

THE IMPORTANCE OF EFFECTIVE COMMUNICATION IN LEAN TRANSFORMATION SUCCESS — INSIGHTS FROM A HUNGARIAN MANUFACTURING STUDY

ATTILA KURUCZ, LÁSZLÓ BUICS

Széchenyi István University, Győr, Hungary
kurucz.attila@sze.hu, buics.laszlo@sze.hu

With the help of a detailed survey, this article aims to examine how effective communication can aid the lean transformation process within a company. Lean methodologies enable companies to create processes and systems that are so efficient that they give them a significant competitive advantage in the marketplace. On the one hand, these improvements can be made by reducing costs and losses and, on the other, by increasing value to the customer. In this study, a survey was carried out in Hungary among 20 Hungarian companies with lean practices, collecting more than 800 employee responses and focusing on the benefits of lean practices in manufacturing companies. Both managers and employees expressed the same opinion, highlighting the importance of communication in the transformation process. The research was conducted among companies with lean experience, and the results and conclusions described can be applied to the lean implementation projects of Hungarian manufacturing companies. Lean practitioners identified communication as almost as important as team composition and management commitment. The research showed that the success of the transformation depends not only on implementing but also on sustaining and remaining dedicated to change, which is only feasible with the right form and frequency of communication.

DOI
[https://doi.org/
10.18690/um.epf.5.2024.47](https://doi.org/10.18690/um.epf.5.2024.47)

ISBN
978-961-286-867-3

Keywords:
lean transformation,
lean thinking,
communication,
change management,
lean survey

JEL:
D83,
L23,
O14



University of Maribor Press

1 Introduction

Although originally an American practice, *lean production*, as now seen in Hungary, was filtered through the work processes and culture of a Japanese company, Toyota. Despite this complex heritage, the emphasis on efficiency in time and resources remains unchanged even as it spreads outside the automotive sector. Lean production has become an indispensable and widely applied methodology that can be used by large companies and small and medium-sized enterprises alike (SMEs) (Kolozsár & Pankotay, 2017).

Rarely would a company begin its operations with lean solutions and management embedded in its culture. A company must reach a certain level of maturity before its operation can be understood and analyzed sufficiently to be refined by lean thinking. A decrease in competitiveness and the undeniability of losses may become the first call to action. This research will assess the introduction of lean processes through the lens of value creation, particularly regarding production and management efficiency improvements that benefit a company's owners and customers (Omenzetter, 2018).

This text examines the role of effective communication in facilitating the transition to lean processes within companies, particularly in times of crisis and rapid change. The two aspects of lean business thinking focused on in this study are the relationship between management (including corporate leadership) and communications. Efficiently designed processes provide a practical framework for innovation, and implementing lean thinking and design is integral to building such a framework.

By surveying 20 Hungarian companies with lean practices and gathering over 800 employee responses, the researchers have empirically established communication's crucial role in achieving competitive advantages through cost reduction, loss minimization, and enhancing customer value. Both managers and employees emphasize communication's significance in the transformation process. This research identifies cases from large market players to smaller manufacturing companies, offering insights relevant to lean implementation projects in Hungarian manufacturing. Communication is a key factor alongside team composition and management commitment and is vital for initiating and sustaining change.

The study reveals the importance of communication frequency and form in ensuring transformation success. Additionally, it explores the connection between communication, management levels, and organizational maturity, presenting critical factors and their impacts on lean transformation effectiveness.

2 Theoretical Background

A successful introduction of lean thinking is contingent on effective communication so that new, even better processes and higher quality and value are formed. Effective communications are crucial to TQM, lean operations, and the deployment of the Scandinavian model. Kotter (2009) also stresses that the direction—*top-down* or *bottom-up*—can affect its implementation and that the importance of change, particularly to a radically different way of thinking and operating, must be communicated by a team supported by management. Furthermore, communicating and celebrating first successes is critical. Doing so decreases the risk of duplicated efforts and maintains morale as the transformation to lean operations continues.

Liker's (2003) 14 principles provide a summary of the lean approach, showing the focus points along which lean is built in the life of an organization:

1. Base management decisions on a long-term philosophy, even at the expense of short-term financial goals.
2. Create continuous process flow to bring problems to the surface.
3. Use “pull” systems to avoid overproduction.
4. Level out the workload—meaning *ensure that work happens without bottlenecks and that every intermediate part is supplied when needed, without backlogs or excess* (Japanese: *heijunka*).
5. Build a culture where problems are addressed immediately and get quality right the first time.
6. Standardize tasks. They are the foundation for continuous improvement and employee empowerment.
7. Use visual control (observation) so no problems are hidden.
8. Use only reliable, thoroughly tested technology that serves essential people and processes.
9. Grow leaders who thoroughly understand the work, live the philosophy, and teach it to others.

10. Develop exceptional people and teams who follow the company's philosophy.
11. Respect the company's extended network of partners and suppliers by challenging them and helping them improve.
12. Directly investigate (go and see) to thoroughly understand the situation (Japanese: *genchi genbutsu*, literally: *real location, real thing*).
13. Make decisions slowly and build consensus across the organization, thoroughly considering all options and their effects on the relevant parties, and when a decision has been made, implement it rapidly (Japanese: *nemawashi*, literally: *turning to the roots*).
14. Become a learning organization through ongoing self-reflection and acknowledgement of errors (Japanese: *hansei*) and continuous improvement (Japanese: *kaizen*).

Considering these principles, it becomes clear that lean thinking and culture must permeate a company, from the material flow and automation operative production line departments to the management principles affecting every aspect of the organization. Lean transformation cannot be implemented incrementally. The research of Sisson and Elshennawy (2015) points out that the successful implementation of lean transformation requires the simultaneous appearance of at least 16 supporting elements. The timeliness of lean process introduction across organizational regions and the decisive role of resources (exclusive allocation of material and human resources) were both highlighted by Sisson and Elshennawy as critical to the effective adoption of lean.

Just as the support of HR and senior management is necessary, so is the support of external consultants and resources. Companies that successfully implement lean often do so with the aid of the Toyota Production System (TPS), which facilitates the move towards quality awareness and excellence in leadership. As part of this transition, communication processes must be extensive and customized to meet the company's and its operations' demands. Thus, in this study, we examined the implementation of TPS in Hungarian lean companies, taking ideas for the research focus from the international literature. Highlighting the research of Colazo (2021), this research investigated whether the communication of managers or subordinates in a centralized network model *or* communication in a shared, decentralized relationship model will be more successful in lean implementations. Communication

shared across the widest possible spectrum seems effective—it appears to support lean implementation better—but *to seem* is not the same as *to be empirically established*. Thus, the need for our research. Lean literature itself deals a lot with lean implementation and lean organizations. Womack-Jones (1997) provides an example of lean implementation in management and lays the ground for the present investigation.

Lean as a production philosophy clearly defines the basic principles to be followed, which are understandable for companies and the market. Although principle nine is about managers, it represents a very advanced level of corporate culture (Shook, 2010), which market participants will also experience through the company's behaviour. The supportive behavior of an authentic leader is very advantageous and motivating for internal and external stakeholders. Companies must learn from their experiences to increase their internal efficiency, improve their market competitiveness, or (ideally) both. To achieve this, a company can use information communication tools and today's database management systems. This utility should be immediately apparent during the introduction of lean.

Understandably, little information about how the company manages its internal data and its *continuous improvement* processes is revealed to external actors. However, these will enhance product quality, which adds value to the customer experience (Balogh et al., 2020). The learning organization is open to market trends and, in this way, cooperates with other actors for the sake of joint success. This willingness to adapt is visible and notable and sends a message to buyers, sellers, partners, and potential clients. The virtues of lean are evident to market players, and if they can be communicated well, they will likely be appreciated. The question arises whether, in the case of internal changes, these same virtues are known by the employees involved. Every member of an organization should understand the importance of lean adoption. Undoubtedly, even shop floor workers are key players, no matter how much research points to the success of top-down transformations. The information must be accurately delivered to the individuals working in the work processes to foster success from the beginning (Ohno, 1998; Shingo, 1989; Koenigsaecker, 2009; Chay et al., 2015).

3 Methodology

This study entailed a detailed survey of 20 Hungarian companies with lean practices, garnering over 800 employee responses. This methodology aimed to investigate the role of effective communication in facilitating lean transformation within organizations of various sizes. Both managers and employees participated in the survey, highlighting the importance of communication in the transformation process. The research focused specifically and intently on manufacturing companies and identified cases from various company sizes, offering insights relevant to lean implementation projects in Hungary. Through empirical analysis, the study examined the relationship between communication, management levels and investment in the process, organizational maturity, and the effectiveness of lean transformation efforts.

4 Results

Most organizations participating in the survey have between 50 and 1,000 employees. Three companies with over 1,000 employees and one with less than 50 employees participated in the research. Nearly 52% of the manufacturing companies that participated in this research are Hungarian subsidiaries of multinationals. The proportion of privately (non-foreign) owned Hungarian companies is 33%, with the remainder being publicly traded Hungarian companies.

Table 1: Informational Channels of Organizational Lean Activities

Communication Form	Percentage of Total Communications
Education and Training	17%
Regular Discussion	16%
Informational Meeting	16%
Informal Discussion	14%
E-Mail	13%
Public Bulletin	9%
Newsletter	7%
Homepage	7%
Total	99%*

*Note: Total is less than 100% due to rounding down several percentages.

More than 50% of the organizations participating in the survey have consciously and methodically applied the lean approach for more than five years, and 15% are still at the beginning of the journey, with 35% being at an intermediate state of

implementation. More than 55% of the respondents participating in the survey indicated the position of subordinate/employee, 30% of respondents indicated middle manager, group leader and nearly 15% senior manager.

In Table 1, we can see the distribution of the communication forms used by the respondents. Effective lean implementation in an organization largely depends on the quality of communication, so the communication channels used in companies were an important research point. The extent to which certain layers of the organization value the tools/platforms used by the company as useful can help during a lean transformation. Reported preferences for each tool can be seen below.

Table 2: Preferred Lean Communication Methods

Communication Form	Percentage Indicating Preferred
Training and Organized Discussion	50%
Informal Discussion	14%
E-Mail	13%
Public Bulletin	9%
Newsletter	7%
Homepage	7%

In Table 2, we can see the preferred communication methods chosen by research participants. Based on the survey, personal forums are still valued over distance and impersonal communication methods. Informational or regular meetings, education, and even informal oral communication do more than any other tool.

5 Discussion

Effective communication plays a paramount role in the lean transformation journey of companies as they endeavor to adopt lean practices and principles. Communication serves as a linchpin for disseminating information about the goals, strategies, and expectations associated with the lean initiative across all levels of the organization. Clear communication channels ensure that employees understand the rationale behind lean transformation, fostering buy-in and commitment from all stakeholders.

Moreover, communication facilitates the exchange of ideas, feedback, and best practices among team members, promoting a culture of continuous improvement vital to lean implementation. Through transparent and open communication,

employees feel empowered to voice concerns, suggest improvements, and participate actively in the lean transformation process. Additionally, effective communication helps align the efforts of different departments and teams towards common lean objectives, minimizing silos and promoting collaboration. Furthermore, clear communication about roles, responsibilities, and performance expectations ensures accountability and ownership among employees, driving the sustained adoption of lean practices.

Regular communication channels provide platforms for sharing progress updates, celebrating successes, and addressing challenges encountered during the lean journey. Communication also plays a crucial role in managing change by addressing fears, uncertainties, and resistance that may arise during the transition to lean practices. By cultivating a culture of transparency and trust, communication enables leaders to solicit employee input and support, building a sense of ownership and engagement in the lean transformation process. Moreover, communication helps manage expectations regarding the timeline, resources, and outcomes of lean implementation, ensuring realistic goals and objectives.

The human touch remains critical. The respondents highly preferred personal communication compared to other channels. Since the lean approach is based on involving and collaborating with employees, striving to create organizational forums that provide space for personal, two-way communication is a worthwhile undertaking.

Through effective communication, leaders can articulate the benefits of lean practices regarding improved efficiency, quality, and customer satisfaction, inspiring employees to embrace change and adapt to new ways of working. Furthermore, communication channels such as training programs, workshops, and mentoring sessions facilitate the dissemination of knowledge and skills important for successful lean implementation.

Finally, ongoing communication ensures that organizations remain responsive to evolving market dynamics, customer needs, and internal challenges, enabling continuous refinement and optimization of lean practices over time. Effective communication is indispensable for navigating the complexities of lean transformation. Without it, lean transformation is bound to fail.

6 Conclusions

The drive toward lean transformation comes as no surprise during times of crisis and rapid change, as it can help an organization avoid losses and construct efficient production processes. This article explored how effective communication supports lean transformation within companies when they need to do so. A survey among 20 Hungarian companies with lean practices was conducted, gathering over 800 employee responses. From a wide range of issues potentially relevant to lean adoption, a specific topic of particular interest to the Hungarian market became the focus of the current study.

This study highlights communication's vital role in achieving competitive advantages through cost reduction and enhancing customer value. Both managers and employees emphasize its significance in the transformation process. The research identified cases from large market players to smaller manufacturing companies, offering insights relevant to lean implementation projects in Hungarian manufacturing.

Communication is a key factor alongside team composition and management commitment, vital for initiating and sustaining change. The study provided evidence of this assertion and revealed the importance of communication frequency and form to ensure success when transforming an ordinary organization into a lean one. Additionally, it explored the connection between communication, management levels, and organizational maturity, presenting critical factors and their impacts on lean transformation effectiveness.

As evident from the responses, personal communication emerged as the favored channel among respondents, underscoring its significance. Given that the lean methodology emphasizes employee involvement and collaborative problem-solving, there is a clear imperative to establish organizational platforms conducive to personal, timely, and interactive communication. An organization dedicated to lean implementation must prioritize the creation of forums that facilitate open dialogue and mutual engagement, both of which are essential to lean thinking.

References

- Balogh, A., Gyenge, B., Szeghegyi, Á., & Kozma, T. (2020). Advantages of simulating logistics processes. *Acta Polytechnica Hungarica*, 17(1), 215-229.
- Chay, T., Xu, Y., Tiwari, A., & Chay, F. (2015). Towards lean transformation: The analysis of lean implementation frameworks. *Journal of Manufacturing Technology Management*, 26(7), 1031-1052. <https://doi.org/10.1108/JMTM-10-2013-0143>
- Colazo, J. (2021). Changes in communication patterns when implementing lean. *International Journal of Quality & Reliability Management*, 38(1), 296-316. <https://doi.org/10.1108/IJQRM-10-2019-0323>
- Koenigsaecker, G. (2009). *Leading the lean enterprise transformation*. Productivity Press.
- Kotter, J. (2009). Leading change: Why transformation efforts fail. *IEEE Engineering Management Review*, 37(3), 42-48. <https://doi.org/10.1109/EMR.2009.5235501>
- Koloszár, L., Pankotay, F. (2017). Lean eszközök a kkv-k fejlesztésében. *Gazdaság És Társadalom*, 9, 67-98. <https://doi.org/10.21637/GT.2017.3-4.05>
- Liker, J. (2004). *The Toyota way: 14 Management principles from the world's greatest manufacturer*. McGraw-Hill Education.
- Ohno, T. (1998). *Toyota production system: Beyond large-scale production*. Productivity Press.
- Omenzetter, P. (2018). On the value of information for industry 4.0 [Conference presentation]. SPIE Smart Structures and Materials+Nondestructive Evaluation and Health Monitoring 2018, Denver, CO, United States. <https://doi.org/10.1117/12.2294490>
- Shingo, S. (1989). *A study of the TPS from an industrial engineering point of view*. Productivity Press.
- Shook, J. (2010). How to change a culture: Lessons from NUMMI. *MIT Sloan Management Review*, 51(2), 62-68.
- Sisson, J., & Elshennawy, A. (2015). Achieving success with Lean: An analysis of key factors in Lean transformation at Toyota and beyond. *International Journal of Lean Six Sigma*, 6(3), 263-280. <https://doi.org/10.1108/IJLSS-07-2014-0024>
- Womack, J., & Jones, D. (1997). Lean thinking: Banish waste and create wealth in your corporation. *Journal of the Operational Research Society*, 48(11), 1148-1148.