP and PO services using Friedman analysis of variance.

The results of the analysis showed that in the case of various functionalities of mobile applications integrating BOZP and PO services, there are statistically significant differences in terms of their preference by enterprise representatives, $\chi^2(5) = 307.309$, p < .001. Specifically, we
found that enterprise representatives significantly preferred the functionality “records of initial and repeated training of BOZP and PO” (MR = 1.32). The second most preferred was the functionality of “BOZP checks and preventive fire inspections” (MR = 2.35). From the point of view of preference, the following were the functionalities “management of reserved technical equipment, records and revisions” (MR = 3.85) and “specialised training of BOZP and PO” (MR = 4.10). On the contrary, enterprise representatives significantly least often preferred the functionality of “personal protective work equipment” (MR = 5.14) and “management of fire-technical equipment, records and controls” (MR = 4.24). The above findings supported our research hypothesis. The results are summarised in Table 4 and graphically represented in Figure 2.

Table 4 Comparison of preferences for individual functionalities that mobile applications that integrate BOZP and PO management would have (N = 110)

<table>
<thead>
<tr>
<th>Interactional styles of teachers</th>
<th>Descriptive indicators</th>
<th>Friedman's analysis of variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MR</td>
<td>AM</td>
</tr>
<tr>
<td>records of initial and repeated training of BOZP and PO</td>
<td>1.32</td>
<td>1.32</td>
</tr>
<tr>
<td>BOZP checks and preventive fire inspections</td>
<td>2.35</td>
<td>2.35</td>
</tr>
<tr>
<td>Management of reserved technical equipment, records and revisions</td>
<td>3.85</td>
<td>3.85</td>
</tr>
<tr>
<td>the specialised training of BOZP and PO</td>
<td>4.10</td>
<td>4.10</td>
</tr>
<tr>
<td>personal protective work equipment</td>
<td>5.14</td>
<td>5.14</td>
</tr>
<tr>
<td>Management of fire-technical equipment, records and controls</td>
<td>4.24</td>
<td>4.24</td>
</tr>
</tbody>
</table>


Respondents had to rank individual functionalities in order of priority, with 1 – the most important functionality and 6 – the least important functionality. A lower score thus represents a higher preference or importance.

Functionality 1 – records of initial and repeated training of BOZP and PO, Functionality 2 - BOZP checks and preventive fire inspections, Functionality 3 - management of reserved technical equipment, records and revisions, Functionality 4 – specialised training of BOZP and PO, Functionality 5 - personal protective work equipment, Functionality 6 - management of fire-technical equipment, records and controls.

Notice: MA = Preference of individual MA functionalities.

Figure 2 Comparison of preferences for individual functionalities that mobile applications that integrate BOZP and PO management would have (N = 110)
5 Conclusions

The findings in this article point to the possibilities of increasing the efficiency of logistical assurance of the fulfilment of obligations in the area of BOZP and PO using applications. The article points out the importance of protecting the life, health, and property of natural and legal persons, as well as the high difficulty of fulfilling legislative requirements. Based on our research and statistical evaluation, we found that the market lacks an offer of integrated mobile applications for which there is a potential demand from micro, small and medium-sized enterprises. Based on the evaluated survey, it can be concluded that enterprises have a positive attitude towards mobile applications, but do not use them due to their unavailability. We can also support the stated statement on the theoretical part, on the basis of which we found a limited offer of software solutions in the addressed area.

Currently, mobile applications are popular with the public as well as with enterprises, as they streamline the process of fulfilling complex and extensive obligations. The search for solutions can be in logistics startups, which mainly develop applications and try to increase customer convenience, thereby improving people’s quality of life [23] and thus increasing customer satisfaction in services. The stated findings and research evaluations create space for innovative creators of mobile applications, who have opportunities to develop and innovate their entrepreneurial activities. Innovative solutions are aimed at reducing the number of occupational fatalities, common injuries, and property damage to natural and legal persons. For enterprises, the use of these mobile applications means saving time, more efficient and innovative fulfilment of mandatory legislative obligations. Mobile applications will enable easy communication between enterprises and enterprises that provide BOZP and PO services. At the same time, they create space for more effective training and specialised periodical training.

The findings of the article also point to the priority order of the functionalities of the individual areas of BOZP and PO. The given order points to a research gap that can be the subject of further scientific research in the area of logistics of BOZP and PO services. The reasons why individual functionalities are prioritised, others less so, may point to problems in security logistics, which can be addressed by further scientific research. Therefore, we recommend that scientific research be focused on individual functional areas and the problems that arise when securing them.

References
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