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THE IMPORTANCE OF WASTE AWARENESS FOR OPTIMIZING ADMINISTRATIVE PROCESSES

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Purpose: The purpose of this article was to assess the awareness of waste and the use of Lean Office tools and methods, as assessed by members of the Lean Management Community Poland (LMCP), and to identify key barriers, needs and managerial directions for companies implementing administrative improvements.
Design/methodology/approach: The study was preliminary and based on a structured interview method. It focused on the issue of waste awareness in administrative processes, as assessed by practitioners affiliated with the Lean Management Community Poland, who cooperate with various organizations in the roles of Lean trainers/consultants or employed Lean specialists/experts.
Findings: The study revealed a moderate level of awareness of waste in administrative processes. Errors and corrections, overproduction and waiting were identified as the most common types of waste, while 5S, process mapping and process standardization were the most frequently applied Lean Office tools. The main barriers included insufficient managerial support, low employee awareness of waste and resistance to change, highlighting the need for stronger leadership involvement, Lean Office training and experience sharing among practitioners. The recommendations emphasize adopting a systematic rather than fragmented approach to administrative process optimization, supported by value stream mapping and the thorough preparation among with active involvement of employees at all organizational levels.
Research limitations/implications: The main limitation of this study is its qualitative nature based on the opinions of a limited number of experts, which may not fully capture the diversity of experiences across organizations and sectors.
Practical implications: The recommendations can be used by organizations at the early stages of administrative process optimization to adopt a coherent approach.
Originality/value: So far, there is no empirical research adapting the seven types of waste to non-production contexts, namely office processes and this gap is about to be filled by this article.
Keywords: Lean Office, administrative processes, optimization.
Category of the paper: Research study.

1. Introduction

In the face of the increasing complexity and volatility of the environment in which modern economic entities operate, the search for the most effective ways of functioning and managing organizations has become one of the key determinants of their competitiveness and even a condition for their survival. Over the years, a number of management concepts have been conceived to optimize processes carried out by companies. One of them is Lean Manufacturing, developed on the basis of the Toyota Production System, taking into account the experience of mass production from American Ford factories. Originally, this concept was focused on identifying and eliminating waste exclusively in production processes, but over time it evolved into the concept of Lean Management, also covering non-production operations.

Lean Management applied to office processes is known as Lean Office. Although the history of Lean Manufacturing began in the 1940s, the concept of Lean Office is relatively new – the first article on this topic was published as recently as 2005 (Yokoyama et al., 2019). A considerable body of research has examined this concept, with significant contributions from the United States, the United Kingdom and Brazil (Malacarne et al., 2018), as well as from Sweden (Gupta et al., 2016). The practical applications have predominantly targeted the healthcare, IT, finance, education and public administration sectors (Gupta et al., 2016). Notably, the literature review did not identify any studies on Lean Office implementations in Japan, which is recognized as the origin of the Lean Manufacturing philosophy.

Lean Office approach is gaining popularity year after year for well-founded reasons, as numerous studies indicate that administrative costs account for as much as 70-80% of the total cost of providing a service or product (Ruwanpura et al., 2025), or 60-80% according to Tapping and Shuker (2003). Another example is the cost of national healthcare in the United States - over the last two decades, administrative expenses accounted for 15-25% of total costs (Chernew, Mintz, 2021). A survey of manufacturing companies in Austria, Hungary and Slovakia showed that their indirect costs in 2017 accounted for between 10% and 31% of total costs (Irsa, Szekely, 2021).

The cited sources indicate that administrative costs constitute a significant portion of total expenditures. Nevertheless, there is a clear scarcity of empirical research addressing administrative waste in companies, as the existing literature predominantly focuses on since the existing literature predominantly focuses on service-oriented and public domains, as described above. Most studies to date have examined the healthcare and education sectors (Ruwanpura et al., 2025), including research by Koromyslova et al. (2018), Monteiro et al. (2015) and Hartanti et al. (2022).

Even though administrative processes do not directly contribute to value creation in manufacturing companies, integrating Lean principles into administrative processes within a manufacturing plant facilitates producing better quality products (Goerke et al., 2015 as cited

in Ruwanpura et al., 2025). Consequently, administrative processes in the manufacturing sector should focus on transitioning towards a lean-oriented approach, although optimizing administrative processes is a much greater challenge than optimizing production. The main difference between Lean Manufacturing and Lean Office is that, while in Lean Manufacturing the work scenarios are highly visible as they involve physical flows, in the Lean Office the processes that add value to the product depend largely on information flows and employee knowledge (Monteiro et al., 2017). As a result, administrative departments within manufacturing plants encounter a number of difficulties in implementing Lean concepts. In some companies, these activities are limited to the application of 5S techniques in the office, without a thorough approach to work standardization, flow creation or balancing the pull system (Locher, 2019). The intangible nature of office work makes it particularly difficult to improve from a Lean perspective.

Systematic reviews of the literature on Lean Office indicate that identifying waste in office processes is difficult, which indirectly confirms the low level of its recognition in office environments. Despite extensive literature on adapting the seven types of waste to non-production contexts, empirical research on this topic remains limited. This gap restricts practical understanding of how lean principles can be effectively applied in administrative processes and other non-production contexts.

Given the findings outlined above, the author of this study decided to conduct a research among practitioners affiliated with the Lean Management Community Poland, aiming to address the following research questions:

- What is the level of awareness regarding the occurrence of waste in administrative processes within organizations?
- Which categories of waste are most prevalent in office processes?
- Which Lean Office tools are most commonly implemented in organizations?
- What organizational barriers and needs influence the effectiveness of Lean Office implementation?

The research questions outlined above were subsequently translated into the main objective of the study. The purpose of this article was to examine the level of awareness of waste in office processes and the degree of application of Lean Office methods from the perspective of lean practitioners belonging to the Lean Management Community Poland (LMCP). At the same time, the article aimed to identify barriers and needs related to the implementation of administrative improvements and outline managerial directions that enterprises should pursue.

The article was divided into five sections. The already presented introductory part provides a concise overview of the relevant literature on optimization of office processes and Lean Office concept, identifies existing research gaps and presents both the rationale for the study and its objectives. The second section outlines the research methodology employed, while the third section presents and discusses the research findings. The final part offers conclusions and suggests potential directions for future research.

2. Method

The study was preliminary and based on a structured interview method. It focused on the issue of waste awareness in administrative processes, as assessed by 6 practitioners affiliated with the Lean Management Community Poland, who cooperate with various organizations in the roles of Lean trainers/consultants or employed Lean specialists/experts. Based on the information gathered, it was possible to answer the research questions and formulate appropriate recommendations for organizations struggling with waste in administrative areas and seeking change.

Structured interview is a research technique that forms part of qualitative, direct methods. It involves a detailed preparation of each question and determining the order in which they will be asked. To ensure the highest degree of objectivity, all interviewees should be asked questions in the same way (Majewska, Głowniak, 2024). In practice, this technique involves asking a series of standardized closed questions and analyzing the answers provided. The level of structure of the interview may vary and include intermediate forms with more open-ended questions, but the use of closed-ended questions facilitates the comparison of results from interviews conducted with different respondents. On the one hand, it minimizes the subjective assessment of the interviewer and on the other, it ensures the appropriate quality of the tools used (Institute for Educational Research – National Research Institute, 2025). In order to ensure the reliability of the study, the author decided to use this technique, with closed-ended questions.

The interview consisted of 9 questions and the form has been divided into 3 categories: awareness of waste in office processes, using methods to optimize office processes and demographics. All respondents participating in the study were Lean practitioners. Half of them (50%) are specialists or experts permanently employed within a single organization, while the remaining 50% work as Lean consultants or trainers, providing support to a range of different companies and industries.

The majority of respondents (67%) reported that their primary area of Lean practice is the manufacturing sector, reflecting the strong roots of Lean methodologies in production environments. A smaller share (16%) apply Lean principles mainly within the service sector, while 17% operate across multiple sectors, adapting Lean tools and approaches to various business contexts.

In terms of professional experience, the respondents represent a highly seasoned group. As many as 83% of them have over ten years of experience in Lean management, indicating a deep and long-term engagement with continuous improvement practices. The remaining 17% have between two and five years of experience, which still places them among practitioners with substantial, hands-on exposure to Lean implementation.

Overall, the composition of the sample ensures that the insights collected come from individuals with extensive expertise and a broad, practice-based understanding of Lean principles in diverse organizational settings.

3. Results

Within the interview process respondents were asked a total of 9 questions divided into 3 groups: awareness of waste in office processes, using methods to optimize office processes and demographics. Data collected through structured interviews were systematically compiled and presented in the form of graphical representations.

Firstly, respondents were asked to assess the awareness of waste in the administrative area in the organization or organizations they work with. The answers to this question varied greatly: 33% indicated a moderate level and the remaining answers were evenly distributed between very low, low, high and very high. This means that some companies are taking steps to optimize their administrative processes, but many still do not see the need to do so. The varying levels of awareness of waste in administrative areas may result from differences in the organizational maturity of companies, a lack of tools to identify losses and the invisibility of waste in office processes. The results of this part of the study are presented in Figure 1.

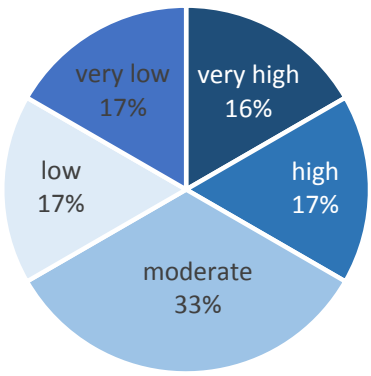

Figure 1. Awareness of waste in the administrative area.

Source: Own study.

Figure 2 presents the results of the study on types of waste most often observed by interviewees in administrative processes. The most frequently cited issues were errors and corrections, overproduction and waiting. Indeed, El-Refai and Mohamademin demonstrated that waiting, corrections and extra processing account for approximately 40% of the total lead time, representing non-value-added activities (2020). Overproduction, also pointed out by the respondents of this study, may be a primary source of above mentioned errors, corrections and waiting. According to Taiichi Ohno, the founder of the Toyota Production System, which later

evolved into Lean Manufacturing, overproduction is considered the primary form of waste from which all other types of waste originate.

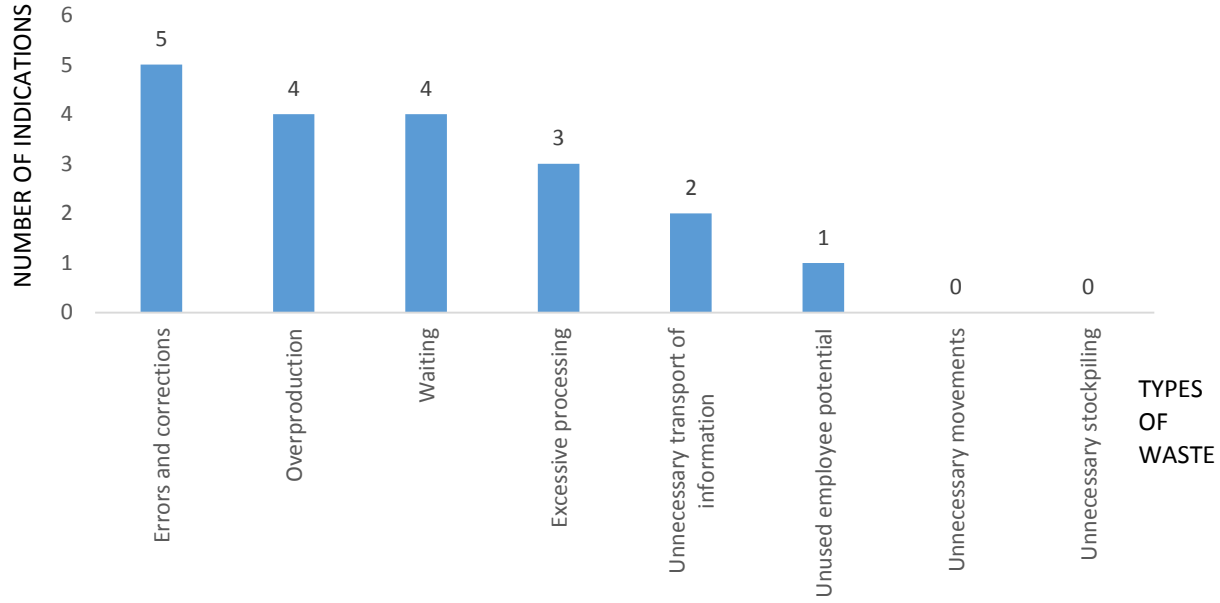

Figure 2. Types of waste in administrative processes.

Source: Own study.

The next topic of interview concerned the frequency with which administrative processes are optimized to eliminate waste in the organizations respondents work with. The results of this part of the study are presented in Figure 3.

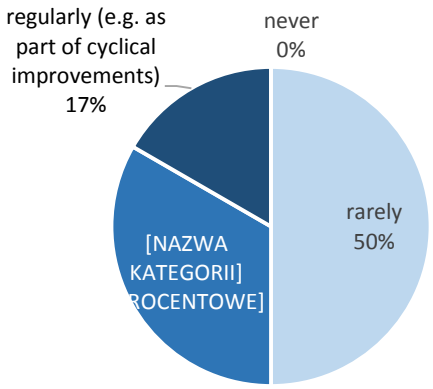

Figure 3. Frequency of administrative process optimization to reduce waste.

Source: Own study.

Half of the respondents believed that such initiatives are rare. In turn, 33% of interviewees stated that they occur only occasionally, mainly in connection with larger projects. Only 17% of respondents indicated that optimizations of administrative processes are carried out regularly. These initiatives operate within the organizations, but they are characterized by irregularity and a strong dependence on specific circumstances. The results therefore indicate potential for their systematic structuring and wider implementation. On this basis, it can be

concluded that the current activities, although valuable, require a clearer framework to ensure their continuity and integration into the organization's strategy.

The next question concerned Lean Office methods or tools used in organizations respondents work with (Figure 4).

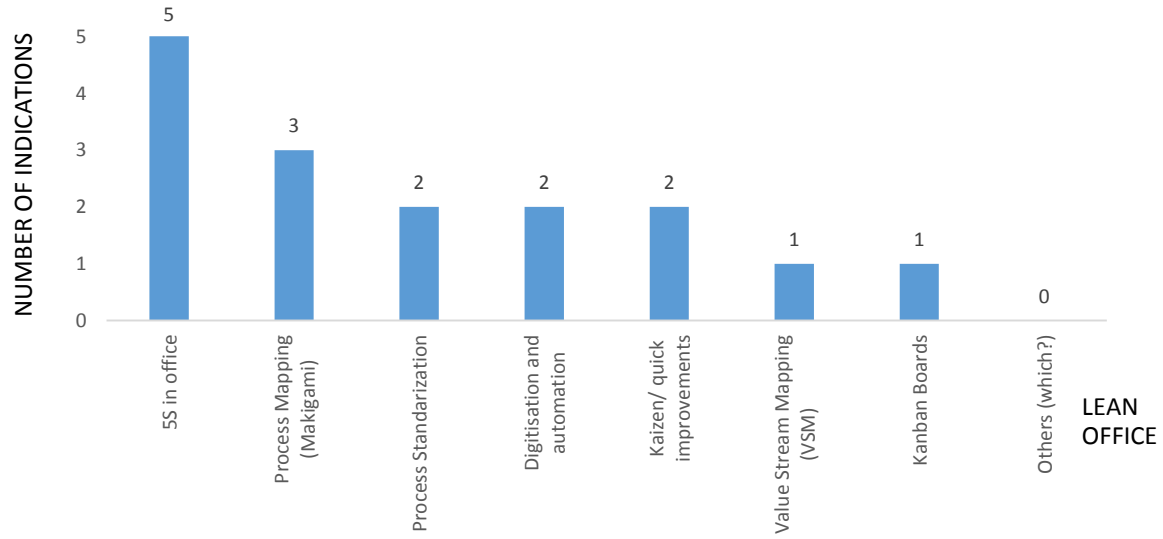

Figure 4. Lean Office methods/tools used in organizations.

Source: Own study.

The tool most frequently indicated by the respondents was 5S, followed by process mapping, which was mentioned slightly less often. In fact, 5S is one of the simplest Lean tools, naturally adapted to the administrative environment as a means of ensuring an organized and orderly workplace. In turn, the popularity of administrative process mapping may reflect organizations' efforts to enhance transparency, standardization and the overall efficiency of their operations. In this context, it is hardly surprising that the third most frequently mentioned response was process standardization. This indicates a growing tendency to apply Lean principles in administrative processes.

In the part of the interview, respondents were also asked about the biggest barriers they encounter or observe when implementing improvements in office processes (Figure 5).

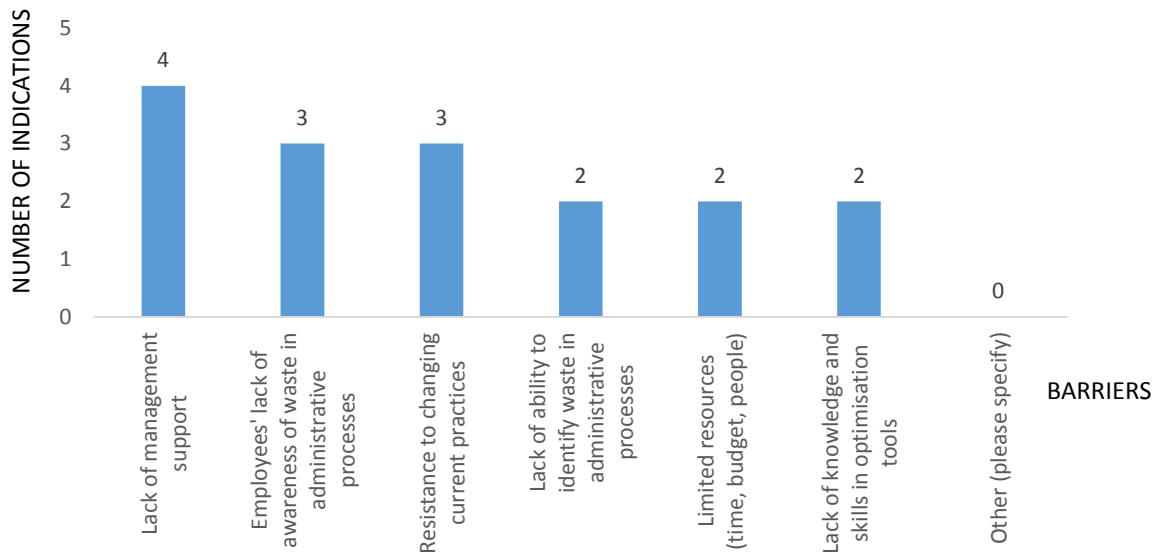

Figure 5. Barriers to implementing improvements in office processes.

Source: Own study.

Among the barriers most frequently identified by the respondents, the lack of managerial support was the most prominent, followed by low employee awareness of waste occurring in administrative processes and resistance to change. This indicates that the successful implementation of Lean principles in administrative processes depends not only on the use of appropriate tools, but also on strong managerial commitment and employee engagement. A lack of leadership support and awareness suggests that cultural and organizational factors remain critical barriers to continuous improvement in office processes.

The next topic of interview concerned support most needed in organizations in order to optimize their administrative processes more effectively (Figure 6).

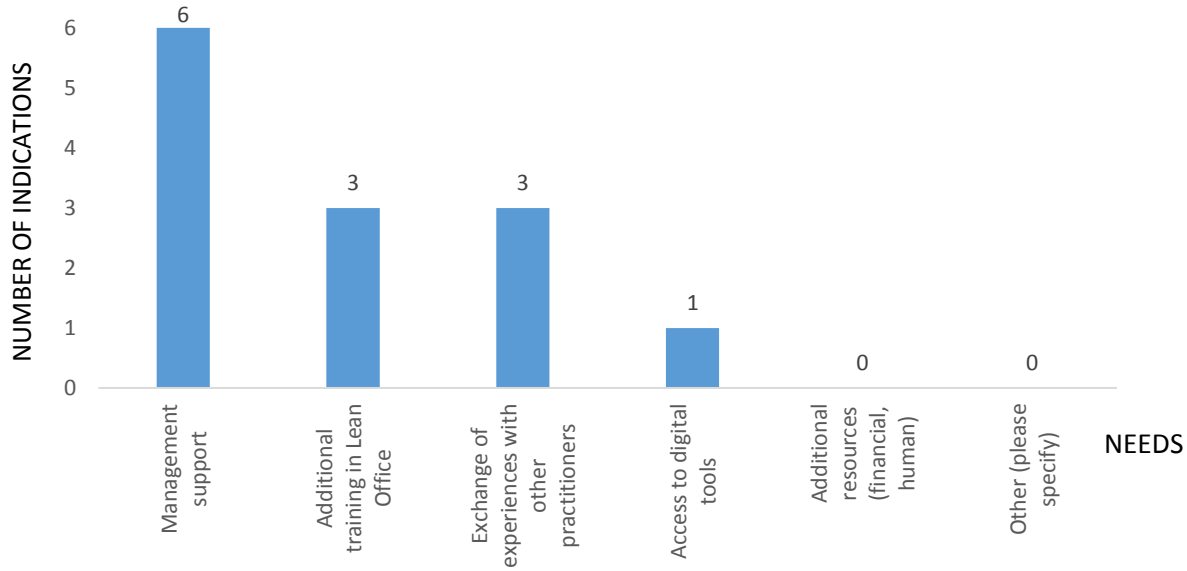

Figure 1. Types of support most needed to optimize administrative processes.

Source: Own study.

The types of support identified by the interviewees closely correspond to the barriers previously mentioned. The most essential factor was managerial involvement and support in optimization activities, followed by training in Lean Office principles and the exchange of experiences with other practitioners. The forms of support indicated by respondents as necessary directly corresponded to the barriers mentioned earlier. This alignment may reflect a growing organizational awareness of the underlying challenges and the mechanisms required to mitigate them.

4. Discussion

The research results indicate that the varying levels of waste awareness across administrative areas may result from differences in organizational maturity and the limited visibility of inefficiencies in office processes. The most frequently observed types of waste, namely errors and corrections, overproduction and waiting, reflect the specific challenges of maintaining flow and quality in administrative environments. The infrequent occurrence of optimization initiatives indicates a lack of systematic improvement approaches and a low maturity of continuous improvement culture in this field. Only routine and systematic action enables organizations to improve their processes systematically, rather than in isolated, individual instances, which constitutes the first recommendation of this article.

The predominance of the 5S tool, followed by process mapping and standardization, suggests that organizations focus mainly on fundamental Lean methods. Using process mapping states a good starting point, but a deeper investigation of value creation flow would make the inefficiencies in office processes more visible, which directly corresponds with the issue described above. The more we know about the value-added creation, the more visible the waste becomes. Moreover, the most common types of waste in office environments - errors and corrections, overproduction and waiting indicate that the main challenge in administration is to ensure the smooth flow of information and the quality of data, rather than that of physical materials. Hence, a systematic mapping of value streams in administrative processes is another recommendation of this article. In order to do that, it is highly recommended to follow the implementation framework developed by Tapping and Shuker, which outlines eight essential steps for planning, mapping and sustaining Lean improvements in administrative areas. These steps include:

1. Commit to Lean - set clear goals and foster a culture of continuous improvement.
2. Choose the Value Stream - select a process or area that delivers customer value and shows strong potential for improvement.
3. Learn about Lean - educate the team on Lean principles, tools and concepts.

4. Map the current state - create a detailed map of the existing process to identify inefficiencies and waste.
5. Identify Lean metrics - define key performance indicators to measure progress and results.
6. Map the future state - design the desired process based on customer demand, continuous flow and workload leveling.
7. Create Kaizen plans - develop specific and actionable improvement initiatives.
8. Implement Kaizen plans - execute the improvements, monitor outcomes and make adjustments as needed to sustain gains (2003).

The identified barriers, particularly the lack of managerial support, low employee awareness of Lean waste in administrative processes and resistance to change, emphasize the critical role of leadership and communication in implementing Lean Office practices effectively. This finding suggests that the primary challenges in implementing Lean Office initiatives are cultural and behavioral rather than technical or financial. The success of such initiatives therefore depends largely on leadership commitment, effective communication and employee engagement, rather than on the availability of tools or financial resources. Indeed, the barriers indicated by the respondents were closely related to above described human factors, rather than to resource-related aspects such as tools or financial means. This confirms the findings of the literature review, which emphasize that the human factor is fundamental and essential for achieving success in the optimization of administrative processes. According to Yokoyama et al. main difficulties encountered in the Lean Office implementations are related to process parameterization and cultural areas (2019). Therefore, the necessity of value stream mapping within administrative processes, as outlined above, together with the requirement for comprehensive preparation and active involvement of personnel at all organizational levels in the implementation of the Lean Office concept, becomes evident. This observation substantiates the rationale for “Commit to Lean” being positioned as the initial step among the eight stages for planning, mapping and sustaining Lean improvements in administrative contexts proposed above.

5. Summary

This paper aimed to examine the level of awareness of waste in office processes and the degree of application of Lean Office methods from the perspective of lean practitioners belonging to the Lean Management Community Poland (LMCP). Moreover, it aimed to identify barriers and needs related to the implementation of administrative improvements and outline managerial directions that enterprises should pursue.

Based on the study, the degree of application of Lean Office methods across companies can be rated as moderate. The respondents indicated specific types of waste occurring in office processes of companies they work with, but at the same time these types of waste are rarely addressed through specific optimization measures. Simultaneously, the use of Lean tools is limited to the basic ones. These findings resulted in a recommendation to introduce routine and systematic measures to optimize the process, rather than isolated and individual measures, with a special focus on mapping the value stream in office processes.

The main barriers related to implementation of Lean Office were indicated: lack of managerial support, low employee awareness of waste occurring in administrative processes and resistance to change. Subsequently, Lean Office implementation needs were also identified and closely correspond to the indicated barriers. Both categories closely relate to the human factor, which is often emphasized in the literature on the subject. As a result, a further recommendation was issued - to ensure thorough preparation and active involvement of staff at all organizational levels in the implementation of the Lean Office concept.

Thus, the research questions were answered as follows:

- The level of awareness regarding the occurrence of waste in administrative processes within organizations is moderate.
- Errors and corrections, along with overproduction and waiting, represent the categories of waste most commonly occurring in office processes.
- 5S, process mapping and process standardization are the most commonly implemented Lean Office tools.
- Lack of managerial support, low employee awareness of waste occurring in administrative processes and resistance to change were indicated as barriers of Lean Office implementation. Subsequently, managerial support in optimization activities, training in Lean Office principles and the exchange of experiences with other practitioners were indicated as main needs in this field.

The contribution of this article is twofold. Firstly, the article proves that both awareness of waste in administrative processes and application of Lean Office tools are at a moderate level, even in companies that employ or collaborate with Lean specialists or consultants. Secondly, the article offers specific recommendations regarding staff preparation and the use of Lean Office tools.

The main limitation of this study lies in its qualitative nature and the reliance on opinions from a limited number of experts. The study involved 6 experts who consented to participate. Although their insights provided valuable qualitative input, the limited number of participants may result in a sampling bias and restrict the broader applicability of the results. As such, the findings reflect subjective perspectives and may not fully represent the diversity of experiences across different organizations or sectors. Therefore, future research should include quantitative studies across different sectors to identify variations in Lean Office maturity and effectiveness. Developing self-assessment tools for organizations would support measuring

progress in Lean Office implementation. Building on the findings of this study, the author of the article plans to undertake future research involving quantitative cross-sector analyses and the creation of practical instrument to assess and strengthen Lean Office maturity. The potential for further development and application of Lean Office principles remains significant and future research may help organizations better realize this untapped potential.

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