OMNICHANNEL IN CRM SYSTEMS FROM THE PERSPECTIVE OF THE SOFTWARE SERVICE PROVIDER

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Abstract

Scientific literature combining omnichannel and CRM systems is not extensive (single papers available). The authors' motivation is to expand the state of knowledge in this field. The goal of the paper is to perform a comparative analysis of the functionality of CRM systems used to support several different fields of activity within one company - a perspective of the software service provider.

The featured research tool is a survey questionnaire used with a sample of 243 company employees in November 2018. The subject of the analysis is a company that operates in a range of different branches on the Polish market. The company has a large collection of various CRM and auxiliary systems used to serve diverse groups of its customers.

The research results are analysed crosswise: first in detail - horizontally (the prism of functionality) and vertically (the prism of the channel type - the type of CRM system), then in general - holistic. The effect of the research is the determination of the company employees' satisfaction with specific functionalities of a given CRM system (channel) along with an assessment of the legitimacy of their use.

Only scientific articles from Scopus databases were considered for literature research. The results of the practical part are adequate for companies that have many CRM systems (not one). In the future, the authors plan to repeat the study on a sample of customers of the company – a look from the second perspective.

After the era of classic customer relationship management systems (CRM), the era of omnichannel customer relationship management systems (OCRM) is coming. This is what the modern market (customers) expects and what is also urgently needed by companies.

Key words: omnichannel, omni-channel, CRM, customer relationship management, CRM system, software service provider, functionality analysis

1. INTRODUCTION

Organizations operating on the market are aware of the fact that in order for them to function and make a profit, it is necessary to attract customers who will buy their services. In a popular trade-specific opinion, acquiring a new customer costs the company six times more than maintaining the current one. Therefore, the company's role is to get to know customer habits and motivate them to make repeat purchases of their services.

In view of the above, increased knowledge about the customer is needed. Hence, companies are investing in newer and more advanced technologies in order to manage customer relations in a better way. The development of such technologies has allowed to create tools that make managing companies easier and more effective. Initially, companies introduced simple applications that facilitated work with customers. Their role was to build a database, exchange information about customers and prepare reports on contacts with them. As time went by, new tools were developed that had new, more extensive functionalities and technologically advanced connections with other IT solutions. The creation of various modules facilitating customer service contributed to the emergence of a tool called a CRM system.

In today's business, the customer is not seen as being important only when the transaction occurs, but also during other forms of contact with the company. CRM systems allow the customer to feel that he/she is not just one of several million customers, but rather one of the few.

The research problem of the article is focused on the functioning of CRM systems in the conditions of implementing a new multi-channel sales strategy – omnichannel: selection of the most important functionalities in the CRM system modules along with their assessment. The goal of the paper is to perform a comparative analysis of the functionality of CRM systems used to support several different fields of activity within one company from the perspective of the software service provider. The article is important for the design and adaptation of CRM systems, adequate to the needs and requirements of the modern logistics software market.

The paper is organized as follows: section 1 – introduction (research problem, goal, main contribution of the paper), section 2 – relationships between omnichannel and CRM systems (state of art); section 3 – subject of research (company with a large collection of various CRM and auxiliary systems used to serve diverse groups of its customers that operates in a range of different branches on the Polish market); section 4 – evaluation of the functionality of selected CRM systems (research methodology, profile of the respondents, functional evaluation of individual CRM system modules, holistic synthesis of the test results); section 5 – general conclusion (summary).

2. OMNICHANNELING IN CUSTOMER RELATIONSHIP MANAGEMENT

The literature on customer relationship management is definitely more extensive than the literature devoted to omnichannel (Table 1). A literature search was carried out on 30 April 2019 in the Scopus abstract and citation database. The Web of Science

database was deliberately omitted by the authors because, as their previous experience shows (Domański et al., 2018), scientific articles from Web of Science are included in Scopus.

Table 1. Number of articles about omnichannel and customer relationship

management in the Scopus database - separation

| | | 1 |
|---------------|-------------|----------------------------------|
| search | omnichannel | customer relationship management |
| 1 | 109 | 1 239 |
| 2 | 112 | 10 168 |
| 3 | 97 | 4 359 |
| 1 or 2 | 158 | 10 447 |
| 1 or 3 | 151 | 4 788 |
| 2 or 3 | 142 | 11 684 |
| 1 or 2 or 3 | 185 | 11 839 |
| 1 and 2 | 63 | 960 |
| 1 and 3 | 55 | 820 |
| 2 and 3 | 67 | 2 843 |
| 1 and 2 and 3 | 52 | 696 |

Legend: 1 - title, 2 - abstract, 3 - keywords.

Source: own study

The number of articles (Table 1) should not come as a surprise because customer relationship management is a historically earlier concept which has existed since the early 1990s. Omnichannel, on the other hand, is a relatively young notion which has been in existence for only a few years.

A more detailed literature search showed the existence of only 3 articles which in their content simultaneously take up the subject of omnichannel and customer relationship management (Table 2).

Table 2. Number of articles about omnichannel and customer relationship management in the Scopus database - conjunction AND

| omnichannel \ customer relationship management | 1 | 2 | 3 |
|--|---|---|---|
| 1 | 0 | 0 | 0 |
| 2 | 0 | 1 | 0 |
| 3 | 0 | 1 | 1 |

Legend: 1 - title, 2 - abstract, 3 - keywords.

Source: own study

These are respectively (Table 2):

- 2-2 design by companies omnichannel customer experiences aimed at achieving long-term customer loyalty, provide guidance for mobile service providers on customer experience management strategies and specifically on touchpoint prioritization, adaptation, monitoring and design (Ieva & Ziliani, 2018);
- 3-2 the challenges for CRM, how digital transformation changes the flow of information from customer to company and vice versa, the influence on corporate

strategy, broader definition of CRM regarding both aspects, the perspective of the company and the perspective (and perception) of the customer (Krämer et al., 2016); 3-3 — customers were actively engaging with brands on a number of levels — from complaints to complements and beyond, different sectors had different challenges, social dancing often requires brands to do a coordinated conga through multiple channels and complex internal processes (Millard, 2015).

The authors also carried out a literature study taking into account the method of writing down the concept: omni-channel instead of omnichannel, CRM instead of customer relationship management. The effect of this approach is the extension of the whole set by two more articles:

- in context of the contact center, the omnichannel approach comes across as an idea of creating seamless and integrated environment for modern customer experience through integrated channels, which allows agents to work on a better interface and to use a richer set of customer and service data (Picek et al., 2018);
- customers expect seamless interaction with companies throughout all available communication channels; however, many companies rely on different software solutions to handle each channel, which leads to heterogeneous IT infrastructures and isolated data sources; omni-channel CRM is a holistic approach towards a unified view on the customer across all channels (Carnein et al., 2017).

Lack of a correlation between both concepts - omnichannel and customer relationship management - in the global scientific literature testifies to a clear gap in the state of knowledge on the subject. A much wider range of knowledge is offered by not searching for a correlation between these concepts (Table 3).

Table 3. Number of articles about omnichannel and customer relationship in the Scopus database - alternative OR

| omnichannel\customer relationship management | 1 | 2 | 3 |
|--|-------|--------|-------|
| 1 | 1 348 | 10 277 | 4 668 |
| 2 | 1 351 | 10 279 | 4 471 |
| 3 | 1 336 | 10 264 | 4 455 |

Legend: 1 - title, 2 - abstract, 3 - keywords.

Source: own study

Without doubt, the research material (Table 3) seems interesting. It might form the basis for a separate scientific project that the authors could carry out in the future. However, for the purpose of this article, due to a large body of sources to analyse, this thread will not be further developed.

Instead, the authors carried out a literature search in the form: title-abstract-keywords (omni-channel) AND title-abstract-keywords (CRM) - 9 articles and title-abstract-keywords (omni-channel) AND title-abstract-keywords (customer relationship management) - 16 articles. It is a development of Table 2 - its results are presented in Table 4.

Table 4. List of articles about omni-channel and CRM/customer relationship management in the Scopus database – conjunction AND: title-abstract-keywords

| | | database – conjunction AND: title-abstract-keyv | |
|--------------|------|---|-------|
| Author | Year | Scope of interest | Cited |
| Církovský | 2018 | concept of customer relationship | 0 |
| & Maryška | | management systems usage for complex | |
| | | campaigns in health care area | |
| Critchley | 2018 | administration of Dynamics 365 Customer | 0 |
| | | Engagement application | |
| Elton | 2018 | how ELLE, the global fashion and lifestyle | 0 |
| &Lopez | | magazine, engages its audience across all | |
| | | platforms to inform marketing, advertising | |
| | | and brand management | |
| Heuchert | 2018 | entity-relationship-model and a linkage | 1 |
| et al. | | model that takes an IS perspective and | |
| | | thereby enables communication between | |
| | | marketing and IT | |
| Miell | 2018 | need for improvements to 3D visualisation, | 1 |
| et al. | | user experience and online customer | |
| | | relationship management of existing | |
| | | websites, aligned with omni-channel | |
| | | retailing practice | |
| Wang | 2018 | building brand equity through establishing | 0 |
| et al. | | key resource advantages in different brand | |
| | | usage situations | |
| Won | 2018 | case study of Lotte Shopping which is trying | 0 |
| | | to reinforce the omni-channel strategy, which | |
| | | can create synergy among various | |
| | | distribution channels based on its core | |
| | | competencies | |
| Carnein | 2017 | three case studies which demonstrate | 0 |
| et al. | | challenges of omni-channel CRM and the | |
| | | value it can provide | |
| Manser Payne | 2017 | proposed an omni-channel integrated | 16 |
| et al. | | marketing communications framework for | |
| | | advancing the field | |
| Niimi | 2017 | defined "the variety of user access patterns" | 0 |
| & Hoshino | | collected from their web browsing history | |
| Park | 2017 | consumer channel choice behaviour in the | 9 |
| &Lee | | perspectives of consumer sociodemographic | |
| | | information, consumer behaviour and | |
| | | corporate communication strategies | |
| Pascoe | 2017 | adopted a best-worst scaling approach to | 2 |
| et al. | | better understand consumer choices in an | |
| | | online/offline branding environment | |
| Aradhana | 2016 | identified the level of utilization of various | 3 |
| | | retail technologies by retailers and the | - |
| | 1 | | |

| | business in the future in the Indian context | |
|------|--|--|
| 2016 | strategic actions that need to be undertaken | 7 |
| | | |
| | industry for managing customer relationships | |
| | in an increasingly technosocial environment | |
| 2016 | one of the first studies to empirically | 23 |
| | investigate the challenges of an e-tailer when | |
| | moving towards an omni-channel strategy | |
| 2015 | developed a luxury brand management | 3 |
| | (LBM) framework that accounts for the | |
| | changing luxury environment | |
| 2015 | value of a structured, formal CRM system | 11 |
| | which helps SME retailers compete in a | |
| | complex, competitive and omni-channel | |
| | marketplace | |
| 2015 | roles of corporate marketing strategies and | 5 |
| | brand management in the global retail | |
| | industry | |
| | 2016 | in order to prepare the financial services industry for managing customer relationships in an increasingly technosocial environment 2016 one of the first studies to empirically investigate the challenges of an e-tailer when moving towards an omni-channel strategy 2015 developed a luxury brand management (LBM) framework that accounts for the changing luxury environment 2015 value of a structured, formal CRM system which helps SME retailers compete in a complex, competitive and omni-channel marketplace 2015 roles of corporate marketing strategies and brand management in the global retail |

Source: own study

The scope of detailed thematic threads to be discussed (Table 4) is diverse. In the context of the literature search conducted by the authors, none of the articles explicitly takes into account (as the main subject) the analysis of the functionality of the CRM system in terms of the implementation of the omnichannel strategy from the perspective of the supplier (operator) of this class of application. The authors of the article had already presented their first view on shaping the logistics system of customer service in the conditions of implementing the omnichannel strategy (general treatment) (Domański & Hadaś, 2017).

3. SUBJECT OF THE RESEARCH, ARCHITECTURE OF THE COMPANY CRM SYSTEM, CHANNELS OF COMMUNICATION (SALES)

The subject for analysis in the article is an international provider of services for individual and business customers. The company operates on the market in many areas, including: landline telephony, mobile telephony, retail and wholesale internet services provision, data transmission, satellite transmission, infrastructure leasing, electricity sales, gas sales, banking and insurance.

The company has extensive infrastructure in Poland which is necessary to provide the aforementioned services. The company features over 600 fixed points of sale throughout the country, a developed network of partner retailers and mobile salespersons. In Poland, the company employs over 16 000 people.

Due to its large and varied scope of activity, the analysed company had to implement a wide variety of IT systems that are necessary for the proper functioning of services provided to customers. The operation of each segment of services is possible thanks to the use of appropriate IT systems and tools. In most cases, the main system, called the CRM system, is integrated with smaller subsystems and auxiliary systems. They are designed to fulfill additional, most often complementary, functions that are not offered by the CRM system and the need for them is business justified. The most important requirements that must be met by the company CRM system or the company CRM system with support tools are the performance of the following functions: operational function, analytical function, contact (also called interactive) function - Figure 1.

OPERATIONAL FUNCTION FUNCTION

CRM
SYSTEM

ADDITIONAL
SYSTEM

CONTACT
FUNCTION

Figure 1. Architecture of the company CRM system

Source: own study

There are often doubts in the company about the validity of keeping so many CRM systems instead of one that would replace the others. By analyzing the structure of the system, it is easy to come to the conclusion that one system will not be able to function for different profiles and areas of the company's operations. Each of them is individually personalized for the specific profile of needs.

A very important aspect in the company's functioning is to shape the relationship with customers through communication channels (sales of services). Currently, in addition to traditional communication channels, which include e-mail and infoline, it is also possible to contact the company through self-service on a website, mobile applications, chat, Facebook. The most popular form of contact with the company infoline - is increasingly being replaced by other communication channels. Customers currently prefer self-service channels, including an individual account on the company's website. Thanks to such a tool, they have full access to information about services they are using. Such a solution is being increasingly chosen by customers because it is them who can decide when is the right time and place for this kind of interaction. The next evolutionary step is the introduction of a customer account in the form of a mobile application, the operation of which is even simpler and faster (all that is required is an Internet-enabled phone). An additional convenience for the customer who is interested in simple and fast communication with customer service staff is a chat (a type of communicator). Thanks to this solution, customers are able to get in direct contact with a customer service staff member who will solve their problems. An equally innovative contact channel, which is increasingly being chosen

by customers, is contact via social media, including Facebook. Currently, the presence of social media in each person's life is growing, so it is important for companies to use this opportunity as one of many forms of communication with the customer. Regardless of a communication channel used for the sales of services, it is important that communication takes place in both ways and does not rely on uploading posts by only one side.

4. EVALUATION OF THE FUNCTIONALITY OF SELECTED CRM SYSTEMS

4.1. Research methodology

Obtaining information on individual systems and their functionalities was possible thanks to using a survey questionnaire. The questionnaire was made available to the employees of the analysed company in electronic form through an internal questionnaire system. The study was conducted among all employees who perform operations on four key CRM systems: landline services, mobile services, sales of electricity and sales of gas. The survey was anonymous.

The questionnaire contained four single-choice questions and one descriptive question. The first question concerned the respondent's work area (a module in the CRM system), the second one related to the length of time the respondent has served for the company. In the third question, the respondent marked the most important functionality in the CRM system module in which he/she works (in accordance with the answer to the first question) in order to answer, on this basis, the fourth question, i.e. to evaluate the selected functionality with respect to four CRM systems (scale from 1 to 5, 1 - the lowest rating, 5 - the highest rating). When selecting the lowest ratings (1 or 2), the respondents had the opportunity to justify their choice in the fifth question. The survey was conducted between 12 and 30 November 2018. 243 questionnaires were filled in.

The aim of the authors' research was, on the one hand, to diagnose the prevalence of omnichannel sales in modern CRM systems (tool used - systematic literature search), and on the other hand, to forecast the possibility for omnichannel sales in the CRM system based on the case study analysis (tool used - pilot survey of its functionality). From the operator's perspective, the omnichannel strategy is related to work in a given CRM system, and within it the operation of given modules of this system - the authors of the article are aware of having adopted the simplification of the type of sales channels.

The subsequent analysis of the results was carried out in a cross-section of individual CRM system modules - it has a simultaneous double-track character: horizontal - a given functionality versus a given CRM system, vertical - a given CRM system versus a given functionality. As part of the analysis of the results, attention was focused on both searching for similarities and differences in assessments (upward or downward deviations of the assessments). The holistic synthesis of research results is included in the summary of the research part. The survey allowed to analyse four

selected CRM systems - drawing conclusions about their operation (functional assessment).

4.2. Profile of the respondents

Table 5 shows modules in which the survey participants work. The majority of the respondents are people performing their daily duties in the customer module (24%) and the service module (22%) - 58 and 54 people respectively.

Table 5. Structure of respondents according to the area of work in the company

| Module in which the respondent works | No. of people (quantity) | No. of people (percentage) |
|--------------------------------------|--------------------------|----------------------------|
| sales module | 46 | 19 % |
| customer module | 58 | 24% |
| operational module | 54 | 22% |
| invoicing module | 47 | 19 % |
| analytical module | 38 | 16% |
| TOTAL | 243 | 100% |

Source: own study

The next place is taken by the invoicing module and the sales module, which are used by 19% of the total number of employees, i.e. 47 and 46 people respectively. The smallest number of respondents work in the analytical module - 16% of the total, i.e. 38 people. The number of operators in individual modules is correlated with the number and labour intensity of the tasks being performed.

Table 6 presents the structure of respondents due to the length of work in a selected area of the company. The largest part of the surveyed people, i.e. 47%, are employees whose experience in the declared area of the company is more than 6 years (115 people). Another large part of respondents (35%) are employees whose length of work in the company is between 5-6 years (85 people).

Table 6. Structure of respondents according to the length of work in a given area of the company

| How long you have worked in a given | No. of people | No. of people |
|-------------------------------------|---------------|---------------|
| area in the selected company | (quantity) | (percentage) |
| 1-2 years | 21 | 9% |
| 3-4 years | 22 | 9% |
| 5-6 years | 85 | 35% |
| more than 6 years | 115 | 47% |
| TOTAL | 243 | 100% |

Source: own study

The lowest percentage (9%) is made up by a group of people working in a given area in the range from 3 to 4 and from 1 to 2 years - 22 and 21 people respectively. Shorter work experience in a given module, apart from natural staff fluctuations, is also a manifestation of changes in organizational structures that result from

implemented changes in company CRM systems (tendencies to automate processes). The fact that the majority of people (82%) have long, corporate work experience, raises the validity of the research results.

4.3. Functional evaluation of individual CRM system modules

Sales module

For the survey participants, the most important functionality in the sales module was the introduction of annexes/modifications of contracts. 27 people responded in this way, i.e. 59% of the surveyed employees of this module (Table 7). Another important activity that they perform in the sales module was entering orders. 32% of the respondents, i.e. 15 people, provided such an answer. Monitoring orders was important for only 9% of the respondents working in a given area, i.e. 9 people. Generation of sales documents and integration with the logistics department were irrelevant to the respondents.

Table 7. Ranking of functionality in the sales module

| Sales module | No. of people | No. of people |
|---|---------------|---------------|
| | (quantity) | (percentage) |
| entering orders | 15 | 32% |
| monitoring orders | 4 | 9 % |
| generating sales documents | 0 | 0 % |
| integration with the logistics department | 0 | 0 % |
| introduction of annexes/modifications of | 27 | 59% |
| contracts | | |
| TOTAL | 46 | 100% |

Source: own study

Additional information obtained from people working in this area allowed to draw conclusions that, due to the implementation of an automated process, generating documents is not important for the respondents because these activities are carried out automatically without the need for humans to interfere in it. The same applies to integration with the logistics department. Previously, it was necessary to prepare a file in a suitable format that was forwarded to the logistics department. Today, it is done automatically by the robot.

In the case of entering orders, according to the respondents working in the sales module, this functionality was rated the highest in the CRM system of electricity sales - the rating on a scale from 1 to 5 is 4.8. CRM for landline services received a rating of 2.4, which is the lowest result. In the case of monitoring orders, the highest result of 4.8 was received by CRM for mobile services. The lowest rating for this functionality, i.e. 2.1, was obtained by CRM for gas sales. Generation of sales documents and integration with the logistics department were not assessed (appreciated by respondents) for any of CRM systems. The functionality of introducing annexes/modifications of contracts was assessed the highest in the case

of a mobile services system - 4.7. The lowest rating of 3.2 was received by a gas sales system. Details of the horizontal assessment are presented in Table 8.

Table 8. Functional assessment in the sales module

| System | CRM | CRM for | CRM for | CRM for |
|-----------------------|--------------|----------|-------------|-----------|
| | for landline | mobile | electricity | gas sales |
| Functionality | services | services | sales | |
| entering | 2.4 | 4.1 | 4.8 | 3.7 |
| orders | | | | |
| monitoring orders | 4.5 | 4.8 | 3.4 | 2.1 |
| generating sales | - | - | - | - |
| documents | | | | |
| integration with | - | - | - | - |
| logistics department | | | | |
| entering | 3.6 | 4.7 | 4.5 | 3.2 |
| annexes/modifications | | | | |
| of contracts | | | | |
| AVERAGE | 3.5 | 4.5 | 4.2 | 3.0 |

Source: own study

Continuing the analysis of assessments vertically (Table 8) and taking into account the entire system of landline services, the respondents indicated monitoring orders as the highest-rated functionality - 4.5 points. The lowest result was obtained by entering orders - 2.4. Monitoring orders was the highest-rated functionality in the CRM system for mobile services, while the lowest was entering orders. The respondents awarded them 4.8 and 4.1 points respectively. The reverse occurs in the case of the CRM system for electricity sales. Here, the highest-rated functionality turned out to be entering orders with a rating of 4.8, while the lowest was monitoring orders - 3.4. The same situation occurs in the case of CRM for gas sales. However, the highest-rated functionality, i.e. entering orders, scored 3.7, while the lowest monitoring orders - 2.1. Taking into account the average rating of all functionalities for specific CRM systems, the highest rating was received by the system for operating mobile services - average 4.5. The lowest rating, however, was given to the gas sales system - average 3.0. For both systems, the sales module functions as a separate system. The respondents expressing a low rating of the system in the gas category quoted a non-intuitive interface as the main reason.

Customer module

In the case of the client module, the most important functionality for the respondents was data modification. 26 people answered in this way, i.e. 45% of the total number of those responding to this question (Table 9). The creation of a customer account was indicated by 20 people, i.e. 34%, while the inputting data by only 12, which is 21% of all responses, and is synonymous with the fact that the respondents considered it the least important activity.

Table 9. Ranking of functionality in the client module

| Customer module | No. of | No. of people |
|-------------------------------|------------|---------------|
| | people | (percentage) |
| | (quantity) | |
| creating a customer account | 20 | 34% |
| inputting customer data | 12 | 21% |
| modification of customer data | 26 | 45% |
| TOTAL | 58 | 100% |

Source: own study

In the opinion of respondents working in the client module whose assessments were presented in Table 7, the functionality of account creation was the highest-rated in the CRM system for gas sales. It obtained the highest mark on a five-point scale. The lowest result of 4.4 was obtained by the landline services system. Another functionality, i.e. inputting customer data, obtained the highest rating, i.e. 4.8 points, simultaneously in three systems: landline services, electricity sales and gas sales. The lowest rating, not much smaller though, of 4.7 was received by CRM for mobile services. The functionality of customer data modification had the highest rating in the case of two systems: electricity sales and gas sales - 4.4 points. The lowest rating of 4.1 was received by a system for landline services. Details of the horizontal assessment are presented in Table 10.

Table 10. Functional assessment in the client module

| System Functionality | CRM for landline services | CRM for mobile services | CRM for electricity sales | CRM for gas sales |
|-------------------------------|---------------------------------|-------------------------|---------------------------|-------------------|
| creating a customer account | 4.4 | 4.6 | 4.8 | 5.0 |
| inputting customer data | 4.8 | 4.7 | 4.8 | 4.8 |
| modification of customer data | 4.1 | 4.3 | 4.4 | 4.4 |
| AVERAGE | 4.4 | 4.5 | 4.7 | 4.7 |

Source: own study

Continuing the analysis of ratings vertically (Table 10) and taking into account all functionalities in CRM for landline services, the highest-rated was inputting customer data (4.8), the lowest was data modification (4.1). The same functionality obtained the lowest rating in the mobile services system (4.3), while the highest was inputting data (4.7). In the case of CRM for electricity sales, two functionalities were assessed the highest: creating a customer account and inputting data. They obtained 4.8 points each. The lowest rating (4.4) was given to the modification of customer data. The respondents assessing all functionalities in the CRM system for gas sales awarded the highest and at the same time the maximum rating to the creation of a customer account. The lowest result of 4.4, as in the other systems, was obtained by

the modification of customer data. Taking into account the average rating of all functionalities in given systems, the highest rating (4.7) was simultaneously obtained by two of them: gas and electricity sales. The lowest rating of 4.4 was obtained by CRM for landline services. This may be due to the fact that gas and electricity sales is a relatively new segment of services for the selected company and the systems for operating them are created with current needs being taken into account.

Operational module

The most important functionality for the surveyed service module staff were complaints and notifications. 35 people responded in this way, which is 65% of the total number of respondents answering this question (Table 11). Another important functionality is history, which was indicated by 16 people, i.e. 30% of all the respondents. Only 3 respondents chose interaction with customers as the most important in their assessment. This is only 5% of the total number of respondents working in the service module.

Table 11. Ranking of functionality in the service module

| Operational module | No. of people | No. of people |
|--------------------|---------------|---------------|
| | (quantity) | (percentage) |
| interaction with | 3 | 5 % |
| customers | | |
| history | 16 | 30% |
| complaints and | 35 | 65% |
| notifications | | |
| TOTAL | 54 | 100% |

Source: own study

In the case of customer interactions, it was rated the highest in the CRM system for gas sales, as it received 4.7 points, and the lowest in electricity sales - 2.1. The respondents were in agreement when assessing the other two functionalities, i.e. history, complaints and notifications. They were rated the highest in the gas sales system where they obtained 4.4 and 4.6 points respectively, while the lowest in the CRM system for mobile services: 2.5 and 2.7. Details of the horizontal assessment are presented in Table 12.

Table 12. Functional assessment in the service module

| System | CRM | CRM | CRM for | CRM |
|------------------------------|--------------|------------|-------------|---------|
| | for landline | for mobile | electricity | for gas |
| Functionality | services | services | sales | sales |
| interaction with customers | 3.7 | 4.1 | 2.1 | 4.7 |
| history | 4.2 | 2.5 | 3.4 | 4.4 |
| complaints and notifications | 4.1 | 2.7 | 3.2 | 4.6 |
| AVERAGE | 4.0 | 3.1 | 2.9 | 4.6 |

Source: own study

Continuing the analysis of assessments vertically (Table 12), history in the landline system was the highest-rated - 4.2. The lowest result was obtained by interaction with customers - 3.7. In the case of CRM for mobile services, the situation was the opposite to that in the aforementioned system, i.e. the highest rating of 4.1 was obtained by the functionality of interaction with customers, while the lowest by history - 2.5. In the electricity sales system, the surveyed service module employees rated history as the highest at 3.4 points and interaction with customers as the lowest at 2.1. The highest-assessed functionality in the CRM system for gas sales was, according to the respondents, interaction with customers, which obtained 4.7 points. History received 4.4 points, which classifies it in the last position. Comparing the average rating of all functionalities, the CRM system for gas sales looks best, as it has an average of 4.6, the lowest is the electricity sales system - 2.9. The users of the electricity sales system indicated as the reason for low rating the need to fill unnecessary fields of the complaint form and the need to set up many filters to read the history.

Invoicing module

For the survey participants, the most important functionality in the invoicing module was an invoice preview. 24 people answered in this way, which is 51% of the surveyed employees of this module (Table 13). Another important activity for many of them was generating invoices, which was indicated by 14 people and making corrections, which was important in the assessment of 9 respondents. This is 30% and 19% respectively of the total number of respondents of the invoicing module. Creating the invoice shipping process was irrelevant to the survey participants as it did not gain any points.

Table 13. Ranking of functionality in the invoicing module

| Invoicing module | No. of people (quantity) | No. of people (percentage) |
|----------------------|--------------------------|----------------------------|
| generating invoices | 14 | 30% |
| making corrections | 9 | 19 % |
| invoice preview | 24 | 51% |
| creating the invoice | 0 | 0 % |
| shipping process | | |
| TOTAL | 47 | 100% |

Source: own study

The invoice generating functionality gained the highest number of points, as many as 4.8, in the electricity sales system, while the lowest number, 3.2, in the gas sales system. Making corrections and invoice previews were the highest rated for one system - CRM for mobile services, 4.7 and 4.9 respectively. As regards the lowest rated functionality, the respondents were no longer so unanimous. Making corrections was assessed the lowest in the context of gas sales CRM, where it received a rating of 2.4, while the preview of corrections was the lowest-rated functionality in the electricity sales system - 3.4. The creation of the invoice shipping process was not

assessed by the survey participants at all. Details of the horizontal assessment are presented in Table 14.

Table 14. Functional evaluation in the invoicing module

| System | CRM | CRM | CRM for | CRM | | |
|----------------------|--------------|------------|-------------|---------|--|--|
| | for landline | for mobile | electricity | for gas | | |
| Functionality | services | services | sales | sales | | |
| generating invoices | 4.3 | 4.5 | 4.8 | 3.2 | | |
| making corrections | 3.1 | 4.7 | 4.4 | 2.4 | | |
| invoice preview | 3.7 | 4.9 | 3.4 | 4.6 | | |
| creating the invoice | - | - | - | - | | |
| shipping process | | | | | | |
| AVERAGE | 3.7 | 4.7 | 4.2 | 3.4 | | |

Source: own study

Continuing the vertical analysis of the ratings (Table 14), in the CRM system for landline services, generating invoices was rated the highest and obtained 4.3 points. The lowest number of points, 3.1, was obtained by invoicing. In the case of the mobile services system, the highest rated functionality was the invoice preview, which gained 4.9 points. Generating invoices was rated at 4.5 points, which classifies it as the lowest-rated functionality. Employees of the invoice module indicated generating invoices, which received 4.8 points, as the highest-assessed functionality in the CRM system for electricity sales. The lowest result of 3.4 was obtained by the invoice preview. In the case of CRM for gas sales, the invoice preview of 4.6 was rated the highest and the lowest was making corrections - 2.4. The overall average of all functionalities indicated CRM for mobile services as the system with the highest average of 4.7. The lowest was CRM for gas sales - 3.4. High assessment of the functionality of the CRM system for mobile services may result from the major update of the invoicing module which was carried out in July 2018.

Analytical module

Employees of the analytical module answering the third question of the survey indicated creating summaries as the most important functionality out of all available there. Such an answer was provided by 71% of the respondents, i.e. 27 people (Table 15). 11 respondents, i.e. 29%, indicated drawing up reports as a significant functionality in their assessment. Data collection was irrelevant to them because it did not receive any points.

Table 15. Ranking of functionality in the analytical module

| Analytical module | No. of people (quantity) | No. of people (percentage) |
|--------------------|--------------------------|----------------------------|
| data collection | 0 | 0 % |
| creating summaries | 27 | 71% |
| drawing up reports | 11 | 29 % |
| TOTAL | 38 | 100% |

Source: own study

The functionality of collecting data in the analytical module was not assessed at all by the surveyed employees. Creating summaries obtained the highest number of points in the case of CRM for electricity sales - 4.6. The lowest rating was in the context of landline services, as it gained 3.5 points. A similar situation was when assessing the functionality of drawing up reports. The highest rating was in the case of electricity sales - 4.1, and the lowest in CRM for mobile services - 3.7. Details of the horizontal assessment are presented in Table 16.

Table 16. Functional assessment in the invoicing module

| System | CRM | CRM | CRM for | CRM |
|------------------------------------|--------------|------------|-----------------|-----------------|
| | for landline | for mobile | electricity | for |
| | services | services | sales | gas sales |
| Functionality | | | | |
| | | | | |
| data collection | _ | - | - | - |
| data collection creating summaries | 3.5 | 4.2 | 4.6 | 4.4 |
| | 3.5 3.7 | 4.2 3.9 | - 4.6 4.1 | - 4.4 4.0 |

Source: own study

Continuing the vertical analysis (Table 16), in the CRM system for landline services, the highest-assessed functionality was drawing up reports - 3.7, the lowest was creating summaries - 3.5. In the case of other systems, namely CRM for mobile services, electricity and gas sales, the respondents unanimously indicated creating summaries as the highest-rated functionality in each of these systems. It was 4.2, 4.6 and 4.4 respectively. The lowest was drawing up reports, which obtained 3.9, 4.1 and 4.0 respectively in individual systems. Taking into account the average rating of all functionalities for a given system, the highest rating was obtained by CRM for electricity sales - 4.4, and the lowest by CRM for landline services - 3.6. It can be assumed that the lowest result is related to several years of functioning of the CRM system for landline services, which despite new emerging needs has not been updated.

4.4. Holistic synthesis of the test results

Table 17 presents a summary of the ratings of individual functionalities in individual modules of four company CRM systems.

Table 17. Summary of the ratings of individual functionalities in individual modules of four company CRM systems

| or rour company crave systems | | | | | |
|-------------------------------|---------------------------------|-------------------------------|------------------------------------|-------------------------|-----------------------|
| Sales module | CRM for landline services | CRM for mobile services | CRM for electricity sales | CRM for gas sales | Functionality average |
| entering orders | 2.4 | 4.1 | 4.8 | 3.7 | 3.8 |
| monitoring orders | 4.5 | 4.8 | 3.4 | 2.1 | 3.7 |

| introduction of annexes/modification s of contracts | 3.6 | 4.7 | 4.5 | 3.2 | 4.0 |
|---|---------------------------------|-------------------------------|------------------------------------|-------------------------|--------------------------|
| AVERAGE | 3.5 | 4.5 | 4.2 | 3.0 | |
| Customer module | CRM for landline services | CRM for mobile services | CRM for electricity sales | CRM for gas sales | Functionality average |
| creating a customer account | 4.4 | 4.6 | 4.8 | 5.0 | 4.7 |
| inputting customer data | 4.8 | 4.7 | 4.8 | 4.8 | 4.8 |
| modification of customer data | 4.1 | 4.3 | 4.4 | 4.4 | 4.3 |
| AVERAGE | 4.4 | 4.5 | 4.7 | 4.7 | |
| Operational module | CRM for landline services | CRM for mobile services | CRM for electricity sales | CRM for gas sales | Functionality average |
| interaction with customers | 3.7 | 4.1 | 2.1 | 4.7 | 3.7 |
| history | 4.2 | 2.5 | 3.4 | 4.4 | 3.6 |
| complaints and notifications | 4.1 | 2.7 | 3.2 | 4.6 | 3.7 |
| AVERAGE | 4.0 | 3.1 | 2.9 | 4.6 | |
| Invoicing module | CRM for landline services | CRM for mobile services | CRM for electricity sales | CRM for gas sales | Functionality average |
| generating invoices | 4.3 | 4.5 | 4.8 | 3.2 | 4.2 |
| making corrections | 3.1 | 4.7 | 4.4 | 2.4 | 3.7 |
| invoice preview | 3.7 | 4.9 | 3.4 | 4.6 | 4.2 |
| AVERAGE | 3.7 | 4.7 | 4.2 | 3.4 | |
| Analytical module | CRM for landline services | CRM for mobile services | CRM for electricity sales | CRM for gas sales | Functionality average |
| creating summaries | 3.5 | 4.2 | 4.6 | 4.4 | 4.2 |
| drawing up reports | 3.7 | 3.9 | 4.1 | 4.0 | 3.9 |
| AVERAGE | 3.6 | 4.1 | 4.4 | 4.2 | |
| SYSTEM AVERAGE | 3.8 | 4.2 | 4.1 | 4.0 | |

Source: own study

Analyzing the ratings in terms of the average of the CRM system (Table 17), the total results are similar and they are in the range of 3.8-4.2. The difference between the lowest overall rating of the CRM system and the highest is 0.4 points. Such a result indicates that the tested CRM systems are similar to each other. This is, however, a tentative conclusion, because after an in-depth analysis of individual functionalities it can be concluded that the described CRM systems differ from each other. Therefore, the average should not be taken as a reliable result.

In Table 17, the extreme values of functionalities in individual modules are marked with colours: green - the highest, red - the lowest. Thanks to such an operation, it can be observed that functionalities in the CRM systems for electricity and gas sales were more often rated the highest in relation to other systems. In the case of the lowest-rated functionalities, the CRM system for landline services is in the first place.

In each of the tested CRM systems, there is a module that is assessed higher and one whose assessment is lower. It can therefore be stated that each system has its strengths and weaknesses. None of the tested systems fully meets the expectations of its users (operators).

5. CONCLUSION

The question of customer service has been and will continue to be a topical issue in the area of logistics. In the era of the 4th industrial revolution - ubiquitous digitization - providing the level of service expected by customers puts new challenges ahead of logistics systems. Today, the customer operates in many vendor sales channels at the same time. For the customer, such possibilities mean the luxury of choice, and for the suppliers' logistics systems they are the necessity for significant modifications to their business strategies.

The outcomes of the goal achieved in the article are assessment of the scale of omnichanneling in CRM systems (results of secondary research), current state of the scientific literature on the subject and assessment of CRM system functionality in the context of omnichanneling requirements from the perspective of the use (operator) of such a system serving its clients (primary research results) and a pilot case study survey.

The authors consider the following to be valuable elements of the article: an interesting research subject - a gap in the state of scientific knowledge on the subject, an interesting research object - one organization operating in many different business lines and offering many different CRM systems, many different functionalities within each CRM system and the size of the sample - 243 respondents. The research subject undertaken by the authors, in the light of the state of the world scientific knowledge (Scopus database), has the hallmarks of originality and innovation.

Only scientific articles from Scopus database were considered for literature research (research limitations), because in Scopus it is the same and even more than in Web of Science database. The results of the practical part are adequate for companies that have many CRM systems (not one) – useful for people designing and operating CRM systems (managerial implications). The authors plan to continue the current course of research – operators of CRM system modules serving clients, and

also to start research similar to the current study but from the customer's perspective – a person served in the CRM system – a look from the second perspective (future). How time-consuming, technologically and organizationally complicated and expensive is transformation of the current customer relationship management systems (CRM) to the omnichannel customer relationship management systems (OCRM)? – Difficult to say. One thing is certain – this is a forward-looking direction of change.

To summarize, the subject of service level and customer relationship management is the essence of logistics. It is a timeless dilemma which is still very important for management and quality sciences.

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