

The implementation evaluation of the philosophy of continuous improvement in company X –part two

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Abstract:

Aim: The aim of the study is to analyze selected areas of the company's operations. The following aspects were examined: the benefits from the application of the concept of continuous improvement for the company and its individual employees, barriers preventing a successful implementation of the concept and self-evaluation of the company's employees.

Design / Research methods: The company was examined using a survey method. The findings are the result of the academic internship done at this company. The publication is an outcome of a science project within the framework of the Support Program of the Partnership between Higher Education and Science, and Business Activity Sector financed by the City of Wrocław.

Conclusions / findings: The paper completes the set of modernization recommendations co-developed by the authors and the entrepreneur's representative.

Originality / value of the article: In the context of current knowledge, the paper demonstrates the quality of continuous improvement based on the example of a Polish enterprise, which is a valuable source of information given the limited number of studies within this scope in the domestic strand of research. The findings may be used during the implementation of Kaizen in other organizations.

Limitations of the research: The paper follows up on the issues concerned with the implementation of the philosophy of continuous improvement in a business entity, and hence does not encompass the full Kaizen spectrum. In the first part of the series, the findings referring to the knowledge about the concept, implementation methods, etc. were presented.

Keywords: continuous improvement, barriers, benefits, Kaizen

JEL: D23, L23, L62.

1. Introduction

According to Deming's definition, continuous improvement (CI) means a "continuous and never-ending improvement from production to services which results in better quality, productivity and cost reduction" and which, in literature, is commonly acknowledged to be a synonym for Kaizen (Kucińska-Landwójtowicz 2015: 297). In Poland, the concept of continuous improvement has been a universally applied method of optimization of managerial, production processes and the likes. It won't be easy to come across a production company which would not be implementing its basic principles and tools in their business practice (Piasecka-Głuszak 2015: 382-385). Since the concept is so universal and fairly simple in its assumptions, even organizations which are not involved in the production sector, e.g. service sector, are implementing its basic principles in their daily operations. While analyzing the literature on this subject, it becomes clear that the current state of the implementation of the concept in Poland's business practice needs to be further diagnosed. In foreign studies we encounter detailed data on the effects of the implementation based on the process and Kaizen approach (Capell 2004: 5-6). In order to fill this gap, the paper seeks to extend the knowledge on the state of Polish enterprises in terms of the implementation of continuous improvement.

In meeting those needs, a cooperation has been established with one of the largest production company in Lower Silesia. The objective of the cooperation established under the academic internship is to improve the functioning of the selected tools of continuous improvement. While performing this objective, the first step was to carry out a thorough assessment of the state of the continuous improvement implementation process. This was achieved by conducting a survey using a questionnaire. The paper presents some of the findings thus obtained.

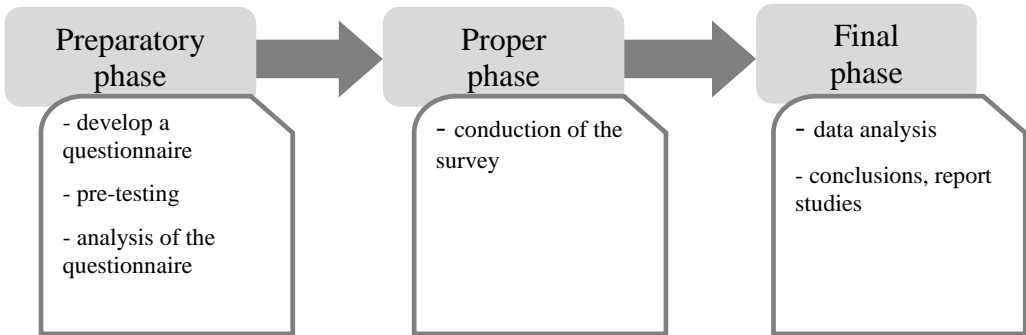
2. Aim and scope of the research

The company surveyed is the largest international investor in the transport industry, employing over 1500 people in Poland, with 4 production plants located in

such voivodships as: Śląskie (Upper Silesia), Łódzkie, Mazowieckie (Masovia) and Dolnośląskie (Lower Silesia). The plant in Lower Silesia has a long tradition of vehicle production, manufacturing frames and bodywork of trucks since 1833. After 1945, it was one of the largest in the country in terms of production volume and number of people employed. Since 2001 it has belonged to an international business group based in North America. The users of the company's products are transport undertakings from Germany, Sweden, Switzerland, USA and Italy. The company employs about 700 employees, including 200 in administration units and around 500 as manual employees.

The primary aim of the survey conducted in the company X was to identify the progress made in the implementation of continuous culture, to seek employees' views and experiences, particularly taking into account the benefits stemming from the implementation of such system, and further, to determine the barriers limiting the introduction and functioning of the concept. The methodology applied in the study was comprised of three successive phases described in Figure 1.

Figure 1. Survey procedure



Source: authors' own elaboration

The survey was carried out in November 2015 among the company's office employees. The target group encompassed 219 employees. The first step, after having defined the survey population, involved establishing contact with the management of specific departments operating within the company's organization structure with a view to determine the survey procedure. 101 questionnaires were filled out and returned, which accounts for 46% of all the employees classified as non-production workers (Table 1).

Table 1. The final number of employees surveyed

Specification	Number of employees	Percentage
Initial population the questionnaire was addressed to	219	100%
Number of questionnaires returned	101	46%

Source: Authors' own research based on data from the company's HR department.

3. Survey findings

The findings presented in the paper in table formats and charts were extended by interpretations and conclusions. The survey was divided into a number of modules pertaining to several aspects of continuous improvement, with the paper presenting only selected factors relating to the company. These include expected benefits, expected barriers, suggestions for changes and self-assessment of the company.

While working with the concept of continuous improvement we can use various models and although with every of those models the improvement process looks slightly different, the idea itself does not change. For the purpose of the study, we used the classic model by Shewhar-Deming, Plan-Do-Check-Act – PCDA (Mansir, Schacht 1989: 50-54). While deploying this approach, the continuous improvement consists of the following stages: identification of possible improvements, analysis of processes, finding solutions to problems detected, which is then followed by their implementation, result evaluation, solution standardization and future activities planning (Soković et al. 2009: 7). Continuous improvement can also be explored from the perspective of other concepts: the EFQM excellence model, DMADV, DMEDI, DMAIC, DCOV models which come up with the Six Sigma concept, the Peters and Waterman model, FEM –philosophy of excellent management, excellent

management pyramid by Kuc and others (Skrzypek 2014: 137-139). The initial research is consistent with the first stage of the cycle based on PCDA – identification of possible improvements in an enterprise – on the one hand, this knowledge enables one to identify areas where changes are necessary, and also to have some suggestions how to do it, while on the other hand, we get to know employees’ expectations with respect to continuous improvement.

4. Continuous improvement benefits

The C module of the questionnaire is concerned with the benefits arising from the implementation of continuous improvement. The improvement of processes most frequently results in a more effective communication, less time needed to perform tasks, better quality, client’s greater satisfaction and that of employees, a higher level of employees’ knowledge, greater awareness and responsibility for processes conducted, etc. (Capell 2004: 4). Also, continuous improvement leads to Deming’s chain reaction, as illustrated in Figure 2; further to that, it is possible to assess, based on the research, at what point of the model the company currently is (Mansir, Schacht 1989: 11).

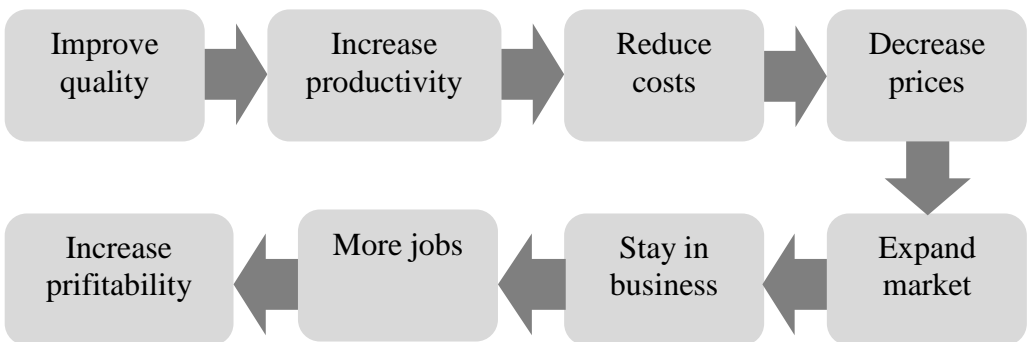


Figure 2. Deming’s chain reaction
Source: Mansir, Schacht 1989: 11.

On the subject of benefits, respondents were asked about the benefits for the company and for the employees themselves arising from the application of the idea of continuous improvement. The questions were open-ended, so as not to make any suggestions of possible responses. 67 respondents stated their views, with 34 providing no comments on the benefits for the company resulting from the concept of continuous improvement (Table 2).

Table 2. Number of respondents who answered the question on the benefits for the company resulting from the application of the concept of continuous improvement

Response	Number of responses
Comments	67
No comments	34
Total	101

Source: Authors' own research.

Table 3. Benefits for the company arising from the application of the concept of continuous improvement

Description	Number of responses	Frequency (67 persons=1)
Saving time and money	28	0.418
Improved efficiency	23	0.343
Safety	19	0.284
Better quality	15	0.224
Process improvements	8	0.119
Error reduction	8	0.119
Waste reduction	6	0.09
Psychological effect – I have influence over the company's management	5	0.075
Process standardisation	5	0.075
More pleasant work experience	4	0.06
New solutions	3	0.045
Better financial results	3	0.045
Improved ergonomics	2	0.03
Improvement in the company's image	2	0.03
Reduction of negative environmental impacts	2	0.03
Innovation	1	0.015
No indifference to irregularities	1	0.015
Risk reduction	1	0.015
Greater integration and involvement of employees	1	0.015
Better frame of mind/comfort	1	0.015
Increased importance of human resource	1	0.015

Source: Authors' own research.

Respondents indicated, in total, 21 benefits for the company arising from the application of the concept. Most frequently indicated responses included: saving time and money (0.418 of those who provided comments), better performance efficiency (0.343), increased work safety (0.284), and better quality of production processes and finished products (0.224). The detailed data are illustrated in Table 3. The responses largely represent standard (literature-based) effect of the implementation of continuous improvement, which can be derived directly, or as synonymous formulations, from the benefits shown in Figure 2. The benefit for the company that appears to be of considerable interest is greater work safety, indicated by nearly 30% of respondents. This implies some work condition issues, with respondents expecting improvements in this area.

64 respondents answered the question on the benefits for employees arising from the application of the concept of continuous improvement. 37 respondents voiced no opinion on that (Table 4).

Table 4. Number of respondents who answered the question on the benefits for employees from the application of the concept of continuous improvement

Response	Number of responses
Comments	64
No comments	37
Total	101

Source: Authors' own research.

The persons surveyed indicated 24 benefits, in total, for employees resulting from the application of the idea of continuous improvement. The most likely comments included: easier work (0.344 persons who gave comments), increased safety (0.219), better work quality (0.172). It is worth pointing out that only one person saw no benefits from the application of the idea of continuous improvement. The detailed data are presented in Table 5. A very important fact to note is that employees see a chance to increase their competences through continuous improvement (personal growth – 0.078, expanding their knowledge – 0.063, training participation – 0.031, employees having an opportunity to gain new work experience

– 0.016, improved employability as the result of acquiring knowledge about continuous improvement – 0.016).

Table 5. Benefits for employees arising from the application of the concept of continuous improvement

Description	Number of responses	Frequency (64 persons = 1)
Easier work	22	0.344
Improved work safety	14	0.219
Better work quality	11	0.172
Opportunity to improve deficiencies	9	0.141
Time saving	7	0.109
Greater job satisfaction	5	0.078
Personal growth	5	0.078
Expanding one's knowledge	4	0.063
Elimination of waste	4	0.063
Improved productivity	3	0.047
Greater order on the company's premises	2	0.031
Capacity to adapt to change	2	0.031
Training participation	2	0.031
Financial benefit	2	0.031
Participation in e.g. the employee suggestion program results in feeling distinguished in the team	1	0.016
Employees can gain new work experience	1	0.016
Clear and transparent procedures	1	0.016
Improved employability due to acquiring knowledge on continuous improvement	1	0.016
Work in prestigious environment	1	0.016
More aesthetic work station	1	0.016
Environmental impact	1	0.016
Relieving an employee of his/her too heavy workload	1	0.016
Introduction of simple rules facilitating performance	1	0.016
Increased acceptance of change	1	0.016
No benefits	1	0.016

Source: Authors' own research.

5. Barriers to the implementation of continuous improvement

The process of overcoming barriers typically encompasses three basic stages: identification, comprehension and overcoming limitations which prevent the company's improvement (NICE 2007: 5). The survey conducted forms a part of the first step of this process. Barriers which hinder a proper development of a company

depend on the field of operation, being specific to the type of business (see Da Rocha de Araujo 2004: 15; Torres, Gati 2011: 104).

In the part of the questionnaire referring to the barriers to the continuous improvement implementation, there were two closed questions, offering, however, a possibility to add one’s own reply. Almost half of respondents (45.5%) believe that the main barrier hindering the realization of the concept is lack of time – too many projects implemented at the same time (39.6%), which is linked to the mentioned lack of time. Unwillingness to change (38.6%) and fear of change (30.7%) indicate a mental barrier to the improvement of the idea. Lower in the rank was no proper communication (28.7%), no consistency in operations (26.7%) and no motivation (25.7%), followed by lack of support (13.9%), which, in turn, points to the problem with managing the concept of continuous improvement. Further on, respondents reported lack of sufficient knowledge and training (each 13.9%), perceiving a gap in terms of being adequately informed on the approach in question. 5 respondents added their own barriers: lack of motivation on the part of the superiors and too much red tape which were included in the category “other”. The findings are presented in detail in Table 6 and Figure 3.

Table 6. Barriers preventing an efficient application of the idea of continuous improvement

Response	Number of responses	Percentage
lack of time	46	45.5%
too many projects	40	39.6%
unwillingness to change	39	38.6%
fear of change	31	30.7%
lack of communication	29	28.7%
lack of consistency	27	26.7%
lack of motivation	26	25.7%
lack of knowledge	14	13.9%
lack of support	14	13.9%
lack of training	14	13.9%
other	5	5.0%

Source: Authors’ own research.

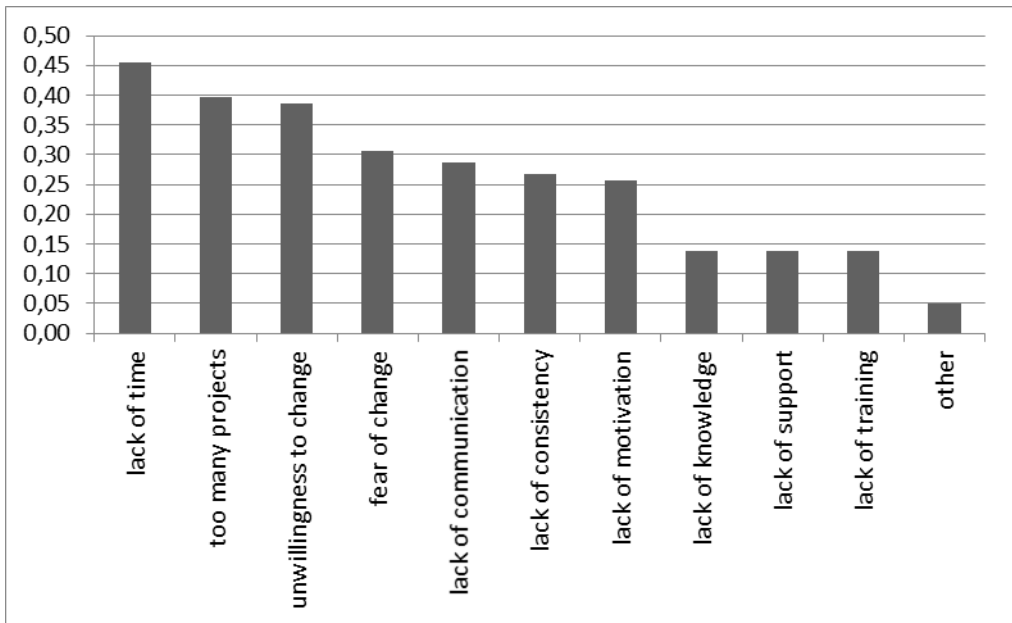


Figure 3. Barriers preventing an efficient application of the idea of continuous improvement

Source: Authors' own research.

In comparison with the surveys from other European countries (Norway, the UK) (Lodgaard et al. 2016: 1122), lack of time, too many projects and fear of change are among the most emphasized features. In the research by Lodgaard et al., the time-related problems are approached in terms of insufficient daily concentration on continuous improvement, which represents a broader view, taking into account, for example, task division. In the Polish research, moreover, lack of time (inadequate amount, too many other tasks) is a barrier that is frequently identified within the scope of the improvement techniques of a company (Jedynak 2015: 58). In literature, fear of change tends to be treated as one of the aspects associated with the resistance towards a some sort of evolution of the company resulting from the implementation of continuous improvement methods (Freddy, Mbohwa 2013: 212). In foreign explorations, fear is not likely to be identified or it tends to be regarded as a minor issue in continuous improvement. While the vast majority of the identified CI limitations can be clearly remedied (lack of training, communication), the problems linked to work involvement, unwillingness to and fear of change represent

a much more challenging issue. The American medical industry is an example where those aspects form the key barrier (Ahmed et al. 2004: 147). The main reasons for being resistant to change are habits, fear of losing one’s freedom, status and income deterioration, etc. (Yılmaz, Kılıçoğlu 2013: 17). Therefore, what is needed is to identify the specific causes and try to address them in the company.

Table 7. Types of waste identified at work stations

Response	Number of responses	Percentage
waiting time	56	55.4%
process errors	36	35.6%
unused employees’ creativity	34	33.7%
waste of motion	33	32.7%
high stocks	14	13.9%
other	6	5.9%

Source: Authors’ own research.

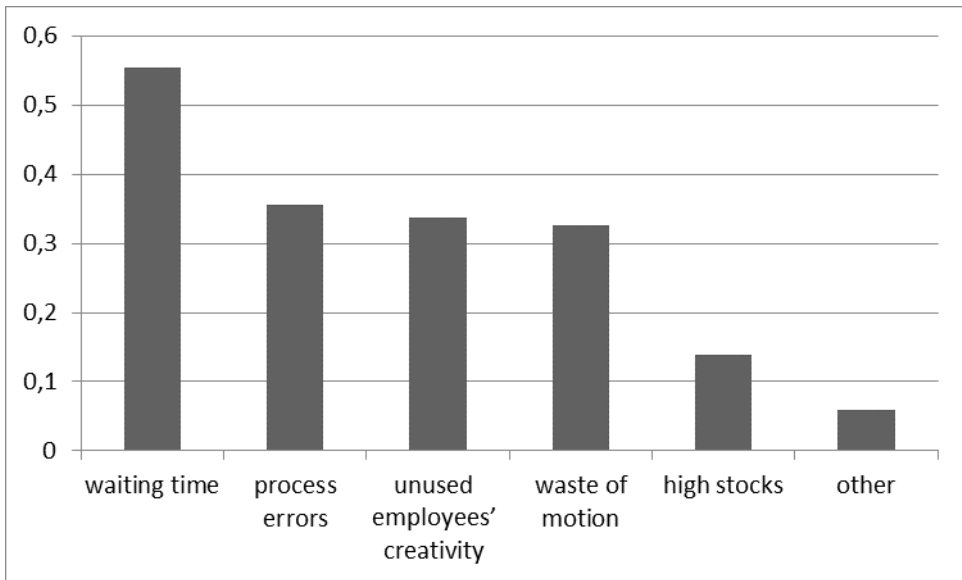


Figure 4. Types of waste identified at work stations

Source: Authors’ own research.

In the next question, respondents were asked to indicate the type of waste (muda) which occurs in their work station or department. 55.4% reported waiting time, 35.6% indicated errors occurring in the process of performing a task, 33.7% respondents underlined unused employees' creativity, with 32.7% indicating waste of motion generating no value added. High stocks are a type of waste indicated by 13.9% of surveyed employees. Respondents (5.9%) indicating their response as "other" elaborated by stating that they meant red tape and lack of communication. A detailed description of the findings is presented in Table 8 and Chart 2.

6. Proposals of change

In this part of the questionnaire, respondents were asked to give advice, recommendations that would make the work of the Department of Continuous Improvement in the company X more efficient. In the question, respondents were asked to suggest ideas that could improve the quality of work of the department. 39 persons gave their own recommendations (Table 8).

Table 8. Number of respondents who answered the question referring to recommendations leading to a more efficient work of the Department of Continuous Improvement

Response	Number of responses
comments	39
No comments	62
Total	101

Source: Authors' own research.

Among the recommendations leading to greater efficiency, more training and workshops were most likely to be indicated (0.333 i.e. one in three respondents answered this question). 0.282% advocate increased campaign promoting the effects of the work performed by the Department of Continuous Improvement, 0.179 respondents wish to change the motivation system in the employee suggestion program, with 0,154 believing that the response to proposals and suggestions submitted by employees should be quicker. A detailed description is presented in

Table 9. The company is an organization with a low level of implementation of the continuous improvement system. The proposals regarding better efficiency are consistent with the standard, literature-based actions necessary for further development. Those include, for example: training, need for measurements, strategy creation, improved communication, specifying more clearly the process optimization method (Garcia-Sabater 2012: 108), the information indicated contains valuable guidance in terms of improving the organization’s operations.

Table 9. Ideas (advice, recommendations) indicated by employees with a view to make the idea of continuous improvement more effective in the company

Element	Number of responses	Frequency (39 persons=1)
More training/workshops	13	0.333
More promotion of the idea of continuous improvement- showing the effects of the department’s work	11	0.282
Higher money-prizes in the employee suggestions system	7	0.179
A quicker response to proposals and suggestions submitted by employees	6	0.154
Greater emphasis on 5S	2	0.051
Creating a web site informing about the idea of continuous improvement implemented in company X	1	0.026
Creating so called codes of good practice	1	0.026
Close cooperation with technologists	1	0.026
More frequent audits	1	0.026
Kaizen walk – benchmarking in other companies	1	0.026
More time devoted to an individual employee	1	0.026
Better access to training material	1	0.026
Meetings between the management and staff focusing on the promotion of the idea of continuous improvement	1	0.026
More activity on the part of employees of the department - more frequent going to the gemba	1	0.026

Source: Authors’ own research.

The next question in this module was concerned with rating the quality of communicating information on the idea of continuous improvement. Respondents were asked to answer a closed question, in which they were to rate the quality of information banners, e-mail communication, contact with the department’s employees and additionally could provide extended comments in an open-ended question. Over 50% of respondents believe that the communication method is on a

medium level, while 40% think it is average. A detailed description is presented in Table 5 and Figure 5.

Table 10. Assessment of the level of communicating information on the idea of continuous improvement in company X

Response	Number of responses	Percentage
unsatisfactory	5	4.95%
medium	51	50.50%
average	41	40.59%
very good	4	3.96%
Total	101	100.00%

Source: Authors' own research.

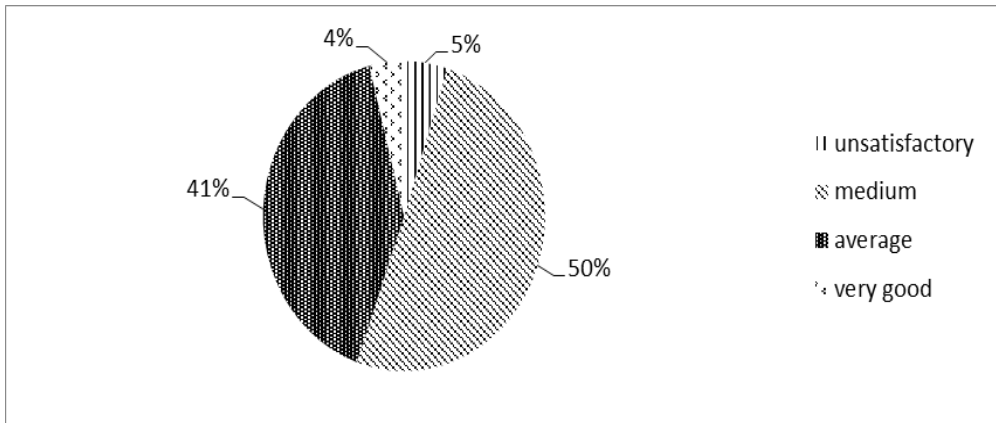


Figure 5. Assessment of the level of communicating information on the idea of continuous improvement in company X

Source: Authors' own research.

7. Self-assessment in terms of continuous improvement

In the last module of the questionnaire, respondents were asked to self-assess their own involvement in the implementation of the concept of continuous improvement in the company X. Over 51% of employees assess themselves as being fairly involved, with 23% saying that they are not very involved in the

implementation of the continuous improvement process. A detailed description is presented in Table 11 and Figure 6.

Table 11. Self-assessment of employees’ attitudes in terms on the implementation of the idea of continuous improvement

Response	Number of responses	Percentage
not involved	7	6.9%
not very involved	23	22.8%
fairly involved	52	51.5%
very involved	19	18.8%
Total	101	100.0%

Source: Authors’ own research.

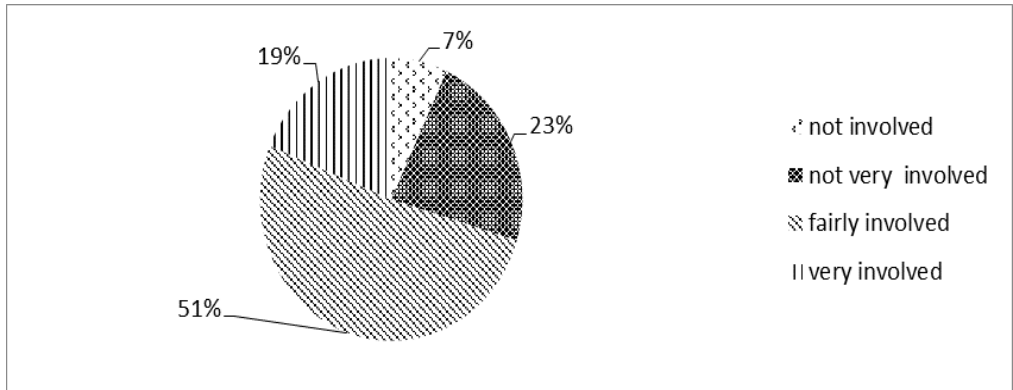


Figure 6. Self-assessment of employees’ attitudes in terms of the implementation of the idea of continuous improvement

Source: Authors’ own research.

8. Survey summary

In the paper, a survey was carried out to examine how the idea of continuous development fared in one of largest enterprises in the transport sector in Poland. Based on respondents’ answers the conclusions are as follows:

- the benefits arising from the implementation of the idea of continuous improvement for the company comprise: time and money saving (lower costs),

improved operation efficiency, increased safety, greater quality of the processes performed and finished products,

- in terms of the benefits for employees resulting from the implementation of the idea, respondents indicated: easier work, increased safety and higher quality of work,
- in analyzing the benefits for the company and its employees, two elements need to be stressed: the answers were not suggested (open-ended questions) and the fact that the answers are similar,
- the survey reveals that the biggest barriers identified in the course of the implementation of the idea of continuous improvement are linked to fear of change and lack of time due to working on too many projects realized concurrently. Respondents also underline motivation and communication aspects, as well as lack of consistency in one's actions,
- the surveyed persons believe that the types of waste most likely to occur are: waiting time, process errors and unused creativity of the employees. The findings confirm that for administration workers (non-manual workers) waiting time is the most frequently identified type of waste,
- while analyzing employees' proposals and suggestions how to make the implementation of continuous improvement more efficient, the following should be indicated: demand for more training and workshops, increased promotional measures (those providing information) with regard to the effects achieved by the Department of Continuous Improvement, analysis of the motivation system in terms of employee suggestions and quicker response to proposals submitted by the employees,
- over 90% of respondents rate the quality of the information flow from the Department of Continuous Improvement as good,
- over half of respondents rate the level of their own involvement in the implementation of the idea of continuous improvement as fairly involved, with ¼ reporting of being not very involved.

On the basis of the data of the Central Statistical Office, between 2012 and 2013, there were 309 and 306 respectively groups of companies employing over 1000 people (GUS 2015: 44). A group of companies is to be understood as legally

independent enterprises, yet dependent on one another in economic terms, owing to their relationships regarding control or ownership (GUS 2015: 8). The paper examines in detail one representative of such enterprises, hence certain conclusion can be made with respect to the entire group. The experience gained additionally will be used to improve the company's operations within the Support Program of the Partnership between Higher Education and Science, and Business Activity Sector financed by the City of Wrocław

9. Recommendations modernizing the implementation of the philosophy of continuous improvement

On the basis of the survey, a set of recommendations has been worked out modernizing the implementation of the idea of continuous improvement in the Company X. Some of the recommendations presented below are general in their nature, while other pertain to specific and detailed solutions. For example, the elimination of barriers in terms of employees' fear of change may proceed through training, increased involvement, identification of misunderstandings and how to tackle them, etc. (Yılmaz, Kılıçoğlu 2013: 19). The corrective recommendations were not used directly, but rather through the prism of taking into account a broader look into the company's issues. Moreover, the recommendations need to be appropriately structured, analyzed and allocated to operational tasks while accounting for internal individual characteristics and circumstances of the organization. The recommendations aimed at modernizing the implementation are as follows:

1. Employee training and workshop – it is recommended to provide training to all production workers on Lean/Kaizen basics – administration workers could also be trained in more advanced techniques and methods, apart from refresher training on Lean/Kaizen basics.
2. Establishing a Kaizen Academy – developing a formalized training plan and have it scheduled one year in advance – with refresh training and training on new Lean/Kaizen tools and techniques.

3. Training materials – in order to strengthen the transfer of knowledge and skills, we recommend to hand out training materials. The materials should take into account workers' comprehension abilities, accounting for their age and years of service. Further, the advice is to start the so called diversity management, i.e. coordinating the transfer skillfully when facing a group in a different age bracket.
4. In the training materials – it is worth highlighting the measurable benefits arising from the implementation of this philosophy, in particular, with respect to manual workers, we recommend deploying training activation methods, e.g. case study, benchmarking, etc.
5. Identifying the causes – of waste occurrence of a particular type (waiting time) which was reported by both administration and production employees in the survey.
6. Communication improvement – with regard to the transfer of information within the employee suggestion system.
7. Standardization of all operations – regarding the operations of the Department of Continuous Improvement.
8. Conducting the analysis – jointly with the HR Department, of factors motivating employees to take Lean/Kaizen actions – articulating very clearly the benefits for employees relating to internal and external motivation.
9. Using an internal paper (company paper) – creating the so called Lean/Kaizen corner where selected contents and materials on Lean/Kaizen techniques can be demonstrated.
10. Using boards – it makes sense to place selected contents on Lean/Kaizen tools on the boards situated in the Departments – the contents should be changed and supplemented regularly.
11. Unification of terminology – within the scope of Lean/Kaizen perception of terms, according to the proper Lean/Kaizen names based on the theory.
12. Sustaining the information transfer – carried out by the Management on the importance of continuous improvement in the company's management process. Communicating such information, particularly by the Top Management, during so called quarterly meetings is crucial from the point of view of shaping the employees' good practices.

13. Finding allies – identifying persons among employees who take particular interest in the philosophy of continuous improvement and get them involved in the informed promotion of this topic; the person could be the so called Kaizen/Lean Leader or Ambassador.

14. Promotion of actions and effects – employees of the Department of Continuous Improvement should work out an effective marketing actions concerned with informing about successes arising from the implementation of the idea of continuous improvement in practice. This information should not be filled with dry facts, e.g. number of ideas submitted by employees, but it should rather focus on the very measurable benefits for the Department, Company, individual employee, etc. – creating the so called board of successes.

15. Logo competition – organizing a competition among the employees to design the best logo for the idea of continuous improvement implemented in the company.

16. Creating a model room – in which the standards referring to the implementation of the ideas would be presented, e.g. 5S technique, etc.

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Ocena wdrażania filozofii ciągłego doskonalenia w przedsiębiorstwie X – część druga

Streszczenie

Cel: Celem badań jest analiza wybranych obszarów funkcjonowania przedsiębiorstwa. Wnioskowaniem zostały objęte następujące aspekty: korzyści ze stosowania koncepcji ciągłego doskonalenia w stosunku do firmy jak i poszczególnych pracowników, bariery uniemożliwiające skuteczne wdrażanie tej koncepcji oraz samooceny pracowników.

Układ / metody badawcze: Przedsiębiorstwo zostało przebadane metodą ankietową. Prezentowane wyniki badań są rezultatem stażu naukowego realizowanego w niniejszym podmiocie. „Publikacja jest efektem realizacji projektu naukowego w ramach Miejskiego Programu Wsparcia Współpracy Szkolnictwa Wyższego i Nauki oraz Sektora Aktywności Gospodarczej finansowanego ze środków Gminy Wrocław.”

Wnioski / wyniki: Artykuł kończy zestaw zaleceń modernizujących wypracowanych wspólnie przez autorów publikacji oraz reprezentanta przedsiębiorcy.

Oryginalność / wartość artykułu: W kontekście obecnego stanu wiedzy, artykuł prezentuje jakość ciągłego doskonalenia na przykładzie polskiego przedsiębiorstwa, co stanowi cenne źródło informacji ze względu na ograniczoną ilość opracowań w tym zakresie w krajowym nurcie badań. Przedstawione wnioski mogą zostać wykorzystane przy wdrażaniu Kaizen w innych organizacjach.

Ograniczenie badań: Opracowanie stanowi kontynuację tematyki dotyczącej wdrażania filozofii ciągłego doskonalenia w podmiocie gospodarczym, dlatego nie obejmuje pełnego spektrum Kaizen. W pierwszej części z serii zaprezentowano wyniki badań związane z znajomością koncepcji, metodami wdrażania itp. (Ostrowski 2016: 27 – 40).

Słowa kluczowe: ciągle doskonalenie, bariery, korzyści, Kaizen

JEL: D23, L23, L62.