Critical Failure Factors of Process Development by the Lean Office Methodology

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Abstract: This work summarizes the key findings of a research run in 2020 in the Hungarian Financial Sector regarding critical failure factors of process development by Lean Methodology. An online questionnaire asked the invited participants of banking, insurance, and counseling firms to rank the difficulties of typical activities in an operational improvement project. Besides, they had the opportunity to add the reasons for implementation issues. Twelve main problems were identified based on the results, including change management-, measurement, and resource availability-related ones. Since these issues are not independent of each other, cause-effect connections among them were defined too. Finally, seven groups of recommendations were articulated for handling the most frequent implementation difficulties. The originality of this work is that this is the first summary of critical failure factors of process-oriented Lean office transformation projects in the financial sector in the Central European Area. The identified factors can only be applied without additional interpretation only in similar projects in the similar industry.

Keywords: Lean Office; Process Development; Critical Failure Factor

1   Introduction and Purpose

Lean methodology nowadays is widely applied in the service sector to optimize operation and organization. Due to the difficulties of adapting Lean principles, tools and techniques, there is an emerging need for surveys and other research activities to identify and understand those factors that may cause such implementation problems. It was the primary reason we planned and organized this research, in which Lean experts working for service companies were asked to rate difficulties of elements of their process improvement projects. Our eventual purpose was to create an easy-to-apply list of suggestions that can help companies avoid critical issues and fasten Lean implementation. Since the study's organizer works mainly in the financial sector, participants had been invited to the survey are from banking, insurance and management counselling firms. In the following chapter, we introduce the literature background of Lean Office implementation

difficulties. In Chapter 3 the research method is depicted. Chapter 4 presents the results in detail. The last chapter summarises the key research findings and lists some suggestions for further implementation projects.

2   Literature Review

Many publications cope with the implementation of Lean in the financial industry, but very few focus on the challenges and success factors deep enough. As Kovács stated, the use of Lean in banks is limited worldwide due to the shortage of studies related to the applicability and success of Lean in the financial industry. [1] Hines wrote in 2004, when Lean Office just started to evolve, most of the Lean applications focused on the tactical level rather than the strategic one, so many organizations could not get as many benefits of Lean implementation as Toyota could. [2] Yokoyama shows in his article that the main difficulties encountered in the Lean Office implementations are related to technical and cultural areas. [3] According to Maleyeff, banks can adopt Lean to improve their operations. [4] Based on their survey results in 2013, PriceWaterhouseCoopers concluded that the financial sector could increase day-to-day efficiency by adopting Lean. [5] Goldenbaum-Gaber and his colleagues showed that banks could gain substantial benefits by using lean practices, including cost reduction and efficiency improvement. [6] Sayer wrote in her book that by applying Lean techniques, financial companies could reduce processing time, eliminate wastes, reduce business cost, and provide better customer service. Its critical element was to boost staff morale by engaging them in development and continuous improvement. [7] Delgado said that the main success factor for Lean strategy is the commitment of management. [8] Malmbrandt et al. found the following key factors are necessary for a successful implementation: 1) continuous employee training in different aspects of improvement work; 2) application of "change agents"; 3) bi-directional vertical information flow between the improvement teams and the management. [9] In a large scale study report, Leyer and his team declared that employees should participate in the enhancement of processes to ensure an efficient Lean implementation. [10] Bohdan defined "respect for people" as the sixth Lean principle in financial firms. [11] Kovács described process simplification as one of the essential elements for improving the processes. [1] A group of Pakistanian researchers found that the main challenges are creating paperless processes and avoiding long, multi-signed documents in many hard copies. [12] Dos Santos concluded that traditional Lean practices should be modified and customized to ensure their seamless application in the banking culture. [13] Bakri stated that the improvement of financial service operations could catalyze the lean transformation. Still, there is a vast need for coordination among the employees and a fundamental cultural change to sustain the Lean attitude for a long time. [14] Bakri declared that the success factors for

banking operation redesign are as follows: 1) clearly defined value; 2) eliminated (reduced) variability and multi-tasking; 3) focusing on customer satisfaction and needs; 4) reduced waste time and cost; 5) engaged employees within the process of improvement and application of enhancements; 6) trained staff; 7) technological solutions for process improvement; 8) lean practices applied by the top executives too. [15] Nenonen studied and gathered the most common wastes and their causes in local financial companies in 2019. These were as follows: 1) data storing in multiple databases because of the absence of automatic transfer); 2) frequently interrupted operation due to waiting for documentation, decision; 3) improper work due to lack of knowledge, experience, time management and process monitoring; 4) the quality of the process can vary on the individual level; 5) outsourced activity development cannot be fully influenced by the bank; 6) many people are checking the process progression to fix errors; 7) unnecessarily organized meetings; 8) responsibility shifts from somebody to another employee because of long absence. According to her, Lean implementation's critical success factors are the management's support, employee involvement in the development project, the well-defined and widely understood goals and "big picture". [16] Secchi clarified the "role of organizational ambidexterity" in implementation failures. He said that the potential failures are as follows: 1) lack of top management attitude, commitment and involvement; 2) resistance of culture change; 3) lack of leadership skills and supportive leadership; 4) lack of employee engagement; 5) lack of training and education; 6) lack of resources (financial, technical, human, etc.); 7) poor communication; 8) weak link between lean and strategic objectives; 9) narrow view of lean as a set of tools, techniques and practices; 10) wrong selection of lean tools. He concluded that the so called "paradoxical tension" between the need to concentrate, standardize, and speed up lean implementations by allocating lean implementation tasks to specialists and the need to integrate and diffuse these activities throughout the organizational structure is a potential barrier. [17] Freitas delt with the coordination of the development of information management capabilities, as one of the essential challenges. He identified its five key factors, such as "information-seeking," "access to information," "information quality," "information processing", and "use of information and communication technology". [18] Monteiro introduces a case study in the private sector, which key findings are relevant in the financial industry too. He wrote that interviewee mentioned the followings as the most important negative elements of the implementation: "At the begging there is an overload of work"; "The waiting for informatics changes"; "Difficulty in finding time to perform planned actions"; "Impersonal work stations"; "It costs money"; "More work". [19] Secchi, in another publication, suggests that the following preparation has to be appropriately managed to reduce the risk of implementation failures: the performance challenge to be addressed, the sense of urgency of the required improvements, the vertical and horizontal articulation of the target organisation, and the organisational units' absorptive capabilities. [20]

3   Methodology and Approach

The survey questionnaire was consist of 48 questions. 3 of them asked for information about the attributes of participants as 1) the industry of the firm they work for (Banking, Insurance, Counselling or other service company); 2) the part of the organization they work in (Front Office, Back Office, other); 3) the type of the position they work in (operator, middle manager, top manager, project manager, process manager, lean or quality management expert, other). The following 19 questions asked participants to rate the difficulties of the adaption of lean principles and the application of process improvement tools and techniques, chosen based on the organizer's experiences in more than 100 lean projects, at a 4 level scale, where level 1 meant 'easy', and level 4 meant 'hard'. In each of these questions, participants were asked to explain their ratings with specific examples for problems that had been occurred. The principles, tools and techniques we asked about were as follows: 1) selecting process to be optimized; 2) identifying the performance of the selected process; 3) defining problems related to the selected process; 4) setting goals related to the defined problems; 5) selecting process development project team members; 6) mapping the current (as-is) state of the selected process; 7) identifying Lean wastes; 8) identifying the root causes of the identified Lean wastes; 9) defining the solutions for the root causes; 10) creating the future (to-be) state process map; 11) planning the implementation of solutions as improvement activities; 12) implementing improvement activities without IT development; 13) implementing improvement activities with IT development; 14) accepting the solutions (new ways of working) by the process staff; 15) measuring the improvement in the process performance; 16) accepting the Lean approach (new ways of thinking) by the management; 17) accepting the Lean approach (new ways of thinking) by the process development project team members; 18) accepting the Lean approach (new ways of thinking) by the other stakeholders; 19) implementing Lean principles, tools and techniques in everyday work. The following five questions asked the participants to estimate the effect of improvement activities on the following process matrices: total lead time, resource cost, mistakes in the process run, and the satisfaction of internal customers of the process. They could select from the following answers: increased, unchanged, decreased, unknown. Finally, participants could add free text information about other effects on daily operation and the organization and the things they would do differently in their following similar projects.

Thirty-six people filled out the questionnaire: 21 worked for banking, 7 for Counselling, 1 for insurance, and 7 for other companies. 12 participant represented Back Office, 5 worked in Front Office, while the others were from other organization units. Most of the participants were Lean or Quality experts (11). There were also 7 middle managers, 6 operators, 5 project managers, 4 top managers, and 1 process manager involved. Two people had other positions at the time of the study.

4 Results

The levels of the difficulties of adapting and implementing Lean principles, tools, and techniques can be seen in Figure 1.
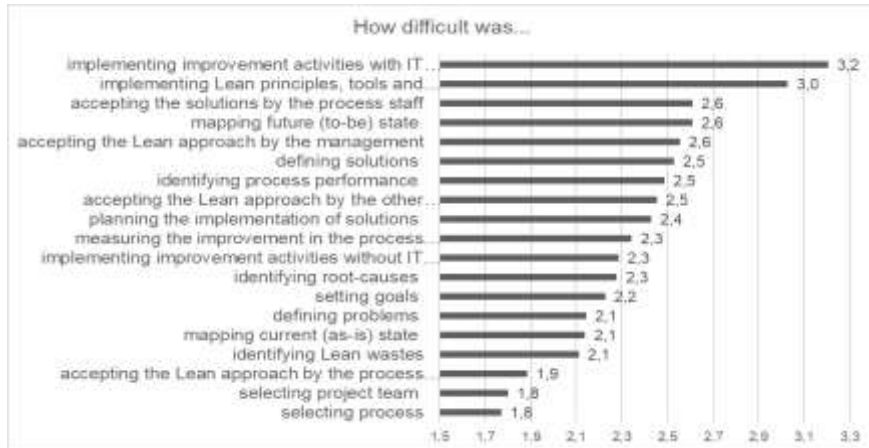

Figure 1
Difficulties of the adaption and implementation of Lean principles, tools and techniques. The values are the averages of the answers given by the participants.

The most problematic element was the implementation of improvement activities with IT development. The total average was 3.2. The values of difficulty by different clusters were:

- by industry: Banking – 3.2, Counselling – 3.8, Insurance – 4, Other – 2.8;
- by organization unit: Back Office – 3.3, Font Office – 3.8, Other – 3.1;
- by position: lean or quality management expert – 3.7, middle manager – 3.1, operator – 2.5, process manager – 4.0, project manager – 2.8, top manager – 3.3, Other – 3.5.

Financial companies use many IT applications, which are not appropriately integrated into the software infrastructure in many cases. Employees working in Back Office units are more administration-focused to adapt to changes in the software environment more easily. Still, the Front Office staff seems to be frustrated more by them. The most frequently mentioned reasons were the lack of IT capacity and the development-related time-consuming activities. Commonly, IT professionals are overwhelmed by tasks, so their involvement significantly enlarges the duration and the resource time and cost of the project. If external experts deliver the IT application, the length and the cost of development can be higher. On top of them, integrating software upgrades into existing IT systems can make this issue more complicated. This situation is one reason that Lean optimization tries to avoid software development for the sake of so-called quick wins.

If there is no need for IT development in implementing process improvement activities, the difficulty level is less (2.3). The challenges estimated by different clusters were:

- by industry: Banking – 2.5, Counselling – 1.8, Insurance – 3.0, Other – 1.9;

- by organization unit: Back Office – 2.1, Font Office – 2.8, Other – 2.3;

- by position: lean or quality management expert – 1.8, middle manager – 2.7, operator – 2.3, process manager – 3.0, project manager – 2.2, top manager – 2.5, Other – 2.5.

The value distribution by clusters is similar to that of IT-related improvement. Only the difference between the difficulties estimated by different roles can be considered significant. Process managers and Lean and quality experts were frustrated mostly by IT development, while project managers and middle managers were afraid mostly of non-IT developments. One of its reasons is that software upgrades hugely affect the daily operation and process performance, which are the most important things for them. On the other hand, non-IT actions also significantly affect the Lean project itself, and its success factors are primarily connected to middle and project manager roles. As for the reasons, the resistance of employees to the new process is the biggest problem. The resistance to fundamental changes is a typical reaction due to the insist on the status quo. It can be reduced by change management, which does not operate appropriately in many organizations. Besides, if people feel that the new process may cause more or more complex work (which is not helpful for Lean projects), their resistance can be even more significant.

Integration of Lean principles and techniques into the everyday operation received mark 3. The values of difficulty by different clusters were:

- by industry: Banking – 3.0, Counselling – 3.3, Insurance – 3.0, Other – 2.7;

- by organization unit: Back Office – 3.1, Font Office – 3.2, Other – 2.9;

- by position: lean or quality management expert – 3.3, middle manager – 3.1, operator – 2.7, process manager – 3.0, project manager – 2.6, top manager – 3.0, Other – 3.5.

Counsellors felt the integration was highly challenging. People in every organization unit were similar, while Lean and quality management experts were the most pessimists. Difficulties were primarily caused by people who did not want to accept changes and new thinking. Furthermore, this problem was not appropriately handled by management. The author experienced in many projects that the motivation system was not modified correctly aligned with the new processes. It is a typical management failure that can be prevented by connecting process and individual goals.

The difficulty rate of accepting the solutions by the process staff was 2.6. The values of difficulty by different clusters were:

- by industry: Banking – 2.7, Counselling – 3.1, Insurance – 1.0, Other – 2.1;

- by organization unit: Back Office – 2.8, Font Office – 2.8, Other – 2.4;

- by position: lean or quality management expert – 2.8, middle manager – 2.4, operator – 2.3, process manager – 3.0, project manager – 2.8, top manager – 2.3, Other – 3.0.

In the only Insurance company involved in the study, the implementation team's solutions were readily accepted. Although in other firms, the acceptance was more problematic according to the staff too, consultants were even more critical about that. The reasons for not accepting the solutions were the regular ones: resistance of employees against changes, the anomaly of change management and the customs, which are the practices they used to run processes. Typically, people rejected new thoughts if they did not know why they were necessary to implement or underestimated their positive impact on the operation.

The same 2.6 value was added to the acceptance of lean thinking by the management. The values of difficulty by different clusters were:

- by industry: Banking – 2.7, Counselling – 2.3, Insurance – 1.0, Other – 2.6;

- by organization unit: Back Office – 2.5, Font Office – 2.6, Other – 2.6;

- by position: lean or quality management expert – 2.7, middle manager – 1.7, operator – 2.7, process manager – 3.0, project manager – 2.4, top manager – 2.8, Other – 4.0.

The most exciting mark is the value 4.0, given by employees working in "other" positions. On the other hand, middle managers felt that the Lean approach was accepted easily by the company leaders. The main reason for rejecting the Lean thinking was the adverse or neutral management approach, partly due to insufficient training and coaching and the implementation mistakes. Some said that management was afraid of being blamed by others for the operational problems indicated by Lean approach-driven work.

The acceptance of the Lean approach was challenging for other stakeholders, too (2.5). The reasons were the same as mentioned above, mostly the adverse approach and the insufficient training. On the other hand, the process development team members accepted this approach much easier (1.9).

Interestingly, the use of a well-known technique, mapping future (to-be) state, was rated 2.6. The values of difficulty by different clusters were:

- by industry: Banking – 2.6, Counselling – 2.9, Insurance – 2.0, Other – 2.6;

- by organization unit: Back Office – 2.7, Font Office – 2.6, Other – 2.6;

- by position: lean or quality management expert – 2.7, middle manager – 2.6, operator – 2.5, process manager – 3.0, project manager – 2.6, top manager – 2.0, Other – 3.5.

It seems that those who were involved intensively in mapping felt this job harder. Most survey participants said that people do not want changes to not prescind easily from the actual operation state. In some cases, inexperience in process mapping made this challenging to do. It is not easy to think through step-by-step how tasks should be conducted in the "ideal world". People do not get used to doing it as a part of their regular job, so the skills needed to imagine a new work are not developed enough. Finally, if the process mapping team does not include the representatives of all responsible organization units, which is a common situation, essential aspects can be missing during the planning.

Mark 2.5 was added to the definition of solutions for root-cause handling. The values of difficulty by different clusters were:

- by industry: Banking – 2.5, Counselling – 2.9, Insurance – 3.0, Other – 2.1;

- by organization unit: Back Office – 2.2, Font Office – 3.6, Other – 2.6;

- by position: lean or quality management expert – 2.7, middle manager – 2.7, operator – 1.7, process manager – 3.0, project manager – 2.4, top manager – 2.5, Other – 3.5.

Consultants, people of insurance companies, Front-office workers and process managers were struggling more with this planning. People said that the cost and time needs of these solutions made it hard to define them precisely. Additionally, there were conflicts among the interests of different organizational units and the members of management. Some participants came to the planning workshop with prepared solutions, which made them resistant to new ideas. Finally, inexperience caused difficulties, too.

Identifying process performance was rated 2.5. The values of difficulty by different clusters were:

- by industry: Banking – 2.8, Counselling – 1.8, Insurance – 3.0, Other – 2.0;

- by organization unit: Back Office – 1.8, Font Office – 2.4, Other – 2.9;

- by position: lean or quality management expert – 2.8, middle manager – 2.7, operator – 1.7, process manager – 3.0, project manager – 2.2, top manager – 2.5, Other – 3.0.

Consultants felt it easy, compering to the staff of Banking and Insurance companies. Identifying the performance of front office processes was more complicated than that of the back-office processes. Interestingly, operators felt that process performance could be easily identified. There were many problems in the monitoring and controlling system. They could not define KPIs due to the complexity of the processes and the lack of information about the operation. If they had KPIs, their assessment and analysis were not the regular part of decision making. People said that external data as benchmarks for setting process goals were almost unable to purchase. Finally, internal and external customer requirements were not known by many process leaders.

Consequently, a similar value (2.3) was added to measuring the improvement in the process performance activity. The values of difficulty by different clusters were:

- by industry: Banking – 2.5, Counselling – 2.7, Insurance – 3.0, Other – 1.6;

- by organization unit: Back Office – 2.2, Font Office – 2.8, Other – 2.3;

- by position: lean or quality management expert – 2.9, middle manager – 2.4, operator – 1.5, process manager – 4.0, project manager – 2.2, top manager – 2.3, Other – 1.5.

The biggest problem was the huger resource need for manual and automatized measurement activities. Where management tried to assess the improvement, the correlation between optimization and positive results could not be verified due to the complex set of factors affecting it. However, there was no demand for it in many companies. These problems concluded in mistrust as a normal reaction in such situations.

The difficulty of planning the implementation of solutions was rated 2.4. The values of difficulty by different clusters were:

- by industry: Banking – 2.6, Counselling – 2.3, Insurance – 4.0, Other – 1.9;

- by organization unit: Back Office – 2.0, Font Office – 2.6, Other – 2.6;

- by position: lean or quality management expert – 2.8, middle manager – 2.9, operator – 1.7, process manager – 2.0, project manager – 2.4, top manager – 1.8, Other – 3.0.

Results show that it was extremely hard in the Industry firm. Back office employees seem to plan easier. Middle managers and lean or quality management experts found the planning task difficult. According to the survey participants, mainly the lack of professional capacity made progress slower. Planning something means that one must think it through deeply, including the scope, the resource need and the risks. No wonder that some of the supporters might withdraw their backing. IT hurdles could make the planning difficult too. And as usual, conflicting interests appeared again.

Some found it challenging to identify root causes. The values of difficulty by different clusters were:

- by industry: Banking – 2.4, Counselling – 2.0, Insurance – 3.0, Other – 2.1;

- by organization unit: Back Office – 1.6, Font Office – 2.8, Other – 2.6;

- by position: lean or quality management expert – 2.3, middle manager – 2.0, operator – 2.2, process manager – 3.0, project manager – 2.2, top manager – 2.5, Other – 3.0.

The most exciting difference is the one between the back office and the front office values. Based on the survey results, we can conclude that back office employees feel more comfortable analyzing problems, like in root cause analysis.

People found the methodologies (mostly Ishikawa-diagram, 5-Why) difficult to apply for their problems. On the one hand, they had no experience in using them, and on the other hand, they felt that their issues are too complex to be analyzed by the widely used root-cause analysis techniques.

Setting goals received value 2.2. The values of difficulty by different clusters were:

- by industry: Banking – 2.4, Counselling – 2.3, Insurance – 1.0, Other – 1.7;
- by organization unit: Back Office – 1.7, Font Office – 3.0, Other – 2.3;
- by position: lean or quality management expert – 2.7, middle manager – 2.0, operator – 1.3, process manager – 4.0, project manager – 2.2, top manager – 2.3, Other – 2.5.

We found a significant difference between the insurance and the other companies' ratings, the ratings of the back office and front office employees, and the process manager's ratings and the different roles. Goal setting can be challenging if there are different approaches and interests. It requires sound experience to harmonize them. Besides, there is a need for a defined and deployed strategy and monitoring and measurement system too. The missing of strategic planning experience and the problems of these systems can pull back goal-setting mostly.

Mapping the current (as-is) state of the process has 2.1. The values of difficulty by different clusters were:

- by industry: Banking – 2.2, Counselling – 2.4, Insurance – 3.0, Other – 1.4;
- by organization unit: Back Office – 1.9, Font Office – 2.8, Other – 2.1;
- by position: lean or quality management expert – 1.8, middle manager – 2.6, operator – 2.0, process manager – 3.0, project manager – 2.2, top manager – 2.5, Other – 1.5.

It was marked difficult primarily by process managers and front office workers. Its most frequently mentioned causes were the complexity of office processes, including the vast amount of different cases, subprocesses and alternative runs, and the diverse knowledge of participants about the way of operation. Besides, workshop attendees had not enough correspondent experience. Due to these reasons, the process mapping was difficult and time-consuming, which initiated demotivation and a negative attitude.

Identifying Lean wastes and problems had 2.1 too. The values of difficulty by different clusters for Lean wastes were:

- by industry: Banking – 2.2, Counselling – 1.6, Insurance – 2.0, Other – 2.4;
- by organization unit: Back Office – 1.9, Font Office – 2.2, Other – 2.2;
- by position: lean or quality management expert – 1.6, middle manager – 2.9, operator – 2.2, process manager – 2.0, project manager – 1.8, top manager – 2.5, Other – 2.3.

Interestingly, middle managers found it hard to do. Besides the complexity of the operation, the problems with wastes quantification and approach changing made it difficult. Since such wastes are usually new to most people working in a non-lean culture, the lack of methodological experience pulled back the progress too.

The values of difficulty by different clusters for other problems were:

- by industry: Banking – 2.3, Counselling – 2.2, Insurance – 2.0, Other – 1.6;
- by organization unit: Back Office – 2.3, Font Office – 1.6, Other – 2.2;
- by position: lean or quality management expert – 2.5, middle manager – 2.0, operator – 1.5, process manager – 2.0, project manager – 2.4, top manager – 2.5, Other – 1.5.

In articulating process-related problems, people tried to keep them secret if there is a problem regarding their job. The reasons for this were to protect themselves and to avoid conflicts and sanctions. In addition, there were no KPIs to quantify issues, and participants had no deep experience in the identification and definition of problems.

Accepting the Lean approach by the process development project team members seemed to be easy (1.9). The values of difficulty by different clusters were:

- by industry: Banking – 2.1, Counselling – 1.8, Insurance – 1.0, Other – 1.4;
- by organization unit: Back Office – 2.0, Font Office – 2.0, Other – 1.8;
- by position: lean or quality management expert – 2.1, middle manager – 1.9, operator – 1.5, process manager – 3.0, project manager – 1.6, top manager – 1.5, Other – 3.5.

Although some team members insisted on the status quo, the existing operation rules and other methodologies they usually applied, their resistance was moderate.

One of the easiest things to do was selecting the process to be optimized (1.8). The values of difficulty by different clusters were:

- by industry: Banking – 1.7, Counselling – 1.8, Insurance – 1.0, Other – 2.1;
- by organization unit: Back Office – 1.6, Font Office – 1.8, Other – 1.8;
- by position: lean or quality management expert – 2.3, middle manager – 1.7, operator – 1.5, process manager – 2.0, project manager – 1.4, top manager – 1.3, Other – 2.0.

It is not surprising that lean and quality experts found it more challenging as it is typically their task to assess processes from different perspectives. People had problems with the lack of performance indicators, so it was challenging to prioritize activities and estimate possible benefits. Due to the complex connections of processes, it is not easy to select one identical process to improve. Lastly, management cannot make such decisions easily because of strategic level indefinability and non-harmonized interests.

Finally, the project team's selection was mentioned as a possible but moderate problem (1.8). The values of difficulty by different clusters were:

- by industry: Banking – 1.8, Counselling – 1.5, Insurance – 1.0, Other – 2.1;
- by organization unit: Back Office – 1.5, Font Office – 2.0, Other – 1.9;
- by position: lean or quality management expert – 2.0, middle manager – 1.7, operator – 1.3, process manager – 2.0, project manager – 1.8, top manager – 2.0, Other – 2.0.

Here the leading source of issues was the limited capacity of key employees. It is not simple to determine the number of colleagues involved in the development team in many cases. People were asked to discuss the effects of process development on the indicators and customer satisfaction. In general, the project teams managed to decrease the number of defects, the resource cost and the lead time (Figure 2). Besides, both internal and external customer satisfaction became higher (Figure 3).

It turned out from the additional notes given by survey participants that the optimization project helped implement the Lean approach even in those not involved in the project, but fundamental changes could not be caused. In some cases, the Lean transition of the operation stopped without applying the methodology in other processes. More time should be spent on training, mindset changing, and process performance analysis in the following projects to get more management support. Lastly, the optimization actions have to be reasoning by cost-benefit calculation.
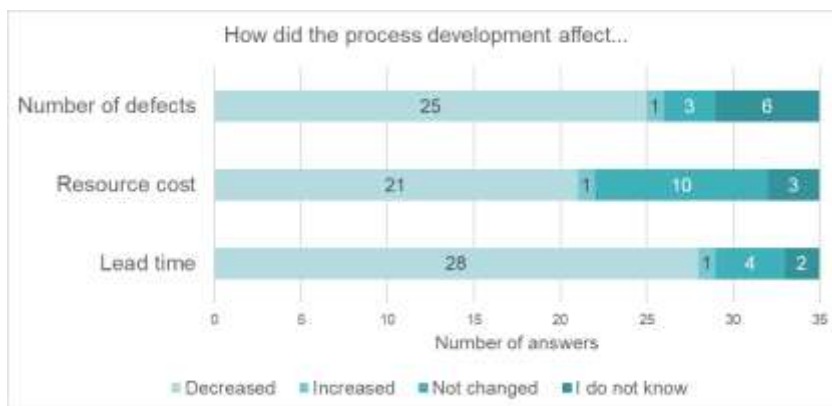

Figure 2

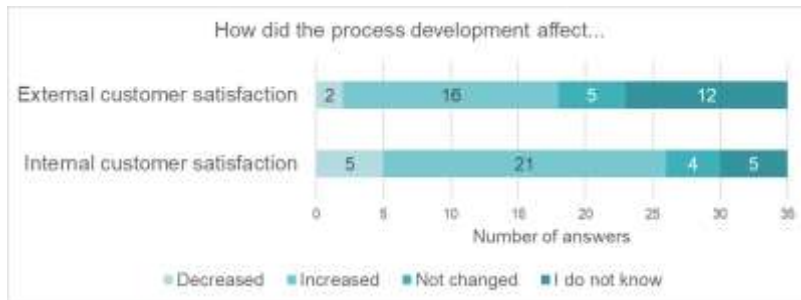The effects of process development on the indicators listed

Figure 3
The effects of process development on customer satisfaction

5   Discussion

By interpreting the key findings of the research, we can define the most frequently occurred Critical Failure Factors of Lean Office process developments in the financial sector (see in Figure 4). These are as follows:

- Resistance against changes – it and its connected issues were found in the 20% of answers;

- Not enough methodological knowledge and experience – 17%;

- Problems regarding measuring and assessing performance – 13%;

- Adverse or neutral approach, conflicting interests, preconceptions, mistrust, scepticism, lack of real demand, as the elements of negative attitude – 12%;

- The insufficient capacity of key employees, mainly in IT departments – 9%;

- Management failures manifesting in inappropriate change management, lack of clear strategy and withdrawing support from ongoing activities – 9%;

- Indefinite and finally too much time and cost need – 7%;

- Complex processes and their consequences on the operation, not equal related knowledge of different departments – 7%;

- Software development problems, system harmonization, dependency from external developers – 2%;

- Consultant failures in scoping, teaching, optimization and implementation – 2%;

- Lack of benchmark of the financial sector related to the scope – 1%;

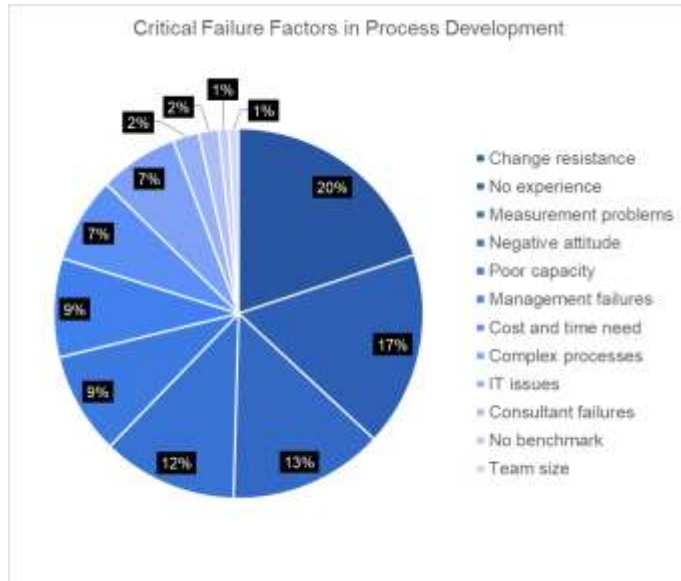- Wrong team size, both too many and too few people can be harmful – 1%.

Figure 4
The most frequently occurred problems as Critical Failure Factors (CFF) of Process Development

The Pareto-Chart of Critical Failure Factors is shown in Figure 5.
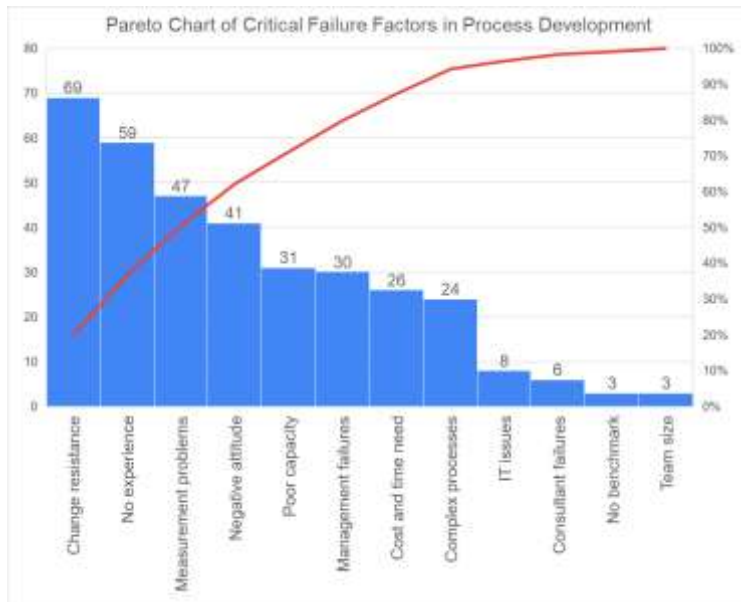

Figure 5
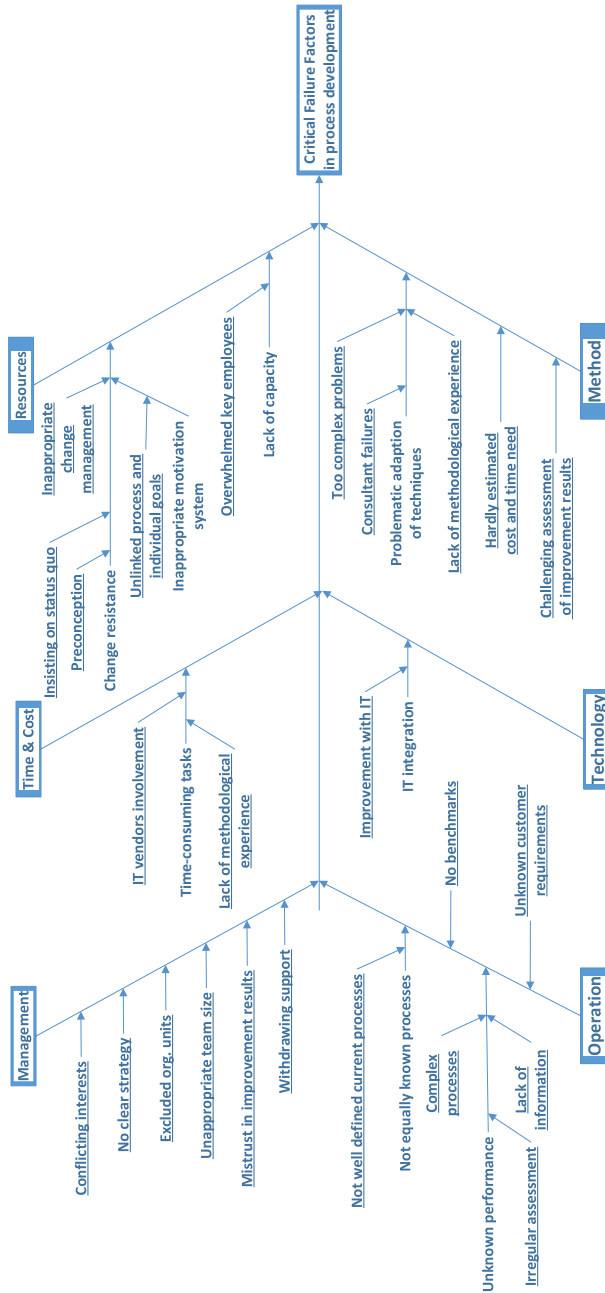The Pareto-Chart of Critical Failure Factors of Process Development

Figure 6
The cause-effect analysis of Critical Failure Factors. The names of assumed root causes are underlined.

Since these factors are generally not independent from each other, we estimated their cause-effect connections, too, grouping the issues and completing the structure from missing elements based on our experiences. The result can be seen in Figure 6. The names of assumed root causes are underlined. These are as follows: Inappropriate change management; Insisting on status quo; Preconception; Unlinked process and individual goals; Overwhelmed key employees; Too complex problems; Consultant failures; Lack of methodological experience; Hardly estimated cost and time need; Challenging assessment of improvement results; IT vendors involvement; Lack of methodological experience; Improvement with IT; No benchmarks; Unknown customer requirements; Conflicting interests; No clear strategy; Excluded org. Unappropriate team size; Mistrust in improvement results; Withdrawing support; Not well defined current processes; Complex processes; Lack of information; Irregular assessment. Please note that these are not certainly root causes in every situation. More fundamental causes can be identified only with the more profound knowledge of particular projects.

Synthetizing the problems defined and focusing on the most frequent issues, the following implementation suggestions can be articulated:

- Assess if the selected process and the associated organization units are mature for Lean optimization. A process is ready to be 'leaned' if the process owners have a clear understanding of the problems in the current operation and have a solid vision of the future state. If these conditions do not exist, help them to define scope, problems and goals. Ensure that problems are expressed by sound and widely accepted data.

- Involve the representatives of every associated department in the project team. Identify critical participants and schedule the project to ensure their availability. Define substitution rules to guarantee that competencies needed to process development are ready to be involved in every phase of the project.

- Organize effective training. Ensure that every participant knows the indication of process development, understands the principles, tools, and techniques to be applied in the project, and knows what they are expected to do.

- Focus on non-IT developments. Identify wastes and optimize the process with organization techniques before specifying requirements for software development. Implement short time improvements until the new version of the IT application is ready.

- Communicate status information and early achievements frequently and efficiently. Monitor the project team's attitude, collect feedbacks, stop negative 'gossips'.

- Make people feel they are not left alone in changes. As a consultant or a leader, behave like a 'doer', not only a 'thinker". Help employees understand the reasons for and the effects of what they do. Apply the 'learning by doing' method instead of frontal presentations.

- Use as many internal and external benchmarks as possible to prove the positive influence of applied methodology on operational excellence. Avoid the use of manufacturing example in the office environment. Note that the variability of the office processes is usually more extensive, while their yield is smaller than the ones in factories. So, comparing them with each other is not recommended.

Conclusions

Our study revealed that process development by the Lean Office Methodology in the Financial Sector has many difficulties. Managers and employees do not accept changes easily if there is not inappropriate project and change management. Inadequate knowledge and experience in relevant tools and techniques may cause misunderstandings. The lack of measurements cannot show performance issues and cannot prove the positive effects of development actions. The insufficient capacity of key employees enlarges the implementation duration so that stakeholders may lose their interests and positive attitude. The operation in the financial sector is complex, strictly regulated and highly automated, so changing processes is challenging, time-consuming and expensive. These are only some of the issues process managers and consultants should face in Lean Office projects. All of them can address by appropriate techniques. Some of them are process maturity analysis, understanding of current state and clear vision for the future one, optimal project team size with all of the necessary competencies, effective training, focus on non-IT developments, frequent and efficient communication os quick wins, mentoring of employees and the use of relevant benchmarks. The following studies will validate if there is a correlation between applying these techniques and the success of Lean Office projects.

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