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Empirical research review on barriers to the implementation of the process approach in Polish companies

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Abstract: The article analyses eleven selected barriers to the implementation of the process approach in Polish organizations. Based on a survey, analysis has been carried out and the ISM model was created. The results of the research show that the underlying barriers are: the employee's resistance to change and the lack of financial resources. Studies show that effective implementation of the system based on the process approach requires change in the mentality of Polish employees. Adequate training should be introduced and implemented, and the involvement of management should be increased. Of less importance is the search for new funds.

Keywords: process approach, ISM-based model, companies, Poland, barriers
JEL: L10, L15, O31

1. Introduction

There is a 60%-70% probability that implementation of the process approach based the TQM system will fail so chances of success are only 33%–40% (Muyengwa 2013: 256). That is why the research on the barriers limiting the correct use of the system is absolutely vital. The paper raises the issue of aspects which have a negative impact on correct implementation of the process approach in enterprises in Poland. An analysis was made into the barriers occurring in the literature and then based on eleven selected ones a national survey was carried out. The paper presents the results of the survey, their analysis on the basis of ISM methodology.

2. Barriers in the process approach

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The process approach is currently considered as one of the most important orientations in organizations management as it puts economic processes and the customer in the centre of managers' attention changing a static view on an organization into a dynamic view (Nowosielski 2009: 11). The essence of the process approach is that it leaves rigid and little flexible formal structures of an organization and goes towards a team managed organization through a matrix structure which is considered more flexible than the functional one. The organization manages only those departments which are able to quickly and efficiently identify, meet or create needs and expectations of a customer. All actions leading to this aim constitute the process approach (Grajewski 2003: 106).

The process approach can be noticed in other management areas, inter alia in TQM, in particular, in the quality assurance system compliant with ISO norms 9000:2000 which includes an obligation of applying a process approach in logistics, marketing, *lean management*, *controlling* (Jokiel 2009: 21).

The literature pictures a lot of various classifications of barriers in implementation of a process approach. In Cătălin et al. (2014: 1238–1239) 52 obstacles have been suggested in reference to the quality approach – 22 in (Alsughayir 2014: 199) whereas the research on American enterprises indicates that only the 3 are significant (Salegna, Fazel 2000: 53–57). The Authors happen to call the same barriers differently despite the fact that they express the same idea. The carried out research selects 11 barriers which in the authors' view are most significant. Based on experience of one's own, 11 most vital ones were arbitrarily chosen out of those presented in (Salegna, Fazel 2000: 56–57, Amar, Zain 2001: 76, Masters 1996: 53–55, Tervonen et al. 2009: 567, Prajapati 2015: 592). Table 1 presents selected barriers in the process approach compared to the breakdown in the literature. A detailed justification can be found in the elaboration (Ostrowski, Jagodziński 2015: 926-930). This chapter also provides a short description of particular barriers.

Table 1. Selected barriers in implementation of the process approach (quality management)

No	Barriers (used in the research)	Original name of the barriers			
		(Salegna, Fazel 2000: 53–57 based on Amar, Zain 2001: 76)	(Masters 1996: 53–55)	(Tervonen et al. 2009: 567)	(Prajapati 2015: 592)
1	Lack of theoretical basis		Weak comprehension of quality management Absence of continuous training and education	Lack of proper training and education	
2	Poor communication	Poor communication		Lack of communication Lack of coordination between department	Lack of communication Lack of coordination between department
3	Inappropriate management style		Lack of accuracy in quality planning	Lack of continuous improvement culture Poor planning	Lack of continuous improvement culture Poor planning
4	Lack of funding		Insufficient resources		
5	Insufficient time for implementation	Insufficient of time			
6	Poor IT infrastructure		Insufficient resources		
7	No explicit manner of implementing the process approach		Lack of accuracy in quality planning		
8	Employee's resistance to change			Employee's resistance to change	Employee's resistance to change
9	Employee's lack of motivation	Lack of real employee empowerment		Attitude of employees towards quality	Employees response towards quality
10	Misunderstandings between employees			Inadequate use of empowerment and teamwork	
11	Lack of management commitment		Lack of management commitment	Lack of top-management commitment	Top management commitment

Source: Authors' own elaboration based on: Salegna, Fazel 2000: 56–57, Amar, Zain 2001: 76, Masters 1996: 53–55, Tervonen et al. 2009: 567, Prajapati 2015: 592.

The lack of theoretical basis- correct implementation of a new system requires knowledge about the process approach. Without appropriate training lower level employees do not understand the idea of implementing a new management manner. All organization level should be trained. A lot of experts indicate that it is the most important barrier in implementation of quality assurance systems (Altahayne 2014: 112–115).

Poor communication – poor system of information exchange may cause a failure to implementation of the process approach. A well-organized information exchange between various departments and levels of the organization is of key importance. Bosses often do not share important information with employees which originates the lack of confidence an conflicts (Tervonen et al. 2009: 568). A psychological look on causes and consequences of bad communication was presented in (Spaho 2013: 108–110).

Inappropriate management style- problems occurring on the management level: the lack of planning in the process approach, bad habits, a poor feeling of responsibility, no evaluation or assessment of activity risk in the organization, the lack of effective actions or qualified managers. This inappropriate management style involves managers' tendency to ignore or reject interesting suggestions made by employees (Dale 1997: 378).

The lack of funding- without proper resources and funds an organization will have problems in all areas: management, administration, planning, infrastructure etc. The process approach requires relevant investments (Suleman, Gul 2015: 133). A sufficient amount of resources may be treated as an initial condition for the quality-based process approach (Fei, Rainey 2003: 153). Although this barrier influences a variety of aspects, it was accounted for to check if a financial aspect, in Polish entrepreneurs' view, it constitutes a barrier in implementing modern solutions and the process approach.

Insufficient time for implementation- a lot of research addresses the problem of insufficient time for implementing a new corporate policy. Management staff are not always able to estimate how much time implementation of the process approach will take (e.g. it will take on average year and a half to implement ISO 9001 system). The reason for this is a badly prepared long-term plan (Sandström, Svanberg 2011: 38–39). A well-organized enterprise can use a new strategy for the purposes of reducing time (costs) of processes and the gained time may be used for further implementation of the system (Muyengwa 2013: 259).

Poor IT structure- this barrier is connected to the lack of appropriate resources (computers, communication systems, proper software) and relates to data and information processing. The Polish research indicates that effectiveness and the use of information technologies in terms of communication leaves much to be desired (Bendarz 2009: 31). This issue is to examine whether the IT problems result from poor IT structure.

No explicit manner of implementing the process approach – employees from various departments deal with a logical structure of processes without systemizing names, unfirming methodology, techniques and tools used; they may have various visions of activities, products, customers and other components (da Silva and others 2012: 769). Such a situation may lead to misunderstandings (e.g. when presenting new topics) and may waste efforts made for the sake of the quality system (Juneja et al. 2011: 94).

Employee's resistance to change – very often employees are used to something and they do not want to change the process which in their view is properly carried out. They fear that changes will involve more workload and as they expect worse conditions they respond naturally to the new solution (Khan 2006: 10).

Employee's lack of motivation- employees of an organization may approach a new corporate action system in a negative way as in the case of the previous barrier. In the milder version, they are not willing and eager to make necessary changes. This will result in poor outcomes of the process approach. The lack of employees' motivation may be caused by their insufficient convictions of the point of certain action, weak leadership of managers and support of co-workers, the infrastructure quality delivered by the organization (Bonsu, Kusi 2014: 341).

Misunderstandings between employees – they inter alia result in personal changes, situation insulting employees, sicknesses (absenteeism) and according to the research of Global Human Capital Report on European and American enterprises, 9% end up with a failure of a project (Global Human Capital Report CPP 2014: 6). Misunderstandings are caused by the fact that in the process approach meetings of the group are very frequent as compared to the functional or project approach (Łasiński, Głowicki 2013: 22).

Lack of management commitment – implementation of the process approach is likely to succeed only with full commitment of the organization management. Sometimes implementation of the quality system is initiated by certain parts of an enterprise as they see specific benefits and that is why only some parts of the company are involved instead of the entire organization and

the management (PHCC 1996: 9). This barrier ranks as one of the crucial ones (Prajapati 2015: 592) whereas well organized management is one of the pillars of correct implementation of quality systems (Islam, Haque 2012: 271).

3. Research on the process research

Under an internal grant called „Measuring effects of implementation of the process approach in selected organizations" in WSB University in Wrocław a survey was commissioned to research the sample of respondents responsible for quality management in companies. The main objective was to get to know opinions and experience in functioning the process approach in companies particularly taking into account benefits from implementation of such a system as well as establishing barriers limiting the introduction and functioning of the process concept. The survey was carried out in May 2015 among the management staff – mostly among quality management system representatives, quality managers and employees related to this area. 100 respondents took part in the survey. It was carried out by means of a *Computer Assisted Telephone Interview* (CATI).

The survey was done on the group comprising 70% respondents dealing with the quality management system only. Next to the surveyed people holding managerial positions (presidents 13%, managers 14%) there were people employed on specialist quality related positions (70%) i.e. a quality control specialist, a quality control engineer, quality management system representatives etc.

The respondents represented production (54%), services (33%) and commerce (13%). As far as the size of the enterprises is concerned the breakdown is as follows: 10% of very big enterprises (over 250 employees), 42% of big companies (50–249 employees), 39% of medium ones (10–49 employees) and 9% of small ones (under 9 people).

One of the questions to be answered by the respondents concerned barriers in implementation of the process approach. The interviewees had given a rating from 1 (very small) to 5 (very big) to each barrier selected in chapter 2 (Table 1). When a respondent had difficulties in replying, the answer „hard to say" was marked (the interviewees were not aware of this possibility). The results are shown in Table 2. One may notice that number 8 „employees'

resistance" was dominant as it was mostly indicated in the "big" option (25%) and "very big" (17%).

Table 2. Barriers in implementation of the process approach

No.	Barrier	Very small l_{bm}	small l_m	mediu m $l_ś$	big l_d	Very big l_{bd}	Hard to say	Weighted average of answers m_w
1	Lack of theoretical basis	16%	10%	34%	21%	12%	7%	56,4%
2	Poor communication	15%	18%	44%	15%	2%	6%	50,6%
3	Inappropriate management style	27%	23%	33%	10%	7%	0%	49,4%
4	Lack of funding	48%	16%	16%	9%	5%	6%	37,8%
5	Insufficient time for implementation	32%	12%	22%	18%	11%	5%	49,8%
6	Poor IT infrastructure	43%	19%	17%	15%	2%	4%	40,4%
7	No explicit manner of implementing the process approach	25%	23%	27%	13%	3%	9%	43,8%
8	Employee's resistance to change	19%	12%	22%	25%	17%	5%	58,8%
9	Employee's lack of motivation	18%	17%	26%	20%	13%	6%	55,0%
10	Misunderstandings between employees	34%	11%	30%	15%	4%	6%	45,2%
11	Lack of management commitment	47%	18%	13%	14%	2%	6%	37,6%
where: $m_w = 0{,}2\ l_{bm} + 0{,}4\ l_m + 0{,}6\ l_ś + 0{,}8\ l_d + 1\ l_{bd}$,								

Source: WSB research

It should be remembered that the weighted average represented in Table 2 constitutes a parameter for evaluating the importance of the barriers however it does not mean that 58.8% of the surveyed people indicated the employees' resistance as almost everyone pointed it. It means this barrier was most significant in global terms.

According to the research carried out, the biggest problem Polish enterprises face is employees' resistance (58.8%), the lack of theoretical basis (56.4%), employee's lack of motivation (55%) and poor communication (50.6%). The barriers are mainly connected to human resources and their attitude. A modern organization under Polish circumstances requires

employees to change mentality and possess appropriate training complementing knowledge about innovative management styles.

Management related problems (inappropriate management style 49.4%, no explicit manner of implementing the process approach 45.2% or insufficient time for implementation 49.8%) ranked on further positions. In order to fully implement the process approach, we need to change the attitude of management staff, their decisiveness to change an organization, confidence and engagement in completion of necessary tasks to achieve a new quality of the company. We should also indicate whether employees considered the process approach and continuous improvement as the aim in itself and not merely an addition to activities brining a value. Without making a change to the management's approach to this aspect, employees will indicate insufficient time for introducing new management methods to the company.

It is very interesting that the aspect of funding (37.8%) and IT resources (40.4%) is the least problem in implementing the process approach in Polish enterprises. To sum up the survey results, Polish organizations should look for improvements of the process approach in human resources and management aspects and not in financial resources.

4. Relations between barriers in the process approach

Interpretive Structural Modelling (ISM) was used to obtain interdependencies between particular barriers which allowed us to find interactions between variables of the selected system. This method assumes that parameters mutually interact similarly to mathematical relations (though interdependencies between certain variables may not be defined). Thus we may indicate which element influences the other one and graphically create a map of mutual relations. ISM is a general method – it may be applied in any scientific field. The algorithm of the ISM technique may be found inter alia in (Tervonen et al. 2009: 572–573, Prajapati 2015: 593).

On the basis of the analysis of the barriers made in Section 2 a matrix of relations between particular barriers was prepared as presented in Table 3. Certainly, the presented interdependencies have an encoded subjective point of view of the authors –although the interdependency between the barriers is fairly obvious, the classification of relations may constitute a broader topic for discussion (for example whether in a particular situation the

interdependency is medium or big). For the purposes of using the algorithm of ISM it is necessary to know correlations between the barriers, the matrix is only a starting point indicating a direction of the impact of particular barriers. The selection of the barriers will be made on the basis of the survey carried out.

Table 3. Matrix of interdependencies between the barriers (D – very big interdependency, S – medium interdependency, M – small interdependency, X – no interdependency)

l. p.	Barrier	1	2	3	4	5	6	7	8	9	10	11
1	Lack of theoretical basis	-	D	D	M	S	D	D	D	D	D	D
2	Poor communication	X	-	D	X	D	D	D	D	D	D	D
3	Inappropriate management style	X	D	-	D	D	D	D	D	D	S	S
4	Lack of funding	X	M	M	-	X	S	M	S	S	S	D
5	Insufficient time for implementation	X	X	X	X	-	X	S	S	S	S	S
6	Poor IT infrastructure	X	D	S	M	S	-	S	S	S	S	S
7	No explicit manner of implementing the process approach	X	M	S	X	D	D	-	D	D	D	D
8	Employee's resistance to change	X	D	D	M	S	X	M	-	D	D	D
9	Employee's lack of motivation	X	D	D	M	D	M	D	M	-	D	D
10	Misunderstandings between employees	X	D	D	M	D	M	D	S	S	-	S
11	Lack of management commitment	X	D	D	M	D	M	D	D	D	D	-

Source: Authors' own elaboration

The data obtained from the respondents was carefully analysed. The research was made into the extent the barriers interact with each other in a selected enterprise and the results were shown in Table 4. For example, an interdependency between barrier 4 and 5 may be read (lack of funding and insufficient time for implementation) on the level 60%. It means the percentage of respondents at the same time marking the two barriers as high (very big or big), medium or small (very small and small). Additionally, values greater or equal to 49% have been marked and will be used in ISM algorithm. The choice of the value on this level is arbitrary and strongly affects the operation of this method. The higher the value of the threshold, the fewer interdependencies we get. On the other hand, setting a too low level results in interdependencies between all variables. That is why, a possibly lowest value has been chosen to receive equivalence between all barriers.

Table 4. Matrix of interdependencies between barriers based on the survey

No.	Barriers	1	2	3	4	5	6	7	8	9	10	11
1	Lack of theoretical basis	100%	51%	38%	35%	42%	38%	35%	47%	39%	44%	34%
2	Poor communication	51%	100%	51%	38%	44%	40%	40%	42%	44%	55%	45%
3	Inappropriate management style	38%	51%	100%	48%	43%	44%	44%	41%	44%	56%	52%
4	Lack of funding	35%	38%	48%	100%	60%	63%	53%	35%	42%	45%	63%
5	Insufficient time for implementation	42%	44%	43%	60%	100%	46%	49%	51%	51%	49%	51%
6	Poor IT infrastructure	38%	40%	44%	63%	46%	100%	56%	41%	39%	42%	62%
7	No explicit manner of implementing the process approach	35%	40%	44%	53%	49%	56%	100%	39%	46%	48%	49%
8	Employee's resistance to change	47%	42%	41%	35%	51%	41%	39%	100%	62%	55%	43%
9	Employee's lack of motivation	39%	44%	44%	42%	51%	39%	46%	62%	100%	60%	44%
10	Misunderstandings between employees	44%	55%	56%	45%	49%	42%	48%	55%	60%	100%	53%
11	Lack of management commitment	34%	45%	52%	63%	51%	62%	49%	43%	44%	53%	100%

Source: Authors' own elaboration

Table 5 shows an input matrix for ISM algorithm. It constitutes an intersection set of the expert data indicating interdependencies between barriers characterized by great dependency (symbol D, Table 3) and relations resulting from the survey (the threshold of 49%, Table 4). Shades of grey mark selected cells in Table 4 whereas light grey denotes those missed out because of their insufficiently strong relations (Table 3).

Table 5. Matrix of interdependencies between the barriers- an input matrix for ISM algorithm (light grey denotes data from Table 4 which has not been confirmed by Table 3)

No.	Barriers	1	2	3	4	5	6	7	8	9	10	11
1	Lack of theoretical basis	1	1	0	0	0	0	0	0	0	0	0
2	Poor communication	0	1	1	0	0	0	0	0	0	1	0
3	Inappropriate management style	0	1	1	0	0	0	0	0	0	0	0
4	Lack of funding	0	0	0	1	0	0	0	0	0	0	1
5	Insufficient time for implementation	0	0	0	0	1	0	0	0	0	0	0
6	Poor IT infrastructure	0	0	0	0	0	1	0	0	0	0	0
7	No explicit manner of implementing the process approach	0	0	0	0	1	1	1	0	0	0	1
8	Employee's resistance to change	0	0	0	0	1	0	0	1	1	1	0
9	Employee's lack of motivation	0	0	0	0	1	0	0	0	1	1	0
10	Misunderstandings between employees	0	1	1	0	1	0	0	0	0	1	0
11	Lack of management commitment	0	0	1	0	1	0	1	0	0	1	1

Source: Authors' own elaboration

The ISM algorithm may be presented as a sequence of steps (Tervonen et al. 2009: 572–573):

1. Identify variables, mark and number them (barriers in implementation of the process approach constitute variables). Such an identification may be done independently on the basis of the literature, discussion with experts in a particular field (the elaboration makes use of books and survey research).
2. Present the variables and their interdependencies in a binary matrix where the number of column marked *l* indicates which variable it influences in a particular row (Table 5).
3. If the algorithm is supposed to work properly, the matrix from the previous step must be checked if it maintains relations of transitivity. If variables *i* and *j* are in relation, *j* and *k* are in relation too then *i* and *k* are related as well. Appropriate modifications must be made to maintain this relation to achieve a final reachability matrix (e.g. Table 5 shows that barrier *l* influences 2 and 2 influences 3 so *l* should influence 3 as compared in Table 6).
4. Variables of the final reachability matrix will be divided into levels based on *R(Bi)* set and antecedent *A(Bi)* set. This is done in the form of interactions (Table 7-10). Variables in Table 7 are assigned with the next level (*l*) if the reachability set and the

intersection of the reachability and antecedent sets are equal to ($R(Bi) = R(Bi) \cap A(Bi)$). Then variables marked with a particular level are removed (variables 5 and 6 may be removed from Table 7 to create Table 8). We repeat the operations for the next levels until all variables are removed.

5. On the basis of the achieved levels, we create a conical matrix which by exchanging rows and columns results in a lower triangular matrix or an approximate one (Table 11).
6. Based on the conical matrix draw an interdependency diagram between the variables (numbers of the variables should be changed into base names). A pattern of connections between the barriers is shown in Figure 1.

Table 6. Final reachability matrix – (supplemented interdependencies resulting from transitivity)

No.	Barriers	1	2	3	4	5	6	7	8	9	10	11
1	Lack of theoretical basis	1	1	1	0	1	0	0	0	0	1	0
2	Poor communication	0	1	1	0	1	0	0	0	0	1	0
3	Inappropriate management style	0	1	1	0	1	0	0	0	0	1	0
4	Lack of funding	0	1	1	1	1	1	1	0	0	1	1
5	Insufficient time for implementation	0	0	0	0	1	0	0	0	0	0	0
6	Poor IT infrastructure	0	0	0	0	0	1	0	0	0	0	0
7	No explicit manner of implementing the process approach	0	1	1	0	1	1	1	0	0	1	1
8	Employee's resistance to change	0	1	1	0	1	0	0	1	1	1	0
9	Employee's lack of motivation	0	1	1	0	1	0	0	0	1	1	0
10	Misunderstandings between employees	0	1	1	0	1	0	0	0	0	1	0
11	Lack of management commitment	0	1	1	0	1	1	1	0	0	1	1

Source: Authors' own elaboration

Table 7. ISM algorithm, interaction 1

Bi barriers	Reachability set *R(Bi)*	Antecedent set *A(Bi)*	Intersection set *R(Bi)∩A(Bi)*	Level
1	1, 2, 3, 5, 10	1	1	
2	2, 3, 5, 10	1, 2, 3, 4, 7, 8, 9, 10, 11	2, 3, 10	
3	2, 3, 5, 10	1, 2, 3, 4, 7, 8, 9, 10, 11	2, 3, 10	
4	2, 3, 4, 5, 6, 7, 10, 11	4	4	
5	5	1, 2, 3, 4, 5, 7, 8, 9, 10, 11	5	I
6	6	4, 6, 7, 11	6	I
7	2, 3, 5, 6, 7, 10, 11	4, 7, 11	7, 11	
8	2, 3, 5, 8, 9, 10	8	8	
9	2, 3, 5, 9, 10	8, 9	9	
10	2, 3, 5, 10	1, 2, 3, 4, 7, 8, 9, 10, 11	2, 3, 10	
11	2, 3, 5, 6, 7, 10, 11	4, 7, 11	7, 11	

Source: Authors' own elaboration

Table 8. ISM algorithm, interaction 2

Bi barriers	Reachability set *R(Bi)*	Antecedent set *A(Bi)*	Intersection set *R(Bi)∩A(Bi)*	Level
1	1, 2, 3, 10	1	1	
2	2, 3, 10	1, 2, 3, 4, 7, 8, 9, 10, 11	2, 3, 10	II
3	2, 3, 10	1, 2, 3, 4, 7, 8, 9, 10, 11	2, 3, 10	II
4	2, 3, 4, 7, 10, 11	4	4	
7	2, 3, 7, 10, 11	4, 7, 11	7, 11	
8	2, 3, 8, 9, 10	8	8	
9	2, 3, 9, 10	8, 9	9	
10	2, 3, 10	1, 2, 3, 4, 7, 8, 9, 10, 11	2, 3, 10	II
11	2, 3, 7, 10, 11	4, 7, 11	7, 11	

Source: Authors' own elaboration

Table 9. ISM algorithm, interaction 3

Bi barriers	Reachability set *R(Bi)*	Antecedent set *A(Bi)*	Intersection set *R(Bi)∩A(Bi)*	Level
1	1	1	1	III
4	4, 7, 11	4	4	
7	7, 11	4, 7, 11	7, 11	III
8	8, 9	8	8	
9	9	8, 9	9	III
11	7, 11	4, 7, 11	7, 11	III

Source: Authors' own elaboration

Table 10. ISM algorithm, interaction 4

Bi barriers	Reachability set *R(Bi)*	Antecedent set *A(Bi)*	Intersection set *R(Bi)∩A(Bi)*	Level
4	4	4	4	IV
8	8	8	8	IV

Source: Authors' own elaboration

Table 11. Conical matrix

	Barriers	5	6	2	3	10	1	7	9	11	4	8	Level
5	Insufficient time for implementation	1	0	0	0	0	0	0	0	0	0	0	I
6	Poor IT infrastructure	0	1	0	0	0	0	0	0	0	0	0	I
2	Poor communication	1	0	1	1	1	0	0	0	0	0	0	II
3	Inappropriate management style	1	0	1	1	1	0	0	0	0	0	0	II
10	Misunderstandings between employees	1	0	1	1	1	0	0	0	0	0	0	II
1	Lack of theoretical basis	1	0	1	1	1	1	0	0	0	0	0	III
7	No explicit manner of implementing the process approach	1	1	1	1	1	0	1	0	1	0	0	III
9	Employee's lack of motivation	1	0	1	1	1	0	0	1	0	0	0	III
11	Lack of management commitment	1	1	1	1	1	0	1	0	1	0	0	III
4	Lack of funding	1	1	1	1	1	0	1	0	1	1	0	IV
8	Employee's resistance to change	1	0	1	1	1	0	0	1	0	0	1	IV
	Level	I	I	II	II	II	III	III	III	III	IV	IV	

Source: Authors' own elaboration

On the basis of ISM analysis (Figure 1) we should notice that employee's resistance to change and the lack of funding are placed at the lowest level –at the foundations of implementing innovations in Poland. Employees' resistance originates the lack of motivation and combined with the lack of theoretical basis and it results in poor communication and misunderstandings between employees and consequently in inappropriate management style. Insufficient time for implementation constitutes the climax of these problems.

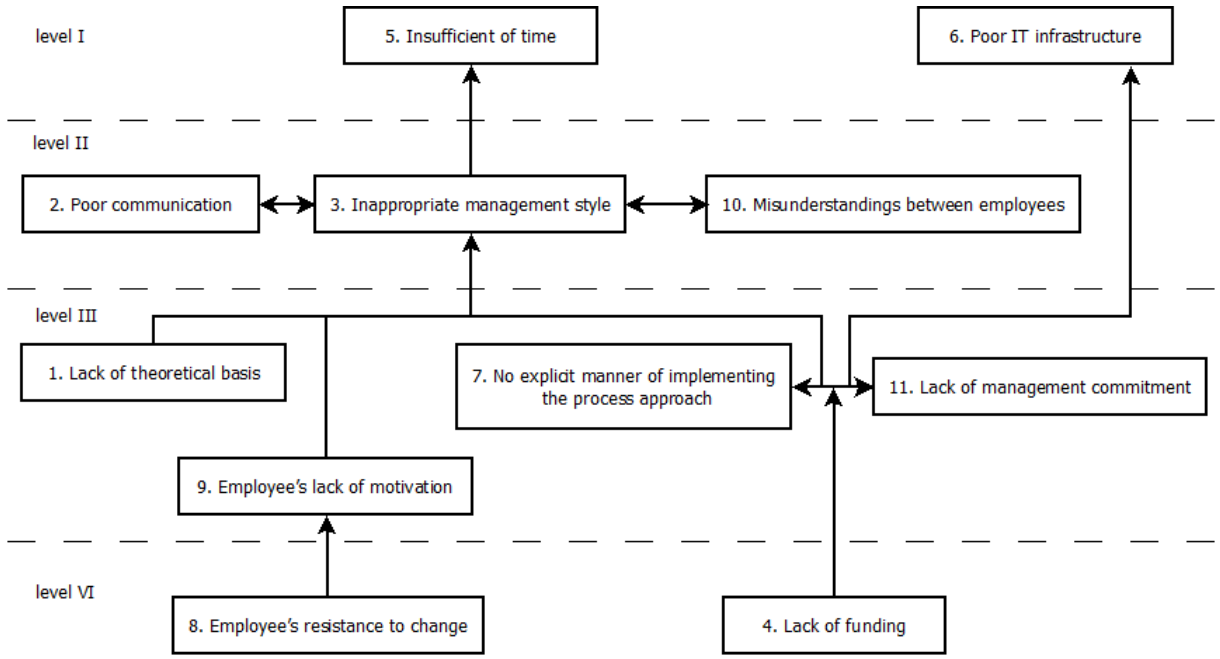

Figure 1. Chart of interdependencies between barriers in the process approach in enterprises in Poland (on the basis of ISM method)
Source: Authors' own elaboration

The lack of funds constitute the second barrier generating problems. As a result, it indicates insufficient management commitment and inexplicit manner of implementing the process approach and leads to poor IT infrastructure. Insufficient and indecisive management activities makes employees feel insecure, have problems with communication and witness inappropriate management style which will result in the lack of time for implementation of the process approach and a certain failure.

The ISM model shows that all other barriers originate from the two basic ones. If the management notices that there are problems with changing the system of company operation, those two aspects should be first taken care of. Employees' resistance should be reduced thanks

to relevant organization culture. A well-operating enterprise relies on principles of trust, communication, motivation, sharing authority, leadership and knowledge (Skrzypek, Hofman 2010: 112). A deficiency of financial resources should be reduced by their better allocation.

5. Concluding remarks

In this article, eleven barriers hampering the implementation of the process approach have been identified. A survey on this issue was carried out among hundred Polish enterprises. Based on this survey, the importance of the identified barriers (Table 2) was presented. A matrix of interdependencies between barriers in the process approach in enterprises in Poland was created using the ISM method (Figure 1). While results should be interpreted with care due to the pilot character if the study, the most important barriers to the implementation of the process approach seem to be the resistance to change among employees and the lack of financial resources. These barriers in turn create managerial problems as well as challenges in the exchange of information between employees. This adds to the lack of time for implementation processes and as a consequence increases the probability of failure of the functioning of the system. The most important barriers identified by the surveyed enterprises are unwillingness from the side of employees as well as a lack of theoretical basis. It seems to be necessary to change the mentality among employees and to increase educational efforts regarding a process approach towards the enterprise. Another step is to increase managerial involvement. Of less importance seems the search for new financial resources.

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Empiryczna analiza barier we wdrażaniu podejścia procesowego w polskich przedsiębiorstwach

Streszczenie:

W artykule dokonano analizy i wybrano jedenaście barier ograniczających wdrożenie podejścia procesowego w organizacjach w Polsce. Na podstawie przeprowadzonych badań ankietowych dokonano analizy i utworzono model ISM. Z badań wynika, że u podstaw problemów związanych z wdrażaniem systemu leżą: opór ze strony pracowników oraz brak środków finansowych. Badania wskazują, że skuteczne wdrażanie systemu opartego o jakość wymaga zmiany mentalności polskich pracowników, odpowiednie szkolenia, zwiększenie zaangażowania kierownictwa, a w ostatniej kolejności poszukiwanie nowych środków finansowych.

Słowa kluczowe: podejście procesowe, model ISM, przedsiębiorstwa, Polska, bariery
JEL: L10, L15, O31