ASSESSMENT OF THE SERVICE PROVISION PROCESS AS A BUSINESS PROCESS MANAGEMENT TOOL

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Abstract: Among the processes that take place in service enterprises and that determine their results, the service provision process needs special attention. Customers take an active part in it, deciding what the service should look like, and having the option to modify it while it is being providing. Therefore, the course of the service provision process influences how customers perceive a given service, whether they are satisfied, and whether the services quality is at the appropriate level. The development of technology and digitization have resulted in the fact that many customers prefer e-services, shopping online. In this case, the service provision process looks different from the traditional services, and the customers' participation in this process is even greater. All activities related to ordering the service are performed by them. They base their decisions on own experience or the opinions of other customers. Therefore, when assessing the services quality, the customer largely assesses its provision process. The aim of the paper was to assess the course of the service provision process by customers from various European countries. The results' analysis was based on the assumptions of the Importance Performance Analysis (IPA). The research allowed not only to assess the service provision process, but also to indicate the attributes that, according to customers, met their expectations and those that cause their dissatisfaction and lower the overall level of service quality, so need potential corrective actions. The research can be used by different e-service enterprises in order to improve their service provision process. The attributes indicated in the work, which are important for customers, should be taken into account by e-shops to improve the quality of the services they provide, and thus affect the level of customer satisfaction.

Key words: e-service, service quality, service provision process, customer satisfaction.

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Introduction

Business processes are transformed over time, responding to the emerging challenges. Contemporary conditions of general digitization favor the emergence of new technological processes related to forcing supply and demand on the market of goods and services. Directly, services in the information society have gained a new status, and their quality depends on the effective business process management (BPM) in a given enterprise (Leonova et al, 2019).

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The service provision process is very specific and largely different from the production process of products. It is related to the features of services, such as their heterogeneity, simultaneity of the services providing and consuming processes, instability of services and the inability to store them (Parasuraman et al., 1991; Royne et al., 1998). These differences are complemented by the fact that the customer participates practically in the entire service provision process, i.e. is a part of this process (Gonzalez, 2016). At the beginning, he precisely defines his requirements and the attributes that the service should have. At the end he participates in the assessment of a given service, determines whether his requirements have been met, what is his level of satisfaction.

There are many difficulties with having an adequate business process management in the service industry. Sung Ho Ha and Sang Chan Park (2006) identified three main problems, i.e. the difficulty in defining processes and flows between them, the difficulty in measuring process efficiency and the impact of factors such as customer behavior on the service provision process. The most difficult problem to overcome is the last one because the enterprise has no influence on it.

One of the main elements of the process management is the improvement of service quality. However, most studies related to BPM focus mainly on designing processes, their configuration, IT systems that take into account processes and their implementation. And immeasurable factors, such as customer expectations or his perception of the provided service are often omitted, so the classic BPM approach is not enough. Therefore, such an analysis should be deepened with an assessment of the service quality which is typical for the quality engineering. This assessment will indicate areas in the enterprise related to the service provision that cause customer dissatisfaction and require improvement, and help to improve the business process management itself (Knop et al, 2019).

In case of services, there is one more problem, their assessment is not as easy as in case of the products, there is lack of measurable features. The products must meet numerous norms and standards, be created according to specific technical documentation (Kardas, 2021; Lazar et al., 2021; Karcz and Ślusarczyk, 2021; Bednárová et al., 2020; Darie et al., 2019; Maláková et al., 2020; Szymański et al., 2018). In their design, it is worth using, e.g. the Quality Function Deployment, which takes into account customer requirements and translates them into technical language (Jagusiak-Kocik, 2020), so the customer's requirements can also be included in the finished product.

Services are created based on customer expectations, which are discussed during the ordering process, they are often personalized. It is therefore impossible to define exactly what parameters should be measured as individual services vary greatly from each other. In this case, the parameters related not only to the service itself, but also to the provision process are determined, and on this basis the service quality is assessed. Additionally, because the customer participates in the service provision process, it is natural that he should also participate in the process of its quality assessment (Klimecka-Tatar and Ingaldi, 2020; Midor and Kučera, 2018).

The e-services deserve special attention, because their market share is systematically growing. The recent pandemic situation around the world made e-services, and especially e-commerce, even more popular. Due to the restrictions introduced in individual countries, not only more people started shopping online, but also the structure of purchases itself changed (Zandi et al., 2020). Th e-commerce has become a window to the world for many of us, a way to do even everyday purchases. It can also be said that due to the ability to operate online, many service providers have managed to survive this difficult time. Shops that have properly developed their website, have organized an e-shop platform and a suitable shipping system are among those enterprises that have the ability to generate appropriate revenues.

The problem, however, is the digital exclusion of certain social groups, such as the elderly, unemployed, disabled, who not only have a problem with the Internet connection, but also do not have the appropriate digital competences to use it, not to mention making purchases through the Internet (Babis, 2018; Olphert et al., 2005). According to Eurostat data from 2019 (Eurostat), 53% of people aged 65-74 have never used the Internet, which means that Poland is far from the average in the European Union (33% of the population of all EU countries). Therefore, when preparing an e-service offer, conducting research in this area, this problem should also be taken into account.

The aim of the paper was to assess the course of the service provision process by customers from various European countries. They were asked to assess the e-service provision process in various e-shops they used. The assumptions of the Importance Performance analysis (IPA) were used for the results analysis. The survey in the form of an online questionnaire was conducted among the respondents from different European countries. This help to assess the quality of services provided by different e-shops and to show what customers pay attention to, in particular, in such processes. Additionally, it was possible to assess individual elements (attributes) of the service provision process. The research allowed to identify the process attributes which, in the eyes of customers, meet their expectations, but also those that cause dissatisfaction and lower the overall service quality level. The results refer to the different e-shops and apply to all countries of origin of the respondents. The survey form can be the basis for research carried out in individual e-shops in order to assess quality of the e-services they offer on market in order to search for their possible improvement.

Literature review

BPM is perceived from various perspectives, it focuses on how to improve the efficiency of an organization through continuous improvement and business control of the management process itself (Usman et al., 2020). Dynamic technical and technological development, progressive computerization, expansion and tightening of domestic and international cooperation, high competitiveness, time pressure, attempt to improve the quality of customer service caused that the

automation and digitization of external processes based on the different business models is gaining importance (Łobaziewicz, 2013; Abbad et al., 2011; Grabara, 2019).

An important feature of e-commerce is that when shopping online, customers pay special attention to the sales platform and its operation (Benaroch and Appari, 2011), the service provision process, in particular, the ease of using these services, depends on it. McKinsey and Company proved that a well-designed website and excellent customer experience are the main success factors for luxury brands e-business (The opportunity in online luxury fashion). Kim (2019) claimed that customers and the market require the Internet platform to constantly raise the level of their services, because the process of ordering a service depends on it. According to customers, e-services should be performed quickly and cause their satisfaction, which means that it is important to focus on customer relationship management. Therefore, e-services must be of high quality and reliable over time (Radonjič and Tompa, 2018; Yang et al. 2019).

There are many factors that determine the popularity of e-commerce and e-services. These factors include a wider selection of products / services, easy search, attractive prices comparable to different suppliers, convenient shopping anywhere and anytime, affordable prices or often even no delivery costs, a higher customer satisfaction rate than traditional stores, reduced time and costs, and no need for measures (Abbad et al., 2011). According to Anvari and Norouzi (2016), this list should be enlarged by low cost, efficiency, high sales, convenience and easy methods of personalizing information in line with consumer behavior and the use of social media availability. There is a different return policy for e-commerce than for traditional commerce. It is easier for the customer to return the goods purchased online, as there is no chance to touch, try on or see it. The customer should be able to resign from the purchase contract and be able to choose various types of payments (Gereffi, 2014; Fedorko et al., 2018).

Customer experience (i.e. the entire experience and sensations of the user in contact with a given brand) plays a large role in the reception of e-services by customers. This means that the customers look for not only goods, but also high-level services, so it is worth designing the service provision process appropriately. The customer is supposed to feel special and the service provider has to follow his requirements and preferences. Customer experience applies to the entire purchasing process, from the first contact with the offer, through the selection of the appropriate product variant, to secure payment for goods and fast delivery. Customers' preferences in relation to communication devices are changing, the number of purchases made by mobile devices is increasing, while that of stationary devices is decreasing (Lemon and Verhoef, 2016).

The service provision process is related to the presence of the customer. He is its integral part. He sets his expectations at the beginning. With the help of a responsible person, contact with customers or on their own, e.g. via the website where a given service is offered, the customer can indicate what he expects from

the service, what elements it should contain, how the process of its provision should look like.

During traditional service provisions the customer has direct contact with the service provider, e.g. can get help from him, ask additional questions, take the advice. If the service is ordered via the Internet, most often the customers uses various types of comparison websites or websites with opinions, where other people describe their experience with a given service. In order to be able to use e-services, customers must have minimum digital competences, which include the skills to use a computer, electronic devices, the Internet, software and applications, and to create digital content (Eingenraam et al., 2018; Reichstein and Harting, 2018; Kowalik, 2020).

The e-service provision process differs from the traditional one. The customer does not have direct contact with the service provider, he chooses the service attributes, orders himself, and decides about its attributes. It is therefore necessary to precisely define its stages in order to be able to manage anything properly and to determine the factors and attributes influencing the service quality. Based on literature research and own experience, a course of the e-service provision process was presented (Fig. 1). A simple quality management tool, i.e. a flow chart was used here.
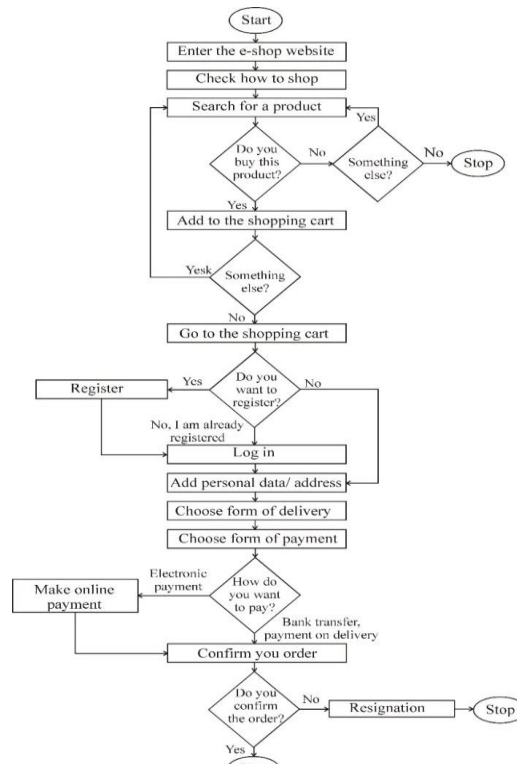

Figure 1: Map of purchases in the e-shop (own study)

Due to the number of choices offered by various e-shops, it was decided to simplify the process as much as possible. The multiple selection of products is presented in the form of a closed loop, so that this process, regardless of the number of products purchased, can always be presented in the same way. At the moment when the customer decides to make purchases, the possibility of registering in the e-shop was taken into account, but also the option to make purchases without the obligation to register on the site was included. There was no decision to choose the delivery due to the fact that even if the customer chooses it, he usually only selects the appropriate option, and the possible price of the delivery is added to the bill.

As a result, the Figure 1 also includes the electronic delivery (e.g. purchase of e-books, software, insurance, etc.). When choosing the payment method, three options were taken into account: various types of electronic payments, traditional bank transfer and payment on delivery. In case of electronic payment, it is required to be made before the final confirmation of the order. However, this part of the process was not described as it depends not only on the method of payment, but also on the customer's and service provider's bank. So it is not possible to accurately present its course. Most often, the payment itself takes place after the final confirmation of the order. However, due to the need to make a payment selection before the final order confirmation, the electronic payment has already been included at this point. This figure does not take into account what happens after the purchase because it depends on many factors. However, two main stages should be indicated here, i.e. all operations related to the delivery of the order (whether in traditional or electronic form), as well as after-sales service.

Based on the literature review, research questions were posed: Q1: What do customers pay special attention during the provision of services offered by e-shops? Q2: How do customers assess the operation of e-shops in Europe?

Materials and methods

The assessment of the service provision process was made using the assumptions of the Importance Performance Analysis (IPA). It helps to define the general level of quality of the service, but also to identify those factors that largely cause customer dissatisfaction, in order to introduce corrective actions to improve both the service and its process provision.

The authors of the IPA were Martilla and James, who designed in the 1970s to measure the perception and significance of factors, variables influencing the service quality from the buyers' point of view. According to IPA, there are two paradigms: the unconfirmed expectations' paradigm (the customer is asked about the subjective value / weight of the service feature) and the implementation paradigm (the customer is asked to assess the service performance level). This method provides that one should take into account the features that are more important for the customers in order to meet customer expectations. These are the strategic features of this service (Martilla et al., 1977).

The results obtained with the use of IPA are summarized in the form of a map. In this way, the desired quality of two parameters is assessed, i.e. the importance of a given attribute and its implementation in a given service. The closer a given factor is located to the diagonal of the map, the more its implementation is correlated with the needs of customers. The IPA map is a two-dimensional model, divided into four areas according to two axes: the X axis is performance or perception, while the Y axis is weight or importance (Martilla et al., 1977; Hariyani, 2017) and those areas are as follows (Esmailpour et al., 2020; Wong et al., 2021):

-Quadrant I: Low Performance – High Importance (Concentrate here): attributes in this category indicate primary weaknesses. If left uncontrolled, these attributes can threaten an organization in attracting customers and competing with other organizations. It is very important that the provider will focus special attention on them.

-Quadrant II: High Performance – High Importance (Keep up the good work): attributes in this category represent major strengths that have succeeded in achieving a standardized level of performance. Quadrant II does not require from the service provider any serious action, only those necessary to maintain the current level of services.

-Quadrant III: Low Performance – Low Importance (Low priority): attributes in this category are low performing for customers, but do not threaten an organization because of their low importance and, indeed, are sub-weaknesses. If there are free recourses, then the enterprise can consider improving them.

-Quadrant IV: High Performance – Low Importance (Possible overkill): attributes in this category, which reflect secondary and insignificant strengths, have the least potential impact on attracting customers. Instead of continuing to focus here, they should allocate more resources to deal with attributes that reside in quadrant I.

The research took the form of an online survey conducted among customers of the from various European countries. The research was aimed at showing how customers assess the functioning of e-shops on the market. The research also made possible to show what customers pay attention to during the e-services provision process. The results of the study will allow the e-shops operating on the market to adapt to customer requirements, but also to check what requirements have not been taken into account so far or treated as of little importance.

The attributes used in the survey, which were used in the presented research, were previously partially used to design customer requirements for the functioning of e-shops generally (Ingaldi and Ulewicz, 2019), which allowed to divide the attributes into specific groups, i.e. "must-be', causing satisfaction or dissatisfaction of customers, attractive. However, in these studies a different method was used (Kano model). Some attributes have been changed and others omitted. But at the same time previous research showed the legitimacy of including those attributes in the survey.

The questionnaire contained 35 attributes that were assessed twice by the respondents (Table 1). First, they were asked to determine how important

individual attributes of the service provision process are to them (Importance), and then they were asked to assess the actual course of this process, i.e. the provided service (Performance). In both cases a seven-point Likert scale was used, where 1 meant "I completely disagree" and 5 "I completely agree". The attributes 1-18 relate to the service ordering process (Fig. 1). The rest of the attributes describe order fulfillment and delivery, and what happens after delivery, but at the same time largely affects the quality of offered services.

Table 1. Attributes of the assessment of the service provision process for the e-shops (own study based on Ingaldi and Ulewicz, 2019)

No	Attributes
1	The e-shop has a well-organized and clear website.
2	The e-shop has its fun-pages in the main social media.
3	Information included on website of the e-shop are up to date and comprehensive.
4	The website of the e-shop includes the exact contact details.
5	Offer of the e-shop is often up to date.
6	Categories in the offer of the e-shop are clear and logic.
7	Information about the products of the e-shop are complete and their images legible.
8	Information included on website of the e-shop is accurate.
9	Regulations of the e-shop is accessible and understandable.
10	The website of the e-shop includes the purchase process described in details.
11	The website of the e-shop includes easy-to-use search engine.
12	The website of the e-shop includes option to filter results.
13	The website of the e-shop includes an option to memorize purchase.
14	Ordering options in the e-shop is clear and easy in use.
15	Registration in the e-shop is required to make purchases.
16	All customer data provided on the website of the e-shop during the order is secure and remain private.
17	A customer in the e-shop can choose different payment methods.
18	A customer in the e-shop can choose different forms of delivery.
19	A customer in the e-shop can easily contact the support to obtain additional information about the products.
20	A customer in the e-shop can easily contact the support in the order to explain any inconsistencies.
21	A customer in the e-shop can cancel the transaction before its implementation.
22	Deliveries in the e-shop are carried out in accordance with the terms indicated on its website.
23	A customer in the can track his purchase.
24	Supply of goods from of the e-shop is realized during hours convenient for the customer.
25	A customer of the e-shop can refuse to accept the consignment in case of any inconsistencies.
26	Products that are sent to customers by the e-shop are safely packed.
27	The packaging of products sent by the e-shop is easy to re-use, e.g. to send back the product.

28	The packaging of products sent by the e-shop contains relevant documents (invoice or bill and a document allowing customer to return the goods).
29	Financial transactions related to the purchase in the e-shop is easily made.
30	After purchase in the e-shop a customer can add his opinion about the purchase process.
31	After purchase in the e-shop a customer can add his opinion about currier and delivery.
32	A customer in the e-shop can return the product if he did not like it.
33	A customer in the e-shop can return or exchange product which was damaged during transport.
34	A customer in the e-shop can have repaired product under warranty.
35	The e-shop should introduce loyalty programs.

Additionally, the survey contained a respondents' features which allowed to define the structure of the respondents who took part in the research. It includes: gender, age, social / professional status, education, residents, region of Europe. Due to the poor experience in previous research related to the financial status of respondents (frequent refusal to answer), this question was not included.

The survey was aimed at European residents who often use e-shop services and want to share their opinion on the services provided in this way. They were asked to fill in the survey after using their services. The link to the survey has been published on different social media websites, which allowed for a random selection of the research sample. The survey was structured in a Google form, which facilitated the collection of responses, but also blocked the possibility of sending an incomplete form or a wrong answers. It was assumed that the questionnaire should be completed by at least 600 people.

The survey was conducted in January-October 2020. Due to the pandemic situation around the world and the general increase in the popularity of e-shops, a large increase in customers was recorded, which allowed for the collection of the appropriate amount of data. Ultimately, 786 people from various part of Europe took part in the survey, and all questionnaire forms were subjected to further analysis.

When analyzing the results, at the beginning the structure of the respondents was assessed. Percentages for each characteristics were calculated. This helped to indicate who mainly used the services of the e-shops. The assessments of individual attributes of the service provision process were first analyzed in terms of their reliability. The Cronbach Alpha test was used for this purpose, which allow to indicate whether the obtained data were suitable for further analysis. Subsequently, the Importance and Performance means for each attribute, total means for both groups and total standard deviations were calculated. The analysis of Importance means allowed to indicate which elements of service provision are the most important for customers and which they do not pay so much attention to. On the other hand, the analysis of Performace means allowed to indicate which attributes of the service provision process were particularly highly assessed by customers,

and which not. Additionally, the differences between Performace and Importance were calculated, which allow to indicate the level of customer satisfaction. This is not part of the IPA method, but the basis of the Servqual method, which aims to indicate the gap between what the customers' expectations and their experiences (perceptions) (Parasurman et al, 1988). However, in order to supplement the information with the level of customer satisfaction, it was decided to use the basic assumptions of the Servqual method. Finally, the IPA map was constructed, which allowed to divide attributes into four groups according to previous assumptions.

Results and discussion

At the beginning, the structure of the respondents was analyzed. Most of the respondents were women (61.11%). As for the age structure, people aged 21-30 (38.48%) and 31-40 (28.19%) were the most numerous. Additionally, attention should be paid to the age group up to 20 years. The survey was addressed to adults, so this age range is actually 18-20 years, which also indicates its large number (19.75%). There were no respondents over the age of 61. When it comes to social status, working people (40.53%) and pupil / university students (37.86%) were the most numerous. There were no retirees among the respondents, which is related to the age of the respondents. The respondents were people with higher (40.52%) or secondary (35.80%) education. When it comes to residence, the responses were more similar, with a small majority of people living in larger cities (41.3%). Most of the people came from the countries of Eastern (32.1%) and Central Europe (22.4%).

The structure of the respondents can be related to two things. Online shopping is more popular with young people. They are not afraid of new products, new solutions, they are open to new technologies. They spend a lot of time online, so it's only natural to shop online as well. The second thing that had an impact on the structure of respondents, but probably also on the structure of customers of the e-shop generally, is digital exclusion. This exclusion mainly concerns the elderly, the unemployed, the disabled or people living in towns or villages where there is a problem with the Internet. The digital exclusion of the elderly is particularly visible, no respondents over 61 years of age or a retiree were recorded.

The Cronbach Alpha coefficients were used to assess the reliability of the survey. These coefficients were calculated for two parts of the survey separately, i.e. Importance and Performance (Table 2). In case of Importance, the results were in the range (0.8, 0.9), which means very good strength of association, while in the case of the Performance part the result was lower and belonged to the range (0.7, 0.8), i.e. good strength of association. However, such results prove the reliability of the research, therefore the study results were subjected to further analysis.

Basic total statistics for Importance and Performance were also calculated (Table 2). This analysis showed that the customers on average assessed the Importance of the attributes higher than their Performance, and the difference is quite high (more than 1). Additionally, it can be noticed that the assessments of the Importance of

individual attributes were less varied than in the case of the service implementation assessments so the expectations of individual customers regarding the service are more similar.

**Table 2.** Cronbach Alpha and statistical analysis (own study)

|	Cronbach Alpha	No of items	Mean	Variance	Standard deviation
Importance	0.821	35	5.623	1.003	1.005
Performance	0.769	35	4.575	1.264	1.597

The mean Importance and Performance assessment for the individual attributes were shown on Figure 2. A certain dependency can be noticed in case of the Importance. In practically all cases, the respondents assessed the Importance of attributes above 3 on average, except for attribute 15 (Registration in the e-shop is required to make purchases). It is not important for the respondents whether the e-shops require customer registration in order to make purchases. It can be assumed that for many customers' registration is rather redundant.

It can be also noticed some differences in the importance of individual attributes, many of them were assessed on average above 6 (16 out of 35 attributes). These attributes are therefore taken into account during the service provision process and certainly a low level of their fulfillment will result in dissatisfaction of customers. This part of the research allows you to answer the research question Q1.

In general, it can be seen that customers assessed the importance of the attributes higher than being included in the finished service.

The diversity in the assessments of the Performance is much greater than in the case of Importance, which can be easy seen in Figure 2. In case of attribute 23 (A customer in the can track his purchase), an average assessment was less than 2. Customers want to know what happens with their orders, where the orders are at the moment. They were not satisfied with this attribute, because this option did not work as it should.


a)
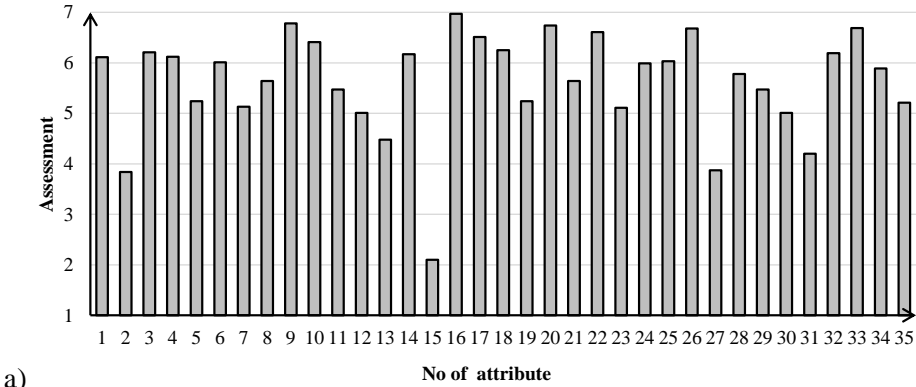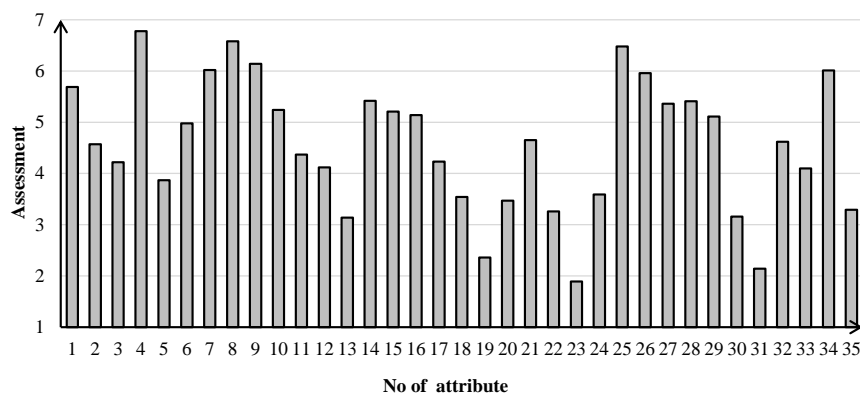
b)

Figure 2: Average Importance and Performance for the e-shops: a) Importance; b) Performance (own study)

The next two attributes 31 (After purchase in the e-shop a customer can add his opinion about currier and delivery) and 19 (A customer in the e-shop can easily contact the support to obtain additional information about the products) were also poorly assessed in the provided service. The first attribute relates rather to the customer's behavior after making a purchase, when he wants to share his opinion with other people and express his level of satisfaction. However, it is not a mandatory part of every service provision process. The attribute related to easily contact the support to obtain additional information about the products may be more problematic for the enterprise. The customer sometimes needs to ask questions that will dispel his doubts and he has full rights to do it.

Most customers were satisfied with attribute 4 (The website of the e-shop includes the exact contact details). Due to this attribute, they knew exactly who was the service provider and how to contact in case of any problem. Attributes 8 (Information included on website of the e-shop is accurate), 9 (Regulations of the e-shop is accessible and understandable) and 25 (A customer of the e-shop can refuse to accept the consignment in case of any inconsistencies), which received an average assessment above 6 for service performance, had also positive influence on the customers' satisfaction level.

Figure 3 has been constructed to show the gap between the importance of particular attributes for the customer and their performance in the provided services. As previously mentioned, this is not an element used in the IPA, however, the authors decided to supplement the research results with this valuable information.
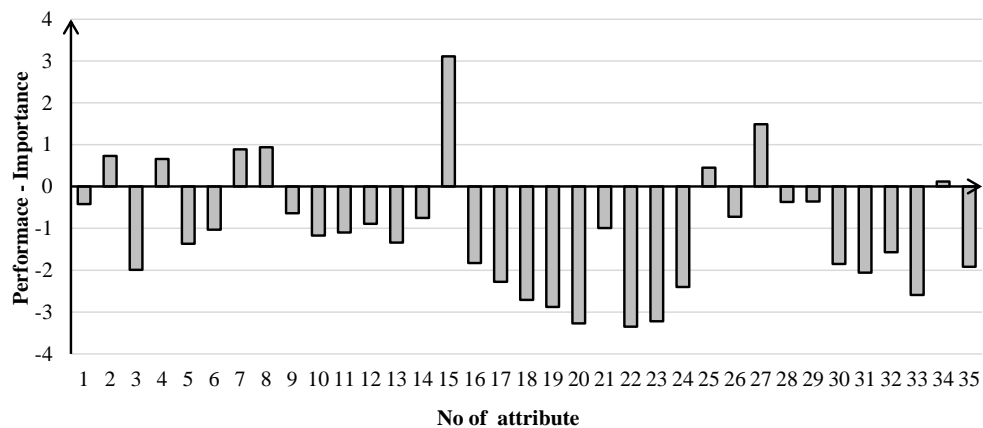
Figure 3: Difference between Performance and Importance for the e-shops (own study)

It is easy to see that only in cases of a few attributes (8 out of 35) the service performance resulted in customer satisfaction (positive difference between Performance and Importance). The greatest satisfaction was caused by attributes 15 (Registration in the e-shop is required to make purchases). However, it should be remembered that in case of this attribute, customers indicated its low importance, which certainly had a large impact on such a result. The greatest dissatisfaction (value below -4) among the customers of the e-shops was noticed in case of the attribute 20 (A customer in the e-shop can easily contact the support in the order to explain any inconsistencies), 22 (Deliveries in the e-shop are carried out in accordance with the terms indicated on its website)and 23 (A customer in the can track his purchase).

The IPA map was shown in Figure 4. However, a different approach than usually shown in other papers, was used, e.g. the map was divided into four equal fields. The fields are divided evenly into four parts, additionally a diagonal has been inserted to illustrate the correlation between Importance and Performance. The points closest to the diagonal are the elements where the importance and performance ratings are as close to each other as possible. The most points (attributes) were placed in quadrant II, i.e. "Keep up the good work". These are attributes important to customers, which have been properly taken into account in the service provision process.

Three points (2, 27 and 15) are in quadrant IV, i.e. "Possible overkill", that is attributes of little importance to customers, and which were assessed quite high when it comes to provision of a given service. These are attributes that cause some kind of loss to the enterprise. Due to their lower importance, the e-shops unnecessarily made such efforts in their cases. Two of these points (2 and 27) are placed near quadrant II, therefore they can also be considered as those which, to a large extent, result in customer satisfaction and affect the general level of quality of services provided by the e-shops.

Quadrant III, i.e. "Low priority", deserves special attention. This area (according to the respondents) remained empty.

However, the most important quadrant of the IPA map from the point of view of the quality of provided services is quadrant I, i.e. "Concentrate here". There are 11 attributes in this area (5, 13, 18, 19, 20, 22, 23, 24, 30, 31, 35). These are the attributes that are important from the customer's point of view, but their performance in the provided services was not that good. Several points are close to the border with quadrant II, one point with quadrant III. These attributes reduce customer satisfaction with the services of the e-shops. So they should be better discussed.
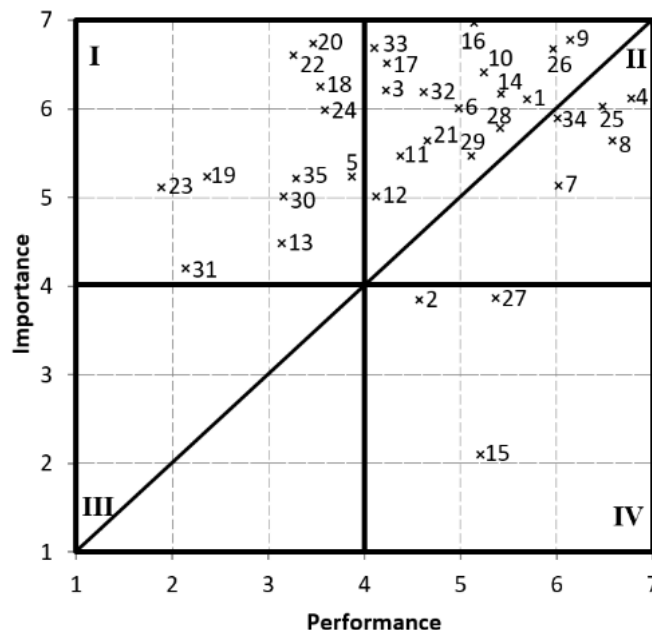

Figure 4: IPA map for the e-shops (own study)

The first attribute to be improved is attribute 5 (Offer of the e-shop is often up to date). It is related to the information contained on the e-shop website. To encourage customers to buy and improve perception of this attribute, a procedure for updating the offer should be defined.

The next attributes are directly related to the e-shopping process, i.e. attributes 13 (The website of the e-shop includes an option to memorize purchase), 18 (A customer in the e-shop can choose different forms of delivery), 19 (A customer in the e-shop can easily contact the support to obtain additional information about the products), 20 (A customer in the e-shop can easily contact the support in the order to explain any inconsistencies). These are the attributes that directly depend on the e-shops. They are mainly related to the information and options of the e-shop

website. Due to the improvement of its operation, it is possible to improve the perception of these attributes. The ease of contact with the e-shop is also noteworthy. In addition to the appropriate software, a well-functioning website, there is also a need of the enterprise's employees to answer any customer questions. The e-shops can therefore do a lot to improve customer satisfaction in this case.

The next three attributes are directly related to the delivery of the ordered goods, i.e. attributes 22 (Deliveries in the e-shop are carried out in accordance with the terms indicated on its website), 23 (A customer in the can track his purchase), 24 (Supply of goods from of the e-shop is realized during hours convenient for the customer). However, it should be emphasized that these attributes largely do not depend directly on the e-shops, but on the enterprises delivering the ordered goods. The research enterprise may claim its rights from suppliers, try to negotiate the improvement of their courier services or choose other suppliers, but may not fully influence their operation. Thus, these are attributes which improvement is difficult to achieve.

The last three attributes are related to the process after delivering orders to customers, i.e. 30 (After purchase in the e-shop a customer can add his opinion about the purchase process), 31 (After purchase in the e-shop a customer can add his opinion about currier and delivery) 35 (The e-shop should introduce loyalty programs). The possibility of adding opinions by customers is not only the feedback for the enterprise itself about the service provision process. It is also information about the services for potential customers who want to know something about the e-shops before they decide to use their services. It can be treated as an advertisement so properly functioning system of expressing an opinion is the basis of a marketing activity. Well-functioning loyalty programs will help in keeping the customer, and thus affect not only his satisfaction, but also loyalty.

The IPA map showed how customers assessed the operation of e-shops and the services they provided, as well as indicated for which attributes improvement actions should be introduced, which also allowed to answer the research question Q2.

The research presented in this paper and the survey may be an auxiliary tool for other e-commerce enterprises that would like to offer their e-services at the highest level. The assessment of the quality of a given service allows for the identification of its strengths and weaknesses and for its possible improvement (Klimecka-Tatar, 2018).

Summary

The course of the service provision process has a great impact on how a given service is perceived by customers, and thus on the quality of this service. Therefore, it is necessary to precisely define the stages of this process and to assess it. In case of the e-shops, this process consists of three main parts: ordering the

service, delivery and the period immediately after the delivery. The survey presented in the paper is a universal tool that can be used in various types of e-shops to assess the services they offer. The attributes included in the survey relate to all three stages of the service delivery process.

The conducted survey indicated the attributes that are important for customers, but their performance in case of the provided services was assessed as low, which unfortunately reduced the services quality, and thus had a negative impact on customer satisfaction. These attributes should be analyzed more precisely in order to suggest detailed corrective actions. However, it should be emphasized that some attributes are not influenced by the e-shops (attributes related to the delivery), where a possible solution may be negotiations with suppliers, and in a critical situation, change of the currier. The research also made it possible to indicate which attributes are particularly important to the customers, which they pay special attention to. Therefore, these are the attributes that e-shops should also pay attention to in order to provide services at the highest level, and thus influence the customers satisfaction.

The presented research is not free from limitations. It should be noted that the research took the form of an online survey. The first problem was to create the survey form. The attributes used in the survey were previously partially used to design customer requirements for the functioning of e-shops (Ingaldi and Ulewicz, 2019), due to which it was possible to check their usefulness for the assessment of the quality of services offered by the e-shops. They were developed on the basis of literature research and the authors' experience in conducting similar research. Additionally, the research sample was limited and the authors had no influence on its structure. However, in the research assumption, the minimum sample was defined as 600 respondents, and 786 people took part in it. The results refer to European countries, perhaps different research results would be obtained in other parts of the world. It should also be taken into account that the research was conducted in the period of a pandemic Covid-19, when, due to various types of restrictions, many enterprises were not able to operate, others introduced services to the Internet. The problem could be also cause by the phenomenon of digital exclusion, which could include the elderly, not working, living in areas where there is a problem with the Internet. This phenomenon can be seen in the analysis of the structure of the respondents.

Further research is planned to improve the list of indicated attributes. Their more detailed analysis should be carried out in order to propose corrective actions, which will allow for improvement of the service provision process in the e-shops. Additionally, similar studies are planned in individual enterprises providing various types of e-services in order to indicate quality problems with during different service provision processes. The questionnaire used in the study will be a starting point for this study.

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OCENA PROCESU ŚWIADCZENIA USŁUG JAKO NARZĘDZIE DO ZARZĄDZANIA PROCESAMI BIZNESOWYMI

Streszczenie: Wśród procesów zachodzących w przedsiębiorstwach usługowych i determinujących ich wyniki na szczególną uwagę zasługuje proces świadczenia usług. Klienci biorą w nim czynny udział, decydując o tym, jak ma wyglądać usługa i mając możliwość jej modyfikacji w trakcie jej świadczenia. Dlatego też przebieg procesu świadczenia usługi wpływa na to, jak klienci postrzegają daną usługę, czy są zadowoleni i czy jakość usług jest na odpowiednim poziomie. Rozwój technologii i cyfryzacja spowodowały, że wielu klientów preferuje e-usługi, zakupy online. W tym przypadku proces świadczenia usług wygląda inaczej niż w przypadku tradycyjnych usług, a udział klientów w tym procesie jest jeszcze większy. Wszystkie czynności związane z zamówieniem usługi są przez nich wykonywane. Swoje decyzje opierają na własnych doświadczeniach lub opiniach innych klientów. Dlatego oceniając jakość usług, klient w dużej mierze ocenia proces jej świadczenia. Celem artykułu była ocena przebiegu procesu świadczenia usług przez klientów z różnych krajów europejskich. Analiza wyników została

oparta na założeniach IPA (Importance Performance Analysis). Badanie pozwoliło nie tylko ocenić proces świadczenia usług, ale także wskazać atrybuty, które zdaniem klientów spełniły ich oczekiwania oraz te, które powodują ich niezadowolenie i obniżają ogólny poziom jakości obsługi, a więc wymagają ewentualnych działań naprawczych. Badania mogą być wykorzystane przez różne przedsiębiorstwa e-usługowe w celu usprawnienia procesu świadczenia usług. Wskazane w pracy atrybuty, które są ważne dla klientów, powinny być brane pod uwagę przez e-sklepy w celu podniesienia jakości świadczonych przez nich usług, a tym samym wpłynąć na poziom zadowolenia klientów.

Słowa kluczowe: e-usługa, jakość obsługi, proces świadczenia usług, satysfakcja klienta.

服务提供过程的评估 作为业务流程管理工具

摘要：在服务企业发生并决定其结果的过程中，服务提供过程需要特别关注。客户积极参与其中，决定服务应该是什么样子，并可以选择在提供服务时对其进行修改。因此，服务提供过程的过程会影响客户对给定服务的看法，他们是否满意，以及服务质量是否处于适当的水平。技术和数字化的发展导致许多客户更喜欢电子服务，在线购物。在这种情况下，服务提供过程看起来与传统服务不同，客户在这个过程中的参与度更大。与订购服务相关的所有活动均由他们执行。他们根据自己的经验或其他客户的意见做出决定。因此，在评估服务质量时，客户主要评估其提供过程。该论文的目的是评估来自不同欧洲国家的客户提供服务的过程。结果分析基于重要性绩效分析 (IPA)的假设。该研究不仅可以评估服务提供过程，还可以根据客户指出满足他们期望的属性以及导致他们不满意并降低整体服务质量水平的属性，因此需要采取潜在的纠正措施。不同的电子服务企业可以使用该研究来改进他们的服务提供过程。电子商店应考虑工作中指出的对客户很重要的属性，以提高其提供的服务质量，从而影响客户满意度。

关键词：电子服务，服务质量，服务提供过程，顾客满意度。