

Employees' involvement in continuous improvement processes of the enterprises in Poland – barriers and the ways of reducing them

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Abstract. In the writing, the results of empirical studies regarding the barriers of regular employees' involvement in continuous improvements processes of the enterprises in Poland and the ways of breaking the barriers identified on the basis of the related literature and the author's researches in this matter were presented. Because of the fact that the examined managers and regular employees of companies were of slightly different opinions regarding the researched phenomenon, in the final compilation of the main barriers, the barriers determined by both - the first and the second group of respondents were included. This issue strongly fits into the subject of companies' sustainable development because without the effective involvement from the employees' part in these processes, there is no sustainable performance (including CSR) or successful continuous improvement of the companies.

1. Introduction

In contemporary, highly competitive and demanding market conditionings¹, the companies should improve their performance in a permanent way. According to the author, continuous improvement, alongside such issues as: ecology, taking the stakeholders' preferences into account or corporate social responsibility (CSR), is one of the element of sustainable development of the enterprises [1, 2]. Continuous improvement (CI), which is often associated with Kaizen² and in reality does not have to be reduced to this concept (because it is also strongly connected to such management methods as: TQM, Six Sigma, TOC, Lean Management or Learning Organization), is one of the basic requirements of sustaining competitiveness of a modern enterprise and its economic results on a demanded level. Nowadays, CI becomes one of paradigms of the economic organizations' performance.

Nevertheless, like J. Miller, J. Villfuerte and M. Wróblewski write, the adequate effects in a continuous improvement effects may be achieved only when "everybody, everywhere and every day" will be engaged in this process [3]. That is why, in a properly conducted continuous improvement, involvement of regular employees is very important. The attempt of this process realization only with a force of management or potential of the services dedicated to this process is highly insufficient and is doomed to failure.

However, as the results of many researches and the reports from practice show, in the enterprises in Poland, the mentioned involvement still appears on insufficient, unsatisfactory level compare with: [4-6]. In connection to this, two basic questions arise (in management study and practice):

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¹ More about it is written by Ph. Kotler and J.A. Caslione in: [7].

² Japanese concept of management consisting in continuous improvement through small, low-cost changes and wide employees' involvement in this process [2, 8, 9, 10].

1. What are the causes of insufficient state of this phenomenon in Poland?
2. In what way can this situation be improved?

In connection to the above, the main objective of the conducted researches was achieving the answers for those questions and the main objective of this article is presenting them.

In a process of formulating the answers, there were the following methods applied [11]:

- the survey of the public opinion (with using questionnaire technique),
- delphic method,
- analysis and synthesis of literature reference,
- analysis and logical reasoning.

In the first part of the writing, the results of the empirical researches regarding the first from the formulated research problems are presented. In the next part, the outline of the answer for the second question is shown.

2. The causes of unsatisfactory state of the involvement of regular employees in a process of continuous improvement of the enterprises in Poland

In order to respond for the first of the formulated research problem, the author conducted the empirical researches, which were realized in three stages:

1. Stage 1 – identification of the main barriers of the employees' involvement in continuous improvement processes (CI) in the enterprises in Poland – by the method of analysis and synthesis of literature reference and Delphic method (in 2014)³.
2. Stage 2 – examining the level of relevance (grades) of the particular barriers. This stage was realized in year 2015, by method of diagnostic surveys on the same sample of Lean Management/Kaizen consultants/leaders⁴ as in the previous stage. The respondents were supposed to establish the level of severity of the particular barriers in a scale from “0” to “3”, while 3 meant the highest power of negative impact of a particular factor.
3. Stage 3 – survey on the opinion of the regular employees, on the unrepresentative (random) sample of 104 people from different economical organization in Poland⁵.

As the results of researches in stage 1, there was a list of 28 factors, which diminish the involvement of the employees in the processes given, created. This compilation is presented in a Table 1.

³ Related literature was analysed i.a.: [12-21] and 16 Lean Management/Kaizen consultants from top Polish consulting companies were examined (i.a. LEIP, LeanQ Team, Lean Passion) and 16 Lean/Kaizen leaders/managers from production companies functioning in Poland (i.a. Franke, Mondelez, Flex, Klose, Visscher Caravelle).

⁴ Lean Management and Kaizen as the management concepts with a common lineage (Japan), they often appear in a company jointly. According to the different sources, Kaizen is a base method/principle of Lean Management. Wider in this matter: [20, 22].

⁵ The research was conducted within V Lean Management Open Conference in Poznan in April 2015. 300 questionnaires were given and 197 ones were given back completed. After discarding the questionnaires not filled in completely of filled in by the managers, there were 104 forms qualified for the final treatment. Most often the examined employees came from big and middle production companies using/interested in Lean Management and industries such as: automotive, food, furniture, cosmetic, sanitary and packaging, industrial productions. The remaining respondents represented logistics, medical, financial and sales services or did not tick the answer. In view of sex, it is deducted that the amount of respondents were similar (52 women, 38 men, the remaining – it was not ticked).

Table 1. Compilation of the barriers of involvement of regular employees in CI processes in the companies using Lean Management in Poland elaborated on the basis of the results of the first stage of researches.

No.	Barriers
1.	Traditional, antagonistic relations between the superiors and subordinates.
2.	Negative aspects of Polish national culture (blaming-complaining, jealousy, demanding attitudes, only own cases' interest).
3.	Weak involvement of the management in CI, lack of a good example from the top.
4.	Imposing ready-made solutions by the superiors.
5.	Lack of support of the employees by the superiors (mental, financial, organizational).
6.	No clear objectives, common policy and attitude to CI in a company („from an action to the action”, managers have no idea what they mean, management by “extinguish the fire”, etc.).
7.	Expectations of short-term results only.
8.	Lack of possibilities of proposing the improvements by the employees (the system does not foresee it).
9.	Low level of the employees' identification with a company.
10.	Reluctance to sacrificing the additional time (after work) at the cost of a private life.
11.	Preferences of the individual way of working/reluctance for team work.
12.	Low level of financial remuneration of the executive employees.
13.	Lack of additional money or/and material encouragement for involvement of the employees into CI activities.
14.	Weak non-financial motivation for involvement of the employees in CI processes.
15.	Weak information system about CI realization needs in a modern company.
16.	Misunderstanding by the employees of the idea and need of using processes and CI solutions (Lean/Kaizen) in a modern company.
17.	Weak system of training in a matter of CI (Lean/Kaizen) methods and techniques in a company.
18.	Low level of feedback loop regarding the effects/results achieved by the employees within IC activities.
19.	Ignoring the ideas of the employees by the superiors.
20.	Reluctance for cooperation among different departments of the company.
21.	Negative reception by the colleagues of the people engaged in a company's issues (negative group pressure).
22.	Reluctance towards standardization.
23.	Reluctance towards all kinds of organizational changes (resulting from the concerns before changes or/and employees' habituations).
24.	Negative experience from the past (once it was implemented and nothing resulted from it).
25.	In the past Lean solutions led to redundancies of the employees – the concern that the presents ones also will lead to dismissal of employees.
26.	Lack of enough number of effort and time for the effective involvement in CI activities (overworking, duties overloading).
27.	Lack of/incorrect system of effectiveness/visualization measurement of general results of organizational changes in a company (KPI).
28.	Construction of suggestions' system in a company is too complicated/ bureaucratic.

The results of the research in stage 2 were presented in Fig. 1 and Fig. 2.

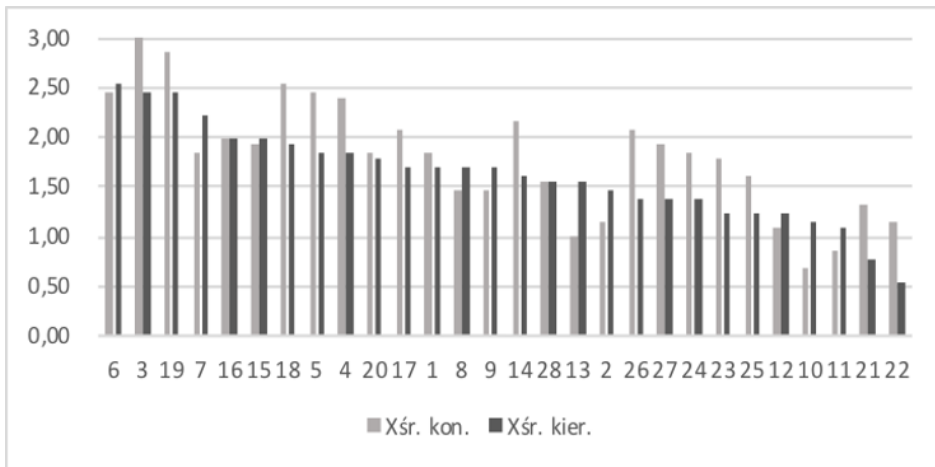


Fig. 1. Distribution of average grades of severity particular barriers for involvement of the employees in CI processes in a group of the examined managers and consultants.

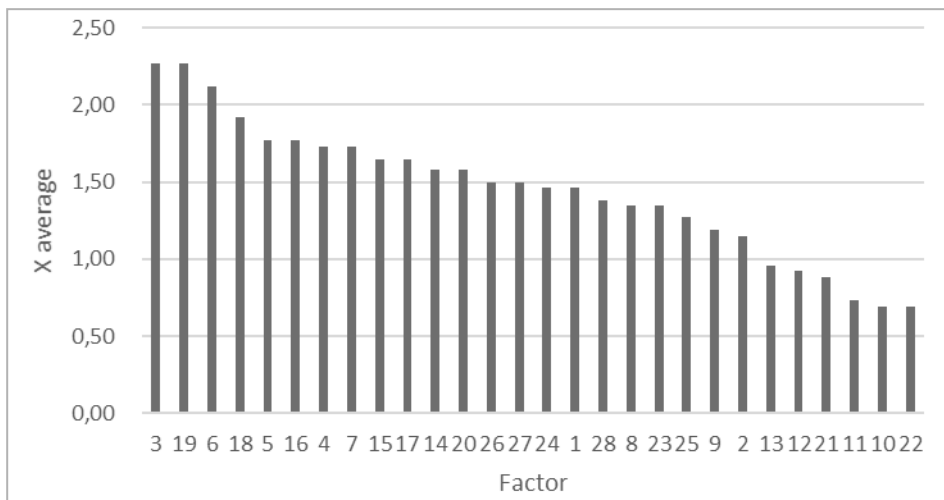


Fig. 2. Distribution of average grades of severity of particular barriers for involvement of the employees in CI processes created together by the managers and consultants.

Reading the particular results in an order presented in a Fig. 2., we receive the answer for the question about the potential severity (relevance) of particular barriers in opinion of the Lean/Kaizen consultants and leaders in leading companies using Lean Management in Poland. The coordinators and consultants recognized the following barriers (average of grades 1.5 and higher): 3, 19, 6, 18, 5, 16, 4, 7, 15, 17, 14, 20, 26 and 27 for the most severe. The next eight barriers should not be ignored as well: 24, 1, 28, 8, 23, 25, 9 and 2. However, the factors: 13, 12, 21, 11, 10, and 22, in opinion of the first group of respondents are the least relevant. According to that opinion, the hypothesis about significant influence of lack of financial and non-financial motivation for the level of involvement of the employees in the researched processes was not confirmed (compare with [4]). The hypothesis about high negative impact of

Polish national culture on the level of involvement of the employees in enterprise improvement processes was not confirmed as well. Source: [23], page 115 and thereafter.

However, as the methodology of management problems solutions in Lean Management/Kaizen indicates, while trying to find the causes of the phenomenon given, it is therefore appropriate to get into the source and conduct the research personally (Japanese *genbutsu genba*). Thus, being aware of the fact that the results achieved within the second stage of the researches may be subjective, in the third stage, the author set the examination of the employees directly as a goal. As the result of hereby research, distribution of the answer was obtained. It is presented in a Fig. 3.

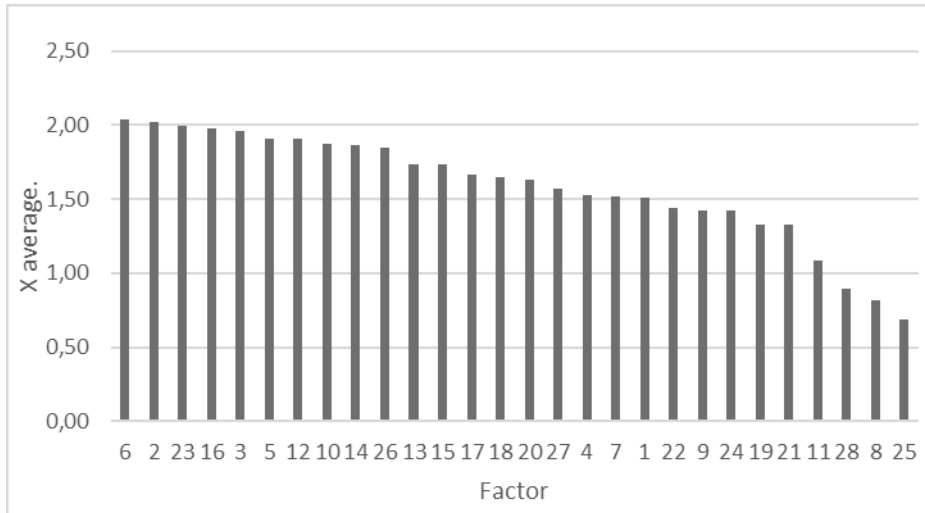


Fig. 3. Distribution of average grades of severity of particular barriers for involvement of the employees in CI processes created by the examined employees.

In opinion of the examined employees for the most severe barriers belong: 6, 2, 23, 16, 3, 5, 12, 10, 14, 26, 13, 15, 17, 18, 20, 27, 1. (For comparison the managers and consultants included to this group: 3, 19, 6, 18, 5, 16, 4, 7, 15, 17, 14, 20, 26 and, 27). The barriers 22, 9, 24, 19, 21, 11 in the employees' opinion were less relevant, but also important. (For comparison the managers and consultants included to this group: 24, 1, 28, 8, 23, 25, 9 and 2). However, the factors: 28, 8 and 25, in opinion of the second examined group, have the lowest negative impact on the level of involvement of the employees in a processes of continuous enterprises' improvement. Amazingly, in opinion of Polish employees, the negative aspects of Polish national culture took up a very high position in a category of the barriers of involvement of the mid-class employees in these processes. Low level of financial remuneration and low level of financial and non-financial for being engaged in these processes also appeared to be very relevant factors.

Due to the fact that the opinions of the examined respondents' groups differ one from another significantly⁶, it is difficult on the basis of first or second compilation draw unambiguous conclusions. It may only be stated that in practice the examined respondents recognized all the barriers as relevant. They often evaluated the barriers in a varied way in different groups. The managers and superiors had critical approach towards evaluation of some barriers, but the employees had balanced attitude to the majority of them (shown in Fig. 2. and

⁶ The conclusion confirmed by the Kendall rank tau b correlation coefficient, which was equal of 0,218 level.

Fig. 3.). Therefore, to establish the final grades, the former results were averaged. The final compilation of the relevance the analysed factors was presented in a Fig. 4.

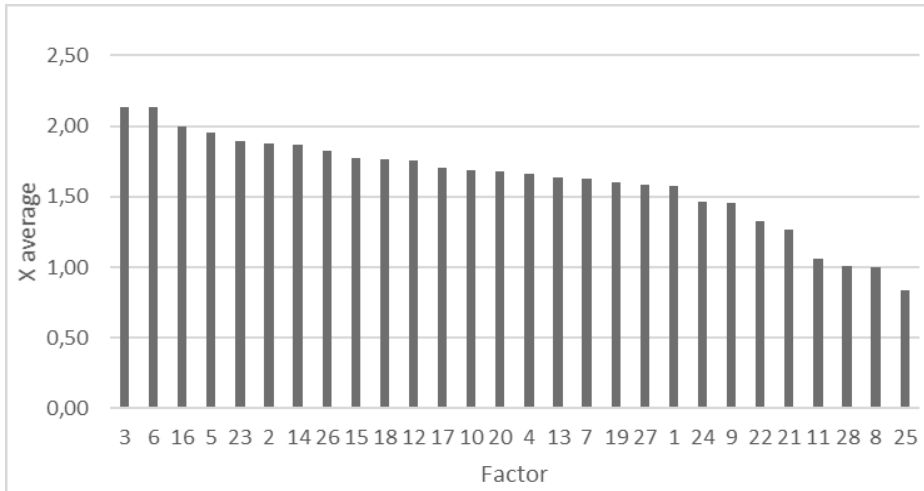


Fig. 4. Distribution of average grades of severity of particular barriers for involvement of the employees in CI processes jointly.

It may be read from the graph that in the respondents’ opinion commonly, to the basic barriers of the analysed phenomenon include: 3, 6, 16, 5, 23, 2, 14, 26, 15, 18, 12, 17, 10, 20, 4, 13, 7, 19, 27 and 1. The barriers: 24, 9, 22, 21, 11, 28 and 8 appeared to be less relevant, but in the process of solving the examined problem, they should be also taken into consideration, especially in different situation conditionings. Even though, in Lean literature it is said differently [20; 24; 25], within the performed research, high relevance of the factor 25 was not confirmed. While, the hypothesis about high negative influence of low remuneration and lack of additional inducement for involvement into the processes of continuous improvement for degree of employees’ involvement in these processes (particularly, in opinions of the employees), confirmed, even if the superiors claim differently. The detailed data in this matter is shown a Table 2.

Table 2. The results of averages, standard deviations and medians of severity grades of particular barriers created by respondents jointly.

No.	Barrier	X av.	Stand. dev.	Med.
3	Weak involvement of the management in CI, lack of a good example from the top.	2,13	0,98	2
6	No clear objectives, common policy and attitude to CI in a company („from an action to the action”, managers have no idea what they mean, management by “extinguish the fire”, etc.).	2,13	0,98	2
16	Misunderstanding by the employees of the idea and need of using processes and CI solutions (Lean/Kaizen) in a modern company.	2,00	0,85	2
5	Lack of support (mental, financial, organizational) of the employees by the superiors.	1,95	0,96	2
23	Reluctance towards all kinds of organizational changes (resulting from the concerns before changes or/and employees’ habituations).	1,89	0,82	2
2	Negative aspects of Polish national culture (blaming-complaining, jealousy, demanding attitudes, only own cases’ interest).	1,88	0,89	2

No.	Barrier	X av.	Stand. dev.	Med.
14	Weak non-financial motivation for involvement of the employees in CI processes.	1,87	0,93	2
26	Lack of enough number of effort and tome for the effective involvement in CI activities (overworking, duties overloading).	1,82	0,99	2
15	Weak information system about CI realization needs in a modern company.	1,78	0,97	2
18	Low level of feedback loop regarding the effects/results achieved by the employees within IC activities.	1,76	0,89	2
12	Low level of financial remuneration of the executive employees.	1,75	0,95	2
17	Weak system of training in a matter of CI (Lean/Kaizen) methods and techniques in a company.	1,71	1,00	2
10	Reluctance to sacrificing the additional time (after work) at the cost of a private life.	1,68	1,00	2
20	Reluctance for cooperation among different departments of the company.	1,68	0,95	2
4	Imposing ready-made solutions by the superiors.	1,66	0,96	2
13	Lack of additional money or/and material encouragement for involvement of the employees into CI activities.	1,64	1,04	2
7	Attitude for short-term results/effects of the actions in a company.	1,62	0,97	2
19	Ignoring the ideas of the employees by the superiors.	1,60	1,05	2
27	Lack of/incorrect system of effectiveness/visualization measurement of general results of organizational changes in a company (KPI).	1,58	0,97	2
1	Traditional, antagonistic relations between the superiors and subordinates.	1,57	0,90	2
24	Negative experience from the past (once it was implemented and nothing resulted from it).	1,46	0,86	1
9	Low level of the employees' identification with a company.	1,45	0,90	1,5
22	Reluctance towards standardization.	1,32	0,93	1
21	Negative reception by the colleagues of the people engaged in a company's issues (negative group pressure).	1,27	0,97	1
11	Preferences of the individual way of working/reluctance for team work.	1,06	0,84	1
28	Construction of suggestions' system in a company is too complicated/ bureaucratic	1,01	0,87	1
8	Lack of possibilities of proposing the improvements by the employees (the system does not foresee it).	1,00	1,08	1
25	In the past Lean solutions led to redundancies of the employees – the concern that the presents ones also will lead to dismissal of employees.	0,84	1,03	0

After achieving the response for the first from the formulated research problems, we can move to search for the answer in a frame of the second of research problem.

3. Proposal of the ways of breaking the barriers of the employees' involvement in processes of continuous improvement in the companies in Poland

In the below section, the ways of breaking the barriers of the employees' involvement in processes of continuous improvement were presented. While formulating the proposals, the assumption that to make the employees engaged in the given processes, they must have the appropriate organizational, cultural, motivation and competence conditions, was taken into account. These methods were presented in a Table 3. in connection to the particular barriers listed in an order of their severity.

Table 3. Authors' proposals of the activities limiting the barriers of involvement of the employees in processes of continuous improvement in the companies in Poland⁷.

No.	Main barriers	Ways of barriers' elimination
1.	Weak involvement of the management in CI, lack of a good example from the top. (B3)	<ul style="list-style-type: none"> – educating management in a scope of CI idea and need in a present company, – creating culture of quality and continuous improvement, – active involvement of top management in CI processes in a company (the good example coming from the top), – evaluating and awarding management in connection to their involvement in continuous improvement and the results in this area.
2.	No clear objectives, common policy and attitude to CI in a company. (B6)	<ul style="list-style-type: none"> – precise defining mission and vision of the company together with its strategic objectives, – connecting CI processes with a company strategy, – determining CI strategy in a company, – establishing a steering committee which coordinates CI processes in a company.
3.	Misunderstanding by the employees of the idea and need of using processes and CI solutions (Lean/Kaizen) in a modern company. (B16)	<ul style="list-style-type: none"> – educating employees through training systems and conferences, – explaining CI idea to employees by superiors and top management, particularly in a context of a general company strategy, – including employees in CI projects established by organization and building their positive experience through real effects and positive examples, – promoting benefits of standardized work.
4.	Lack of support (mental, financial, organizational) of the employees by the superiors (B5)	<ul style="list-style-type: none"> – educating management regarding CI idea and needs in a present company, – prioritising CI processes in a company, – securing appropriate resources (financial and organizational ones) dedicated for investments in CI process, – work of superiors based on <i>genbutsu genba</i> style.
5.	Reluctance towards all kinds of organizational changes (resulting from the concerns before changes or/and employees' habituations). (B23)	<ul style="list-style-type: none"> – promoting CI idea by top management, – educating employees regarding idea and need of continuous improvement usage in a present company, – encouraging employees for involvement in CI processes by direct management, – financial and non-financial motivating employees to take

⁷ Source: own study based on: [3, 13, 17, 14, 26, 27, 28, 29, 30, 31, 32, 33] as well as own experience and empirical research.

No.	Main barriers	Ways of barriers' elimination
		part in these processes.
6.	Negative aspects of Polish national culture (blaming-complaining, jealousy, demanding attitudes, only own cases' interest). (B2)	<ul style="list-style-type: none"> - positive example coming from the top (leadership and genbutsu genba management style), - creating new, pro-effective and pro-quality organizational culture in a company, - promoting team work and supporting team problem solution, - work organization supporting CI system (5S, standardization, visualization, suggestions system, KPI), - positive example of a group (facilitation effect), - dismissing the most resistant and reluctant employees.
7.	Weak non-financial motivation for involvement of the employees in CI processes. (B14)	<ul style="list-style-type: none"> - educating management within a scope of leadership and employees' motivation in a new style, - building atmosphere and quality, innovation and continuous improvement culture in a company, - mental and organizational support for employees in this process.
8.	Lack of enough number of effort and time for the effective involvement in CI activities (overworking, duties overloading). (B26)	<ul style="list-style-type: none"> - employees' superiors are responsible for appropriate organization of time and work conditions, - stepping away from "fire extinguish" policy and transition for realization of CI strategy in an orderly manner will be helpful in this area (it facilitates correct process of Lean Management implementation in a company).
9.	Weak information system about CI realization needs in a modern company. (B15)	<ul style="list-style-type: none"> - promoting new strategy with help of real and virtual storage media with a special provision of future vision and example of active involvement of top management in these processes, - shaping employees in this scope.
10.	Low level of feedback loop regarding the effects/results achieved by the employees within IC activities. (B18)	<ul style="list-style-type: none"> - building operational system of suggestions taking into account effective system of feedback, - implementing effective communication visual communication system/visual results management (Performance Visual Management).
11.	Low level of financial remuneration (net) of the executive employees. (B12)	<ul style="list-style-type: none"> - changing strategy of payroll outsider and screen strategy for at least a company with average remuneration level in a branch and using human capital strategy.
12.	Weak system of training in a matter of CI (Lean/Kaizen) methods and techniques in a company. (B17)	<ul style="list-style-type: none"> - educating employees regarding CI idea and tools in a coordinated way (workshops, simulations, conferences), - building experience and knowledge of employees by including them in improvement project established by a company, - lean solution benchmark in other companies.
13.	Reluctance to sacrificing the additional time (after work) at the cost of a private life. (B10)	<ul style="list-style-type: none"> - sacrificing additional time after work hours should be connected with additional remuneration system (according to Labour Code requirements) and/or additional materials awards (i.e. day off). Demanding it in an informal way, without extra compensation or award (even thanking from superior) most often will cause resistance in our culture, - securing time for CI activities within regular work time.
14.	Reluctance for cooperation among different departments of the company. (B20)	<ul style="list-style-type: none"> - stepping away from functional organization model for process approach in organization, - building positive experience through establishing interdisciplinary teams for improvement projects' realization

No.	Main barriers	Ways of barriers' elimination
		(Kaizen projects), – changing bonus system for financial results of a company from individual into team one.
15.	Imposing ready-made solutions by the superiors. (B4)	– creating leadership management style by educating managers, creating adequate policy of human resources management and positive example of top management, – the leadership style of leadership is: not "me", only "we"; do not "do it", just "let's do it"; do not "go to work", just "follow me", you do not "have to"; only "you can" and not "succeeded", only "we did it", – delegating employees to solving specific problems.
16.	Lack of additional money or/and material encouragement for involvement of the employees into CI activities. (B13)	– statutory determining remuneration of activity in CI scope in a form of effective system (experience from practice proves that it does not have to be connected with high financial expenses).
17.	Attitude for short-term results/effects of the actions in a company. (B7)	– changing policy of short-time financial effects maximization towards building competitiveness and market position of a company in a long-term way based on Toyota model. It is most often associated with management exchange and correct implementation of Lean concept in a company. Practical experiences show that any attempts of changing attitude of top management without understanding Lean Management/Kaizen ideas by them and involvement in implementation/usage of these concepts are little effective.
18.	Ignoring the ideas of the employees by the superiors. (B19)	– there is high probability of eliminating this barrier after performing appropriate trainings among management, building effective suggestions system and creating quality culture and continuous improvement in a company.
19.	Lack of/incorrect system of effectiveness/visualization measurement of general results of organizational changes in a company (KPI). (B27)	– implementing correct PVM (Performance Visual Management/KPI – Key Performance Indicators) and consequent using it (by inter alia regular designating tasks for realization and their visual control).
20.	Traditional, antagonistic relations between the superiors and subordinates. (B1)	– as a result of management and employees shaping process, implementing new forms of organizations (connected to Lean Management or CI) or creating new organizational culture (pro-quality, pro-effectiveness Lean), problem is strongly limited, – if necessary, getting rid of superiors with negative attitude.

In result of using the particular methods presented in a Table 3., there is high probability of diminishing or eliminating majority of the indicated barriers.

4. Summary

In hereby elaboration, the answer for two questions were trying to be given:

1. What are the causes of insufficient state of involvement of regular employees in processes of continuous improvement in the companies in Poland?
2. In what way can this situation be improved?

The questions appeared under the influence of the signals from Polish economic practice.

In the first part of the elaboration, the barriers of the examined phenomenon, which was identified on the basis of the empirical researches conducted by the author in years 2014-2015, were presented. In the second section, on the basis of literature studies, former empirical

researches and own author's experience, the answer for the second of the researched problems was given. In the author's opinion, reading of the text may be useful, especially for the practitioners, in finding the answers for puzzling questions connected to the researched problem.

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