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ASSESSMENT OF THE PROCESS MATURITY OF THE ORGANIZATION ON THE EXAMPLE OF THE SHARED SERVICES CENTRE – A CASE STUDY

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Abstract: The main objective of the article was to present the results of the assessment of the process maturity of the shared services centre (SSC) from the perspective of four functional areas. The research problem was formulated in the form of questions (RQ). RQ1: What is the level of process maturity of the shared services centre? RQ2: What are the similarities and differences in the assessment of the implementation of elements of the process approach from the perspective of employees employed in various departments and in various positions? Empirical proceedings were carried out using such methods as: literature review and opinion poll performed using the CAWI technique. The study employs a multi-dimensional MMPM model of process maturity assessment adapted to the specifics of the sector under study. In the summary assessment of the level of maturity, average values obtained from all respondents were adopted. On this basis, it was assessed that the examined shared services centres were classified at the fourth level of process maturity, with clear signs of development towards the fifth level – the highest one. Of the three points in this article, the first characterizes the concept of process maturity and presents selected models for its assessment. The second point characterizes the studied organization, outlines the methodological framework of the conducted empirical proceedings and presents the structure of respondents. Then, detailed results of the completed research procedure were described. The summary presents a summary assessment of the level of maturity of the surveyed organizations, and indicates limitations resulting from the adopted research methodology, as well as further research directions.

Keywords: process maturity, process approach, process management, BPM, shared services centre.

1. Introduction

The turbulent nature of the changes in the business environment of transnational organizations implies the need for constant cost optimization, dynamic response to increased competitiveness and the search for solutions to meet high employee fluctuation and shortage.

The indicated factors determine the design of highly flexible structures and functioning systems that enable achieving a state in which organizations will consciously discount the benefits of dynamic development of IT and communication solutions. The implementation of modern technologies and tools, such as artificial intelligence (AI), machine learning (ML), Internet of things (IoT) and robotics process automation (RPA), requires the design of activities with a high level of standardization and the replacement of activities with linear processes by intelligent processes. This, in turn, implies the need for systematic implementation of modern IT, communication and process solutions, and thus achieving higher levels of process maturity.

According to the authors, shared service centres (SSC) can be an example of such organizations. Premises indicating the procedural nature of such organizations, also defined as support centres, were presented by S.M. Szukalski, according to whom the processes in SSC are optimized and standardized, while the effects of processes focus on customer satisfaction in the external and internal terms (2012). According to the report published in 2015 by the Polish Information and Foreign Investment Agency, 852 shared services centres, performing 1701 processes and employed 193,500 employees (2016). The presented statistics prompted the authors to consider the assessment of the degree of implementation of process approach determinants in the non-probabilistically selected SSC. Herein, maturity models are used to measure the degree of implementation of process solutions in the organization. In Polish and foreign literature, many researchers propose proprietary models that allow, depending on research goals or business needs, to determine the current state of the organization (descriptive models) or opportunities for development or improvement based on the obtained results (prescriptive models) (Pöppelbuß, Röglinger, 2011; Głuszek, Kacała, 2015, p. 28-29). Simultaneously with the increase in the number of maturity assessment models, an increasing number of studies on the assessment of process maturity of organizations in Poland in both the private and public sectors is noticeable (Bitkowska, 2013, 2019; Cieśliński, 2009, Flieger, 2013, Grela, 2013, Krukowski, 2016, Maciejczak, 2012, Sliż, 2018). Attempts are also being made to assess the relationship between process maturity and the economic performance of the organization (Nowosielski, 2012), effectiveness (Brajer-Marczak, 2012), management improvement (Skrzypek, 2015; Jurczuk, Gabryelczyk, 2015) and assessment of process maturity of the supply chain (Kramarz, 2015).

The literature identified few publications describing the characteristics of the functioning of support services (Zarzycka, Michalak, 2013; Grycuk, 2014), SSC relations with the local environment (Micek, Działek, & Górecki, 2010), process innovations implemented in SSC (Szukalski, 2012) as well as the role of an employee in this type of organization (Łada, Konieczny, 2015; Kabalski, Przygodzka, 2017). At this point, it should be emphasized that there is a cognitive gap related to the lack of studies on the assessment of the level of implementation of process solutions in shared service centres.

The empirical proceedings presented in this study were carried out by applying the multidimensional MMPM model of process maturity assessment modified for the needs of the sector, which enabled a comprehensive assessment of the maturity of the examined organization in the short and long term.

The main axis of this article was to present the results of the assessment of the process maturity of the organization identified as a shared services centre from the perspective of various functional areas.

2. Process maturity of the organization

Business Process Maturity Models (BPMM) allow the identification of the level of implementation of factors of the process organization. The literature on the subject shows a tendency to present ever newer and more complex concepts of process maturity assessment models (de Bruin, Rosemann, Freeze, & Kulkarni, 2005; Pöppelbuß, & Röglinger, 2011). One of the main reasons for this phenomenon are the limited possibilities of modifying the adopted assessment criteria in relation to the specifics of the functioning of the audited entity, but also adapting it to the specifics of the sector of the surveyed organizations (Sliż, 2018b). This means that the right selection and reconfiguration options of the model are important in the context of the intended purpose of the study. Table 1 presents the selected definitions of the organization's process maturity.

Table 1.Selected definitions of organizational process maturity

Author/s	Definition
Oxford University	"The state of being complete, perfect, or ready" and the "fullness or perfection of
Press, 2004	growth or development".
Rosemann, de Bruin,	Maturity is "a measure to evaluate the capabilities of an organization in regards to
2005	a certain discipline"
Grajewski, 2007,	"Process maturity of the organization is expressed in the extent to which processes are
p. 119	formally: defined, managed, flexible, measures and effective".
Juchniewicz, 2012,	"Process maturity means the organization's ability to manage processes effectively,
p. 129	i.e. the ability to define, measure, quantify and continuously improve the process".
Brajer-Marczak, 2012,	"Process maturity is the awareness that the organization is created by processes that
p. 516	occur horizontally in it, which must be managed in an appropriate manner. Process
	maturity also indicates how the perception of processes fits into the company's
	strategy".
Kucińska-	"The level of process maturity can be defined as the degree of implementation of the
Landwójtowicz,	guidelines of the analysed concept".
Kołosowski, 2012	
Grajewski, 2016,	"Process maturity is an expression of the aspirations of modern organizations to
p. 125	ensure their ability to respond to the challenges of a turbulent environment that
	requires flexible solutions".
Bitkowska, Bogucka,	"Process maturity is a measure of how far a particular process is structured,
2016, p. 115	standardized or optimized".

Source: own study based on the indicated literature.

Maturity models are generated as a result of the current needs of organizations, which due to their design and purpose are divided into models: descriptive, prescriptive and comparative (Pöppelbuß, Röglinger, 2011; Głuszek, Kacała, 2015, p. 28-29). In the context of the assessment of individual processes existing in the organization and the maturity of the organization as a whole, models are divided into: one-dimensional and multi-dimensional (Raczyńska, 2017; Sliż, 2018a, 2018b). The first type of model provides the possibility of short-term assessment of the organization's maturity, focusing attention on specific processes, while the multi-dimensional model enables long-term and perspective assessment, which highlights development directions and allows managers to plan future activities. Achieving subsequent levels of maturity can then be carried out in a linear or non-linear manner depending on the layers, dimensions and areas provided in the model.

Table 2, based on a review of foreign literature on the subject, summarizes the parameters of the selected maturity models.

Table 2.Characteristics of process maturity models according to the selected parameters

Model/ Type	Descriptive	Prescriptive	Comparative	One dimension	Multidimensional	Linear	Non- linear
CMM*	X	X		X		X	
BPMM**	X	X			X		X
MMPM***	X	X	X		X		X
(PM)****	X		X		X		X
EFQM****	X	X	X		X		X

^{*}Capability Maturity Model, **Business Process Maturity Model, ***Multidimensional Model of Process Maturity Assessment, ****Multicriteria Model of Process Maturity Assessment, ****Excellence model created by the European Foundation for Quality Management

Source: own study based on (Głuszek, Kacała, 2015, p. 28-29; Fisher, 2004, p. 1-7; Sliż, 2018a, 2018b; Raczyńska, 2017, p. 65; Kwak, Ibbs, 2002, p. 150-151).

A coherent element of most models is their descriptive nature. In addition, the vast majority of models are characterized by a five or six-level scale.

3. Material and methods

3.1. Characteristics of the organization

The subject of the research was an international organization with foreign capital identified as a shared services centre (SSC). The surveyed entity provides financial and accounting services. The headquarters of the examined organization is located in Poland in the Pomeranian voivodeship. It is a separate part of the transnational organization and is subject to the area of financial activity of the company, which supports all its other areas. The shared services centre provides customer services (front office) and, to a small extent, constitutes organizational

facilities (back office). It has ISO 9001 and 22301 certificates, which confirm the quality of recording of identified processes and a set of procedures enabling their improvement.

3.2. Structure of the research procedure

The study used a survey method of opinion polling with a non-probabilistic sampling technique. The research questionnaire was sent to respondents using the CAWI technique (computer-assisted web interview). As a result, 13 correctly completed questionnaires were received. The response rate was 72.22%. The research tool was sent to employees employed in four functional areas, which included: the payables department (accounts payable; AP), the tax department (tax operational; TO), the database department (master data; MD) and the general ledger department (general accounting; GA). The structure of processes in the examined organization is shown in Fig. 1.

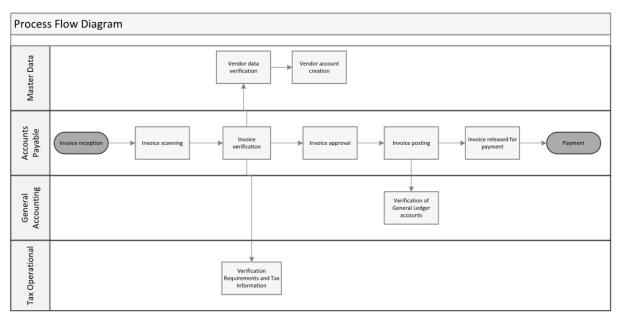


Figure 1. Structure of processes implemented in the examined functional areas in the examined SSC. Source: own study based on the study completed in 2019.

In turn, Table 2 presents the structure of respondents by position and membership in the department in the organization under study.

Table 3. *Structure of respondents in empirical proceedings*

Department	Position	Number of responses	Share of responses
AP	Team leader	4	30.77%
AP	Expert	4	30.77%
AP	Senior Accountant	1	7.69%
GA	Expert	2	15.38%
MD	Expert	1	7.69%
TO	Expert	1	7.69%
	Sum:	13	100%

Source: own study based on the study completed in 2019.

3.3. Research framework

To implement the assessment of process maturity of the examined organization, a multi-dimensional model of assessment of process maturity of the MMPM organization was used (Sliż P., 2018a, 2018b). The prerequisites for choosing the MMPM model were as follows: the possibility of assessing maturity in the short and long term, the availability of a research questionnaire and the possibility of adapting the research tool to the specifics of the sector being studied (Sliż P., 2018b). Table 3 presents a consolidated outline of the maturity assessment criteria including five levels of process maturity in the short-term dimension and long-term dimensions enabling the assessment of development paths or threats that may affect its maturity level reduction.

Table 4.Characteristics of organizational process maturity levels (MMPM model)

Level	Level	Characteristics
	ST+LT*	
Level 5:	L5 A+	Very high organization maturity in process improvement. Modern IT,
Improved		communication and process solutions enabling process improvement are
processes		implemented in the organization.
	L5 A	High ability to improve all processes in the organization.
	L5 A-	Moderate ability to improve all processes.
Level 4:	L4 B+	The organization manages main (basic) and supporting (auxiliary) processes.
Managed processes		The symptoms indicating the improvement of individual processes or their selected stages are identifiable.
1	L4 B	Processes are managed and their improvement is determined by the influence of external factors (e.g. crisis).
	L4 B-	The organization has a metering system for all processes, while process management is superficial.
Level 3:	L3 C+	There are symptoms that indicate that management decisions are made based on
Measured		the results of the measurements.
processes	L3 C	The organization has a process evaluation system.
	L3 C-	Superficial assessment of processes using a meter system.
Level 2:	L2 D+	All processes are identified and formalized in the form of activity maps.
Identified and formalized		Measurement disorders of processes can be caused by the influence of functional structure.
processes	L2 D	Further implementation of the elements of the process approach is being suspended, despite partial formalization and identification of processes.
	L2 D-	Superficial formalization and identification of business processes (it may only apply to the selected process or main processes).
Level 1:	L1 E+	The concept of 'process' is defined correctly, there is awareness of the existence
Functional		of processes in the organization. There are no symptoms indicating
organization		a formalization of activities in the form of process maps.
with weak	L1 E	Superficial activities are employed in the organization in order to implement
symptoms of		a process approach related to the implementation of process solutions.
processes	L1 E-	There are no symptoms indicating the possibility of implementing a process approach.

^{*}ST – short-term dimension, LT – long-term dimension

Source: own study based on (Sliż, 2018a, 2018b).

In the conducted empirical proceedings, the number of questions was reduced from 15 to 13 (excluding the record). At this point, it should be emphasized that the questions regarding the implementation of the ISO system and management methods and tools have been

abandoned. In addition, the answers to questions 6, 7, 10, 12 and 13 were adapted, based on the literature on the subject, to the characteristics of the unit being studied. The new assessment criteria (response structure and scoring) have been formulated on the basis of documentation available in the organization. This required rebuilding the system of criteria for classifying organizations into the long and short term (see Tab. 4). The research questionnaire is attached to this article (see Annex 1).

4. Results and discussion

Table 4 presents the results of empirical proceedings. Due to the cross-sectional nature of the study, arithmetic mean values were selected for the overall assessment. At this point, it should be emphasized that the scoring range for each of the questions ranged from 0 to 5.

Table 5. *The results of the assessment of the level of process maturity in the examined SSC*

Question	Level	Class	Min	Max	Average question	Median	Average level	Median
1		Identification of correct use of the concept of process	1	5	3,538462	5		
2	L2*	Identification of processes in the organization	3	5	4,192308	4,5	11,80769	11
3		Formalization of process architecture in the organization	1	5	4,076923	5		
4		Assessment of the orientation of management activities towards processes	2	5	3,846154	4		
5	L3**	** Identification of the employee role desired from the perspective of the goals and strategy of organization		5	3,846154	3	8,25	8
6		Evaluation of the degree of metering of processes	0	5	1,25	1		
7		Identification of trainings implemented in the organization	1	5	2,230769	1		
8		Identification of the desirable nature of training provided in the organization	2	4	3,076923	4		
9	L4***	Identification of the leadership role desired from the perspective of the goals and strategy	2	5	3,769231	4	11,84615	12
10		Identification of internal trainings implemented in the organization	1	5	2,769231	2		

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11		Identification of improvement performance characteristics	2	5	3,769231	4			
12	L5****	Identification of the organization's market relations	0,5	4	1,961538	1,5	8,730769	8,5	
13		Identification of the type of services provided outside the organization	2	3,5	3	3			

^{*}Minimum number of points classifying for level L1 for dimensions E- (1 p.), E (2 p.) and E+ (5 p.), while for the level L2 for dimensions D- (11 p.), D (14 p.) and D+ (15 p.), **Minimum number of points classifying for level L3 for dimensions C- (8,5 p.), C (10,5 p.) and C+ (11,5 p.), ***Minimum number of points classifying for the level L4 for dimensions B- (11 p.), B (16 p.) and B+ (19 p.). ****Number of points classifying for the level 5 for dimensions A- (12 p.), A (13 p.) and A+ (14 p.).

Source: own study based on (Sliż, 2018a, 2018) and a study completed in 2019.

As a result of the analysis of the answers given by the respondents related to the use and correct definition of the concept of 'process' (54.8%)¹, identification of main (100%) and auxiliary (84.6%) processes in the organization and their formalization in the form of maps (92.3%), the studied organization obtained the number of points qualifying it for the level of process maturity of the L2 D+ level (see Tab. 3). In turn, based on the results regarding the area of process measurement (61.53%), and the direction of management activities towards processes (84.61%), the studied unit was qualified to the L3 D- level. What prevented the achievement of a higher level of the organization in the long-term (the D or D+ level) was determined by the low assessment desired from the perspective of the goals and strategy of organization of the employee's role. The vast majority of respondents indicated the role of the multi-task implementer in the space of a selected functional area. The greater number of respondents also indicated that the desired role of a leader was largely focused on coordinating the activities of a subordinate section, department or branch, integrating during the process (53.84%). Only 15.38% (2) of the respondents indicated the desired role from the perspective of the process organization, identifying the leader responsible for the transfer of knowledge in the organization, intervening when the actions of the process implementers deviate from the assumed effect (cf. Sliż, 2018a, 2018b). Noteworthy is a moderate assessment of knowledge diffusion in the organization with confirmation of the implementation of internal training (100%). Free-market internal principles are characterized by a state in which both suppliers and internal customers are identified. The studied entity also uses services provided by external suppliers, despite the possibility of generating these services or products in the environment of the examined organization, which may also indicate identified and formalized relations of a free market nature. Improvements in the studied unit can or are largely initiated by all employees (69.23%), which indicates that they aspire to the role of independent team members having an impact on the course and quality of implemented activities.

¹ In this part of the article, the percentage share of answers that allowed qualification to the next level is given in brackets.

Figure 2 shows the average response values in two groups of respondents. Based on the chart below, two areas are visible. Employees in the positions of team leader, supervisor and coordinator considerably higher assess the implementation of process solutions related to formalization and process management, while the second group in the area related to reorientation of the role of the employee by expanding his prerogatives in decision-making, and thus the possibilities by all implementers of improving the processes (see Fig. 2).

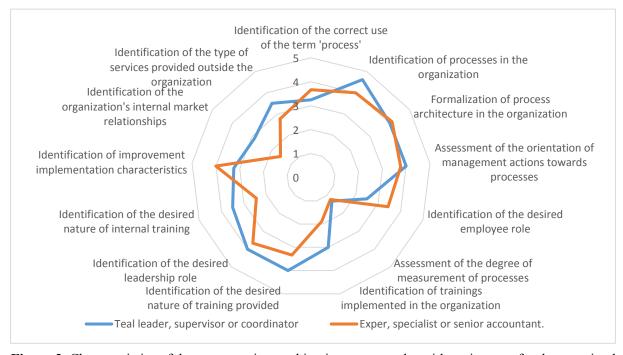


Figure 2. Characteristics of the answers given, taking into account the arithmetic mean for the examined groups of respondents, determined by the position held. Source: own study based on a study completed in 2019.

Table 6 presents the summary results of the study, determined by the respondent's position, taking into account the classification into levels 2-5.

Table 6.Characteristics of results according to the respondent's position in the examined organization

Statistics	Minimum		Maximum		Average		Median	
Level/ Position*	TL/SU/C	E/S/SA	TL/SU/C	E/S/SA	TL/SU/C	E/S/SA	TL/SU/C	E/S/SA
Level 2	9,50	9,00	14,50	14,50	11,88	11,78	11,75	11,00
Level 3	6,00	5,00	9,25	13,00	7,81	8,44	8,00	8,00
Level 4	10,00	7,00	16,00	16,00	13,00	11,33	13,00	11,00
Level 5	8,50	6,00	11,50	10,50	9,63	8,33	9,25	8,00

^{*}TL – team leader, SU – supervisor, C – coordinator, E – expert, S – specialist, SA – senior accountant.

Source: own study based on a study completed in 2019.

In turn, Table 7 presents a summary of the process maturity assessment of the examined organization from the perspective of the functional areas studied.

Statistics	Minimum			Maximum			Average			Median		
Level/	AP	GA	MD	AP	GA	MD	AP	GA	MD	AP	GA	MD
Department*	AI	UA	TO	AI	UA	TO	Ai	UA	TO	AI	UA	TO
L2	9,00	10,50	10,00	14,50	13,50	11,00	12,06	12,50	10,50	12,50	12,00	10,50
L3	6,00	6,50	5,00	13,00	8,00	11,50	8,47	8,00	8,25	8,00	7,25	8,25
L4	7,00	11,00	10,00	16,00	12,00	15,00	11,78	12,00	12,50	12,00	11,50	12,50
L5	8,00	6,00	8,00	11,50	6,50	9,00	9,33	8,50	8,50	8,50	6,25	8,50

Table 7.Characteristics of results according to the functional area in the examined organization

Source: own study based on a study completed in 2019.

The analysis of the results obtained makes it possible to draw the conclusions that there are no significant differences in the perception of the implementation of elements of the process approach in the perspective of functional areas.

5. Summary

Based on the results obtained, three conclusions of a generalizing nature were formulated:

First of all, the examined shared services centre was qualified to the L4 D+ level, identified as a state in which the identified and formalized processes are measured, and management decisions are made on the basis of data from the measurement system of operations (see Tab. 4). In addition, symptoms indicating the implementation of factors enabling achievement of the fifth level of organization were identified in the long-term dimension.

Another conclusion, the study showed the existence of certain differences in the assessment of the organization's maturity, which may result from the range of prerogatives and the level of flexibility of the process being carried out. In the assessment of the managerial staff, their activities should be focused on coordinating the activities of a subordinate department, division or branch, while from the perspective of respondents employed in other positions, the desired role of a leader is similar to a functional approach in which the leader is identified with a specialist with expert knowledge about the implementation of all stages of processes in the given department. At this point, it should be emphasized that few responses were also noticed, indicating a role focused on managing knowledge transfer between employees in a managed department or team. The third and final conclusion, the analysis of the presented average and median values for the sum of responses for each of the examined levels, indicates similar assessments of the degree of implementation for the L2 and L3 levels, while in the area of management and improvement of business processes in the examined organization, the level of maturity is assessed much higher by the managerial staff of the middle and lower level than by experts and specialists (see Tab. 6).

^{*}AP – accounts payable, TO – tax operational, MD – master data and GA – general accounting.

Summing up, the authors' goal is to expand the study to examine a group of shared services centres in the Pomeranian voivodeship and to verify the conclusions formulated in this article with the confirmed empirical facts in a qualitative study.

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Appendix

Table 8. Research questionnaire with the percentage of respondents' answers

Question	Level	Question no.	Answer
		1.1.	A pre-determined criterion defining the required characteristics of the activities carried out by one employee or a team of employees in the organization.
		1.2.	A single activity or a set of clearly defined (designed) activities that the contractor has no influence on during their implementation.
1. Which of the following		1.3.	A set of sequentially performed and planned activities, as a result of which, from a certain initial value, i.e. effort, a result is obtained, that is, the effort is transformed and enriched with the added value.
statements means a process in your	L2	1.4.	An activity specified in the job description or organizational regulations implemented by a single employee or a team of employees.
organization?		1.5.	An undertaking, implemented by the team, focused on achieving the intended goal.
		1.6.	A sequence of unique, complex and related tasks, having a common goal, designed to be completed within a specified period of time without exceeding the set budget, according to the assumed requirements.
		1.7.	The concept of process is not used in the organization.
		2.1.	The process of booking invoices from external customers.
		2.2.	The process of booking invoices from internal customers.
		2.3.	Customer data management.
2. Which of the		2.4.	Verification of bank details.
following processes are		2.5.	Customer order management.
identified in	L2	2.6.	Fiscal verification of accounting documents.
your organization?		2.7.	Project management.
organization.		2.8.	Human resources management, human resources development.
		2.9.	Accounting accounts management.
		2.10.	Other:
3. Is there a model		3.1.	Yes, only for the main processes (mega processes, central processes).
or graphic map of activities in		3.2.	Yes, for all identified processes in the organization.
processes in	L2	3.3.	Yes, for the selected processes.
your organization?		3.4.	In the organization, processes are not formalized in the form of maps (diagrams) of their course.
		3.5.	I don't know.
4. Are management		4.1.	Reproductive proficiency in the implementation of tasks.
activities in the		4.2.	Process effect.
organization designed with	L3	4.3.	Tasks and results.
a focus on?		4.4.	None of the above.
		4.5.	I don't know.

Cont. table 5.

5. Which role of an		5.1.	The role of the expert contractor of the assigned tasks.
employee from the perspective		5.2.	The role of a multi-task implementer in the area of a selected
of goals and strategy is the	L3	5.3.	department of the organization. The role of the contractor of assigned tasks and the initiator of improvements in the position held.
most desirable and expected in		5.4.	The role of an independent member of the team performing tasks and stimulating improvements throughout the organization.
your organization?		5.5.	None of the above.
. <i>G</i>		6.1.	Process implementation cost.
		6.2.	Length of process implementation.
		6.3.	The amount of revenue generated by the process.
6. Which of the		6.4.	The ability of employees to change roles in the organization.
presented	L3	6.5.	The level of external customer's satisfaction.
measures are used to evaluate processes?	L3	6.6.	The level of internal customer's satisfaction.
		6.7.	Measurement of process effectiveness using key performance indicators (KPI).
		6.8.	I don't know.
		6.9.	Measurements are not performed.
	L4	7.1.	Training creates competence development.
		7.2.	Training is part of the organization's strategy.
7. What is the		7.3.	Training creates a direction of learning new ways of doing things.
desirable nature of the training		7.4.	Training is one of the elements of the incentive system.
provided?		7.5.	Training enables employees to exchange views.
		7.6.	Training shows the benefits and risks of the planned changes.
		7.7.	Training is not implemented.
8. Which of the leader's roles,		8.1.	Coordinating the tasks of a subordinate department, division or branch.
from the perspective of		8.2.	Coordinating the tasks of a subordinate department, division or branch and solving problems during the process.
goals and strategy, is the most desirable	L4	8.3.	The leader is responsible for the transfer of knowledge between employees, intervening when the implemented activities of the staff deviate from the established assumptions.
and expected in your		8.4.	A specialist, fluent in the implementation of tasks in the selected department.
organization?		8.5.	None of the above.
9. What is the nature of		9.1.	They are the result of employees' invention in transferring knowledge obtained during external trainings.
		9.2.	They result from own initiative, e.g. current changes in the organization.
internal training	L4	9.3.	They are implemented in a planned and cyclical manner.
in your organization?		9.4.	They are implemented for the purposes of implementing new employees in the organization.
0-8			employees in the organization.

Cont. table 5.

Cont. table 3.			
		10.1.	Improvements are carried out during the implementation of the process.
10. What is the		10.2.	Improvements are generated by all employees.
nature of the		10.3.	Improvements are planned based on customer requirements.
implemented process improvements	L5	10.4.	Improvements begin with planning the course and date of implementation.
throughout the organization?		10.5.	Improvements are designed by the planning centre (e.g. brand, importer, company management).
		10.6.	Improvements are planned based on identified external or internal threats to the organization (e.g. crisis).
11. Which of the		11.1.	Suppliers and internal customers are identified in the organization.
following statements	L5	11.2.	There is an internal supplier satisfaction assessment system by an internal customer.
corresponds to the nature of the		11.3.	The organization has criteria for measuring the quality and number of internal services provided in the organization.
relationship between the		11.4.	There is an internal system of service evaluation measures in the scope of:
service provider and the internal		11.4.A	Quality of services provided.
customer in your		11.4.B	Timeliness of services provided.
organization?		11.4.C	Effectiveness of services provided.
12. Which of the		12.1.	Training services.
following		12.2.	IT services.
services are	L.5	12.3.	Cleaning and/or maintenance services.
provided in your organization by	LS	12.4.	Audit.
external		12.5.	Courier services.
suppliers?		12.6.	The organization does not seek services outside its own structure.

Source: a study based on (Sliż, 2018a, 2018b).