Implementation of Toyota-Based Kaizen in Swiss Small and Medium-Sized Enterprises: Prerequisites and Success Factors

Bachelor's Thesis

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Management Summary

Kaizen, pioneered by Japanese automaker Toyota after World War II, is more than a method for increasing efficiency and reducing costs. It is a management philosophy that aims to advance a company through continuous improvements by all employees. Especially in Switzerland, small and medium-sized enterprises expand into the European Union comparatively early in their life cycle due to the limited domestic market. Efficiency increases and innovations are crucial to keep up with the competitive prices of the European competitors. In addition, companies with solid growth often experience a proliferation of processes and lose agility, making the introduction of kaizen beneficial. As a result, this thesis aims to determine the success factors and prerequisites for implementing Toyota-based kaizen in small and medium-sized companies.

First, a systematic literature review was conducted to identify the barriers and success factors for the kaizen implementation. The research is based on peer-reviewed databases and reports from renowned consulting firms. Subsequently, the New St. Gallen Management Model was applied to examine the prerequisites systematically. The success factors were discussed in five semi-structured interviews with a professor, a consultant, and managers from different positions in Swiss kaizen companies to obtain additional insights and best practice examples. From the results, the author has designed a model to guide Swiss managers in implementing Toyota-based kaizen in small and medium-sized enterprises.

According to the literature, many Western companies fail to implement kaizen in their organization. While Japanese companies realized 30 to 40 percent cost reductions, many foreign companies managed only 10 to 15 percent. Although it is a great challenge, many authors agree that kaizen can be transferred internationally. However, organizations must adapt kaizen to the national characteristics while insisting on the basic principles.

At its core, a kaizen company must empower its employees to participate and create a long-term competitive advantage for the company through continuous improvements and striving for perfection. For an organization to achieve this, the paper identifies three core requirements: top management commitment, human capital management strategy, and basic kaizen tools. Additionally, these prerequisites are influenced by three structuring forces that should be aligned with kaizen: a team-based culture, a process-oriented structure, and a customer-focused strategy. These six factors create an atmosphere in which kaizen can thrive. Nevertheless, the whole organization is in an environment of continuous change due to internal and external influences. Therefore, constant reflection and improvement of the management philosophy according to the plan-do-check-adjust cycle is mandatory. Kaizen is never finished, and each company interprets it slightly differently based on its underlying values.

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List of Abbreviations

CI	Continuous Improvement
CIP	Continuous Improvement Process
HCM	Human Capital Management
KPI	Key Performance Indicator
PDCA	Plan, Do, Check, Adjust
SFM	Shop Floor Management
SGMM	New St. Gallen Management Model
SLM	Situational Leadership Model
SME	Small and Medium-Sized Enterprises
SOP	Standard Operating Procedure
THTCD	Trompenaars and Hampden-Turner Cultural Dimensions
TQM	Total Quality Management

1 Introduction

Kaizen, a term that most Western managers had never heard of thirty years ago, is now common knowledge and no longer perceived as a foreign word (Liker & Franz, 2011, p. 1). Yokozawa et al. (2010) explain that the term originates from the Japanese language - literally meaning change (*kai*) for the better (*zen*) - and was pioneered by the car manufacturer Toyota after World War II. To catch up with the West, instead of hiring consultants, companies began holding employees accountable for improvements (Medinilla, 2014, p. 7). Magee (2008, p. 23) underlined that starting its overseas operations in the early 1960s, Toyota became the world's largest automaker in 2007, with an operating margin of more than nine percent, three times the industry average. As a result, many corporations became attentive to Toyota's way of constantly improving its operations and began to analyze its recipe for success. Imai (1986, p. 3) claimed that kaizen is an essential concept in Japanese management and the key to its competitive success.

Over the past decades, many researchers have studied whether and how the kaizen management philosophy can be successfully transferred to other countries. Many authors argue that the implementation of kaizen has failed in many organizations, even though the philosophy is not very complex (Aoki, 2008; Holweg et al., 2018; Janjić et al., 2020; Sturdevant, 2014).

Despite this, Aoki (2008), Chiarini et al. (2018), and Hailu et al. (2017) claim that it is possible to transfer kaizen outside Japan when companies implement and insist on basic kaizen principles. However, these authors maintain that some level of reinterpretation and adaptation to the national culture is required to bring long-term benefits to the organization.

1.1 Research Question

The aim of this thesis is to determine the prerequisites and success factors for implementing Toyota-based kaizen in Swiss small and medium-sized enterprises (SMEs). Since most literature on the kaizen transfer is limited to emerging markets, no extensive research has been conducted specifically on the transfer to Swiss companies (Aoki, 2008; Georgise & Mindaye, 2020; Hailu et al., 2017; Hosono, 2009; Paipa-Galeano et al., 2020). In addition, many studies are based on quantitative research and do not provide any insight into how the prerequisites and success factors should be implemented in practice (Hailu et al., 2017; Janjić et al., 2020; Nguyen, 2019).

1.2 Research Methodology

The thesis has followed an inductive approach to answer the research question (Saunders et al., 2009). The study is based on a qualitative approach since, according to Kumar (2011), it

allows for more flexibility in the research process. This leeway was essential because the author wanted to address specific success factors more strongly, depending on the interview statements.

Semi-structured interviews were chosen as the instrument for the qualitative data collection. According to Saunders et al. (2009), they allow the researcher to adapt the questions to the flow of the conversation to obtain the data needed and thus gain valuable insights. Adams (2015) confirms that semi-structured interviews can be beneficial if the researcher needs to ask probing, open-ended questions and wants to know the independent thoughts of an individual. However, Saunders et al. (2009) acknowledge that qualitative data analysis is demanding and should not be considered an easy option.

Firstly, a list of factors for the transferability of kaizen was compiled following a systematic literature review. According to Kumar (2011), using existing literature offers several advantages, such as a large volume of professionally collected data. The literature review was conducted using the keywords kaizen, kaizen transfer, kaizen Switzerland, and kaizen implementation in peer-reviewed databases: Emerald Insight, Google Scholar, ProQuest, ResearchGate, ScienceDirect, and Wiley Online Library. Articles published between 1995 and 2022 were selected from the databases. In addition, databases from renowned consulting firms were reviewed to reflect current business insights. Since there are many case studies on the transfer of kaizen to other companies in South America or China, the key findings served as a cross-reference for Swiss companies. The papers were examined for kaizen-related success factors and barriers. A summary of the success factors and barriers is shown in Table 3.

Next, based on Imai (1986) and Liker & Franz (2011), the fundamental elements of kaizen are outlined. However, it is assumed that the reader of the paper is already familiar with the philosophy. After that, the models applied in this work are presented: The New St. Gallen Management Model (SGMM), Trompenaars and Hampden-Turner Cultural Dimensions (THTCD), and the Situational Leadership Model (SLM).

After having established the theoretical foundation, this thesis addresses the central question of how Toyota-based kaizen can be successfully integrated into Swiss SMEs. For this purpose, the SGMM, a framework recognized in the German-speaking world for developing organizational value creation and management practices, has been used (Rüegg-Stürm & Grand, 2019). The thesis deals with the issues that arise in the seven sub-areas of processes and structuring forces and the approaches that can be used to solve them. A structured overview of the topics covered is presented in Table 1.

Area	Sub-Area	Kaizen Topics
Processes	Management Processes	Management commitment, resource allocation, breaking down the vision
	Business Processes	Cross-organizational collaboration, standards
	Support Processes	People development, employee rewards, motivation, suggestions system
Structuring Forces	Governance	Fundamental values and norms, internal politics, stakeholder relations
	Strategy	Continuous improvement vs. organizational goals, long-term sustainment
	Culture	Comparison of Switzerland and Japan (according to THTCD), leadership
	Structure	Mechanistic vs. organic view, informal structures

Table 1: Applying Kaizen to the SGMM

The THTCD model has been used to classify and compare the national values of Switzerland and Japan in seven cultural dimensions (Trompenaars & Hampden-Turner, 1998). From this comparison, it can be deduced which norms and values relevant to kaizen are not sufficiently anchored in Swiss culture and need to be fostered by a potential kaizen organization. In addition, the SLM is used to illustrate the principles of kaizen leadership (Hersey & Blanchard, 1988).

This analysis is based on primary and secondary data. According to Saunders et al. (2009), secondary data has the advantage that it requires relatively little time and money. Due to the limited time of fourteen weeks for the thesis, secondary data has served as a basis for analyzing the different topics to a large extent. Nonetheless, five semi-structured interviews were conducted to validate the literature review findings and obtain practical guidance on implementing the success factors.

The interviews consisted of 15 to 20 open-ended questions. The author of this paper discussed the main kaizen challenges as top management commitment, long-term sustainment of kaizen, people development, leadership, performance assessment/ rewards, failure to identify problems, cultural differences, and cross-organizational collaboration. The interviewees are listed in Table 2.

Name	Occupation	Company	Industry
Andreas Graf	Lean Manager	Wilhelm Schmidlin AG (Schmidlin)	Production of bathtubs, shower bases, and washbasins.

Reto Sieber	Board Member and Co-Owner	SIGA Holding AG (SIGA)	Production and distribution of air and windproof products for building construction.
Irène Isenschmid-Muff	Department Head	Luzerner Kantonsspital AG / Wolhusen (LUKS)	Healthcare (hospital)
Alfred Angerer	Professor	ZHAW School of Management and Law (ZHAW)	University of Applied Sciences, lean and change management at hospitals
Erich Sannemann	Senior Expert	STAUFEN.INOVA AG	Business consulting (operations)

Table 2: List of Interviewees

Three people with different jobs in kaizen organizations, a consultant with many years of kaizen and operations experience, and a professor with an academic perspective were interviewed to gain comprehensive insight. Of the companies, two are from the secondary sector, and one is from the tertiary sector. When kaizen was introduced, SIGA and Schmidlin were categorized as SMEs. The LUKS group has significantly more employees than an SME, but since kaizen was introduced separately at the Wolhusen site, the interview still provided valuable conclusions for SMEs. All interviews are recorded in Appendix B.

The lean manager has 15 years of kaizen experience and is the coordinator for all kaizen activities at Schmidlin. The company introduced SchmidLEAN in 2011, and he has been lean manager since 2015. The board member and co-owner of SIGA introduced kaizen to the company in 2007 in his former role as co-CEO. He visited several plants in Japan and has been involved with the kaizen development at SIGA for over 15 years. LUKS introduced kaizen as a pilot program at the Wolhusen site in 2019, and the department head has been a part of it from the beginning. The professor focuses on healthcare management and has led several projects and published multiple papers involving kaizen. In addition, he holds a Ph.D. in retail processes and has experience as an operations consultant at McKinsey & Company. The senior expert is currently 55 years old and has numerous years of experience in operations. He has implemented kaizen projects all over the world - from Africa to Europe and Asia - and has been back in Switzerland as a consultant for four years.

Next, the differences between the systematic literature review and the five semi-structured interviews are addressed. Finally, the primary success factors are identified and generalized into a practice-oriented model intended to guide Swiss managers who want to introduce Toyota-based kaizen in their SMEs.

1.3 Practical Relevance

Kaizen is of high practical relevance for Swiss SMEs. Firstly, due to the relatively small home market, Swiss SMEs usually expand into the European Union early in the company's history (Ruigrok et al., 2007). According to the same authors, Switzerland's relatively high price level is a significant challenge in this process. Due to the higher production costs, it is more demanding to keep up with the prices of European competitors. In conclusion, SMEs constantly look for cost optimization and innovations (Maarof & Mahmud, 2016). García-Alcaraz et al. (2017) emphasize that kaizen and its incremental improvement approach have tremendous potential in this area.

Secondly, Greiner (1998) claims that companies in the second or third growth phase of his six-phase growth model grant employees more competencies to achieve efficiency gains in the value chain. Lindner (2020) argues that companies in these stages face a cultural crisis and internal power struggles because a clear direction and dominant culture are missing. In his opinion, an organization loses agility, and due to high growth, there is a proliferation of new processes. Implementing kaizen at this point is beneficial because it improves process control and continuous improvement (CI) efforts (Imai, 1986, pp. 23–27).

1.4 Scope

This thesis addresses the implementation of kaizen in the context of Swiss SMEs. The goal is to develop a practice-oriented model describing the prerequisites and success factors for transferring Toyota-based kaizen. This study does not contribute to the debate on whether kaizen is effective as a concept, nor is its aim to discuss the transfer to countries other than Switzerland.

Suárez-Barraza et al. (2011) distinguish between three perspectives of kaizen: kaizen as a management philosophy, kaizen as a part of total quality management (TQM), and kaizen as a theoretical principle for improvement methodologies and techniques. The same authors outline that the first perspective contains a set of principles and values that underpin the company's management. Moreover, Suárez-Barraza et al. (2011) conclude that there are many kaizen methodologies and techniques, for instance, Kaizen Blitz, *Gemba*-Kaizen workshops, Kaizen Office, Lean-Kaizen Six Sigma, Kaizen *Teian*, or TQM. The same authors argue that although these methods include implementation details, they lack some of the kaizen principles as a management philosophy. Hence, in this paper, kaizen is not seen as a technique or methodology, but as a holistic management philosophy according to the first perspective.

When the author of this thesis examines kaizen, he primarily understands it as two ways of thinking. On the one hand, there is the short-, medium- and long-term elimination of problems and malfunctions. On the other hand, there is the method of CI, which means that already efficient processes are further optimized because employees are not satisfied with the first best result.

2 Theoretical Framework

The following chapter summarizes the barriers and success factors based on a systematic literature review. Additionally, the fundamentals of the SGMM, THTCD, and SLM applied in this thesis are outlined.

2.1 Literature Review

Japanese kaizen was first brought to the attention of the West by Imai (1986). It is well established that there are significant barriers to transferring kaizen to other cultures because it is deeply rooted in Japanese culture (Desta, 2011; Hayashi & Baldwin, 1988; Shaari, 2010; Yokozawa et al., 2010). This difficulty is reinforced by the research of Suárez-Barraza et al. (2011), who measured that Japanese companies realized operating cost reductions of 30 to 40 percent due to kaizen, while Mexican companies generally achieved only 10 to 15 percent. Yokozawa et al. (2010) confirm this effect by claiming that about 80 percent of Japanese companies consider the transfer of kaizen as one of the main problems in their overseas operations.

While Suárez-Barraza et al. (2010) and Yokozawa et al. (2010) examined that kaizen is not as effective outside of Japan, many authors argue that, although it is challenging, the successful international transfer of kaizen is possible (Fukui et al., 2003; Hosono, 2009; Recht & Wilderom, 1998). Other studies support this opinion, but they underline the significance of insisting on the basic kaizen principles while adapting to the national characteristics (Aoki, 2008; Desta, 2011; Hailu et al., 2017; Shaari, 2010). Oki (2012) concludes that there are numerous barriers and success factors to the kaizen transfer. According to the same author, these factors seem to depend on national aspects such as culture, work attitude, work environment, or history. Furthermore, he points out that some factors are common to all continents, while others are country-specific.

In summary, Table 3 shows general agreement that the most significant success factors are employee participation and development, top management commitment, organizational structure, and organizational culture. Furthermore, recent studies have introduced mindset as a new prerequisite for sustaining kaizen over the long term (Frackleton et al., 2017; Nguyen, 2019).

While many authors name numerous factors as a contributor to success, Yokozawa & Steenhuis (2013), who examined the implementation of kaizen in Dutch companies, identified two primary factors influencing the transfer: the level of the eagerness of employees and the level of discipline of employees. The same authors conclude that the transfer to South-East Asian countries is more feasible than to Europe due to its closer cultural proximity to Japan.

Area	Keywords	Sources
Barriers	Culture of blame	(Medinilla, 2014)
	Failure to identify problems and root causes	(Medinilla, 2014)
	Lack of communication	(Bwemelo, 2014; Farris et al., 2008, 2008; Georgise & Mindaye, 2020; Rich & Bateman, 2003; Rivera-Mojica & Rivera-Mojica, 2014)
	Lack of cross-functional cooperation	(Aoki, 2008; Bwemelo, 2014; Desta, 2011; García-Alcaraz et al., 2017; Hailu et al., 2017; Recht & Wilderom, 1998; Suárez-Barraza et al., 2011)
	Lack of resources	(Medinilla, 2014; Paipa-Galeano et al., 2020; Rich & Bateman, 2003; Sanchez-Ruiz et al., 2020)
	Lack of standards	(Suárez-Barraza et al., 2011)
	Restistance to change	(Bwemelo, 2014; Glover et al., 2011; Hailu et al., 2017; Medinilla, 2014; Paipa-Galeano et al., 2020; Rich & Bateman, 2003; Sanchez-Ruiz et al., 2020; Yokozawa & Steenhuis, 2013)
	Rigid job descriptions	(Bwemelo, 2014; Medinilla, 2014; Paipa-Galeano et al., 2020)
	Short-term vision (lack of alignment between continuous improvement and organizational objectives)	(Medinilla, 2014)
Success factors	Bottom-up implementation	(Bwemelo, 2014; Georgise & Mindaye, 2020)
	Customer focus	(Rivera-Mojica & Rivera-Mojica, 2014)
	Discipline of employees	(Yokozawa & Steenhuis, 2013)
	Eagerness of employees	(Yokozawa & Steenhuis, 2013)

	Employee participation, motivation of staff	(Aoki, 2008; Bwemelo, 2014; Desta, 2011; Georgise & Mindaye, 2020; Hailu et al., 2017; Nguyen, 2019; Paipa-Galeano et al., 2020; Paul Brunet & New, 2003; Recht & Wilderom, 1998; Sanchez-Ruiz et al., 2020; Suárez-Barraza et al., 2011; Yokozawa & Steenhuis, 2013)
	Goal clarity	(Paipa-Galeano et al., 2020; Sanchez-Ruiz et al., 2020)
	Leadership	(Aoki, 2008; Chiarini et al., 2018; Desta, 2011; Hailu et al., 2017; Paipa-Galeano et al., 2020; Rich & Bateman, 2003)
	Mindset	(Frackleton et al., 2017; Nguyen, 2019)
	Organizational culture	(Bwemelo, 2014; Chiarini et al., 2018; Fukui et al., 2003; Hailu et al., 2017; Hosono, 2009; Medinilla, 2014; Oki, 2012; Recht & Wilderom, 1998; Rich & Bateman, 2003; Rivera-Mojica & Rivera-Mojica, 2014; Shaari, 2010; Yokozawa et al., 2010, 2014; Yokozawa & Steenhuis, 2013)
	Organizational structure	(Bwemelo, 2014; Yokozawa et al., 2010, 2014)
	People development	(García-Alcaraz et al., 2017; Georgise & Mindaye, 2020; Liker & Convis, 2011; Liker & Franz, 2011; Nguyen, 2019; Recht & Wilderom, 1998; Rivera-Mojica & Rivera-Mojica, 2014; Sanchez-Ruiz et al., 2020; Suárez-Barraza et al., 2011)
	Process orientation	(Chiarini et al., 2018; Recht & Wilderom, 1998; Rich & Bateman, 2003)
	Recognition and rewards	(Bwemelo, 2014; Georgise & Mindaye, 2020; Hailu et al., 2017; Nguyen, 2019; Rich & Bateman, 2003)
	Sense of urgency	(Liker & Franz, 2011; Medinilla, 2014; Yokozawa et al., 2011)
	Top management commitment	(Desta, 2011; Doolen et al., 2008; Farris et al., 2008; García et al., 2014; García-Alcaraz et al., 2017; Glover et al., 2011; Hailu et al., 2017; Nguyen, 2019; Oki, 2012; Paipa-Galeano et al., 2020; Rich & Bateman, 2003; Rivera-Mojica & Rivera-Mojica, 2014; Suárez-Barraza et al., 2011)

Table 3: Barriers and Success Factors for the International Transfer of Kaizen

2.2 Kaizen

Kaizen is neither a method nor a temporary project. It is much more a philosophy, a way of thinking and living that is committed to the ideal of improving continuously in every part of the organization (Medinilla, 2014, pp. 5–8). The collaborative approach includes the participation of top management and grassroots employees from all departments. According to Liker & Franz (2011, pp. 60–64), engaging employees is key to working toward true north, a completely lean organization where all waste has been stripped away, and purely valued-adding activities are left. Since a true north company does not exist in reality, kaizen is never finished. The same authors further assert that the current state is the worst possible, and there is always room for gradual improvement to get as close as possible to achieving a true north state. The following sections highlight some of the kaizen principles in more detail.

According to Imai (1986, pp. 5–8), Japanese management consists of two main activities: maintenance and improvement. Maintenance refers to developing and adhering to a standard operating procedure (SOP), while improvement focuses on enhancing those standards. An employee's work is based primarily on standards enforced through training and discipline. The more proficient employees are at their job, the more they are expected to improve the way they perform their work. The same author breaks down improvement into two activities: innovation and kaizen. While innovation stands for a drastic improvement with typically more considerable investment, kaizen signifies the incremental improvement from the status quo with minor but continuous effort.

Liker & Franz (2011, p. 62) underline that kaizen must be done at the *Gemba* (Place of action). Chiarini et al. (2018) confirm that Japanese managers greatly emphasize *Genchi Genbutsu*, go and see for yourself. The authors state that databases and statistics will never tell the whole story. Instead, a manager must go to the workplace to observe and get a feeling of the actual situation.

Additionally, Imai (1986, pp. 14–15) highlights that a suggestion system is an integral part of kaizen. According to the same author, employees are expected to write down their continuous improvement process (CIP) suggestions, resulting in numerous positive effects. Firstly, the top management understands how deeply a specific team lives the CI philosophy as the number of suggestions is regarded as a significant indicator in reviewing a supervisor's performance. Secondly, top management often invests substantial time reflecting on and listening to presentations about suggestions. It is willing to recognize employees' efforts for improvements, making them feel appreciated and creating intrinsic motivation. Lastly, because they set up a new standard by themselves, rather than having it imposed by management, the employees are more willing to follow it.

Although kaizen is often associated with Japan, many Western concepts have influenced the philosophy. A key example is the PDCA or Deming cycle, first introduced by the American Dr. Walter Shewhart and further developed by Dr. W. Edwards Deming (Liker & Franz, 2011, p. 25). While it met with little interest in the West, the authors state that Japanese managers were fascinated when Deming published the concept in the 1950s. The plan-do-check-adjust (PDCA) cycle is illustrated in Figure 1.
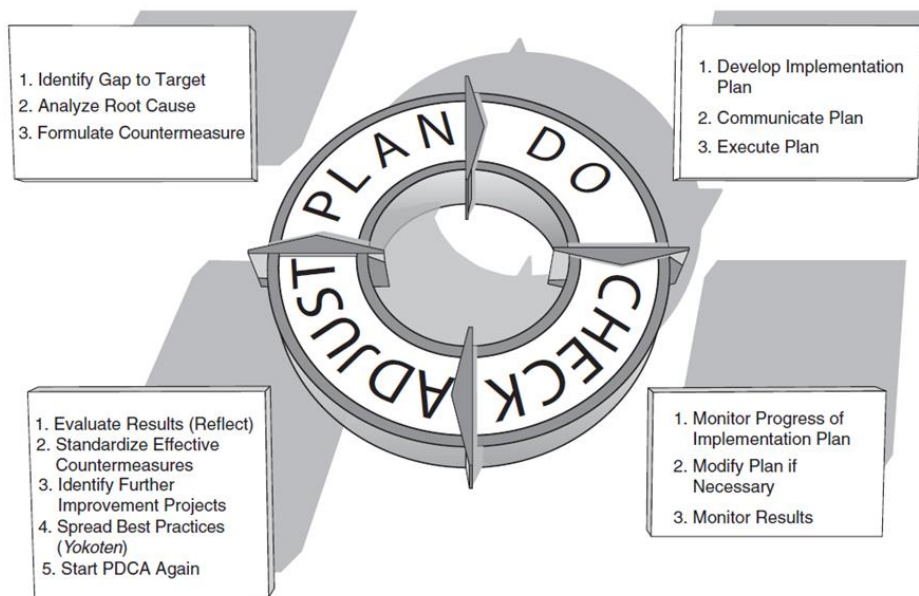
Figure 1: The PDCA Problem-Solving Cycle (Liker & Franz, 2011, p. 27)

According to Liker & Franz (2011, pp. 25–40), the planning phase is crucial. They explain that the employee must identify a gap between the actual and ideal state. After the gap is defined, the problem is broken down, and the root cause is identified. Subsequently, the employee sets a target and develops countermeasures. In the next stage, the countermeasures are communicated and executed. In the check phase, the employee measures both results and processes.

Last but not least, results are evaluated and successful processes standardized. The same authors underline that an essential step is to identify gaps for further improvements, spread best practices and redo the PDCA cycle to work closer to the true north. It is evident that the PDCA cycle is a core concept of kaizen, and it illustrates clearly that the process of CI is never-ending.

At least as important as process aspects are the focus on people. Ultimately, the CIP suggestions come from the employees, and kaizen does not work without the commitment of top management and the willingness of employees to continuously develop and be open to change (Aoki, 2008; Desta, 2011; Recht & Wilderom, 1998). According to Liker & Franz (2011, pp. 63–65), employees are not respected if they are not challenged and unable to learn. The same authors conclude that it is disrespectful when the leader thinks for everyone and point out that when

people have to perform tasks in a prescribed mindless way, it violates their right to grow and develop.

Liker & Franz (2011, pp. 35–41) demonstrate employee development based on the PDCA principle. In the planning phase, the vision of the ideal team member is created. Based on a skills matrix, the strengths and weaknesses become visible, the gap to the ideal state is determined, and a personal development plan is defined. In the execution phase, the employee is guided through the development by a *Sensei*, an experienced coach and master. *Hansei* (self-reflection) is a vital element of the control phase. Finally, positive behavior is reinforced, and further development opportunities are defined. The guiding principle is that the employee continuously learns and never stops growing.

2.3 The New St. Gallen Management Model

The SGMM is a framework recognized in German-speaking countries to develop organizational value creation and management practices. According to Rüegg-Stürm & Grand (2019, p. 31), the SGMM strengthens the collective imagination of those who face management challenges. Therefore, it is an optimal framework for systematically analyzing the prerequisites for introducing kaizen in an organization and explaining it to managers in an established context.

The following statements in this chapter regarding the SGMM are based on the theory of Rüegg-Stürm & Grand (2019, pp. 62–97). The thesis thereby concentrates only on parts that shape a company: structuring forces and processes. An overview of the SGMM can be found in Figure 2.
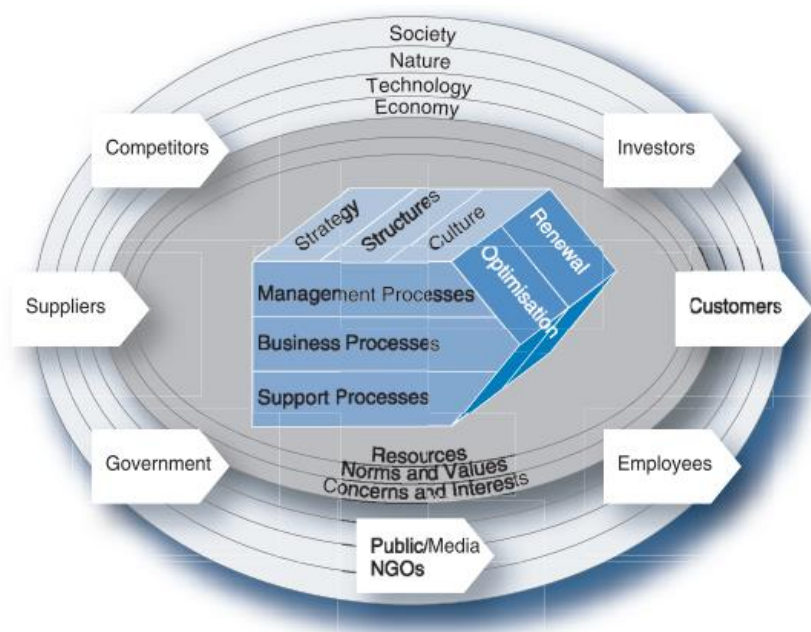

Figure 2: The New St. Gallen Management Model (Rüegg-Stürm & Grand, 2019, p. 43)

2.3.1 Structuring Forces

According to Rüegg-Stürm & Grand (2019, pp. 74–97), structuring forces refer to the foundation that ensures that the organizational value creation is aligned with the value creation addressees and can be delivered in a coherent, reliable, and efficient manner. The SGMM divides into four structuring forces: governance, strategy, structure, and culture.

The same authors underline that an organization's governance includes its central purpose, fundamental values and norms, and the relationship with its stakeholders. It is closely linked to the strategy, which in the sense of the SGMM refers to success drivers for securing the organization's long-term future. The aim is to show where and how the organization should develop in the future on a short, medium, and long-term horizon. However, the authors underline that strategy does not only refer to the plan but also its actual implementation.

The structure contains the organization's internal division of labor that determines which tasks with which competencies and responsibilities are to be performed by the organizational units and persons of a company. The structure is often visualized in an organization chart. However, the authors underline that a chart cannot regulate all the structuring and coordination requirements of an organization, which is why companies often have to rely on improvisation and self-organization - the informal organization - in day-to-day business.

As defined by the SGMM, culture involves the entire way of life and practice of an organization. It is aligned with a shared understanding of purpose and interpretation with defining values and norms. Behavioral maxims and rules regulate cooperation and conflicts between members of an organization. The authors conclude that culture cannot simply be placed alongside the other structuring forces but instead operates through them.

2.3.2 Processes

According to Rüegg-Stürm & Grand (2019, pp. 62–69), process-oriented work and agility have become much more critical in recent years. While the strong growth of organizations increasingly creates operational islands, cross-functional design and customer-oriented processes would be required instead. Processes are divided into management processes, business processes, and support processes.

The same authors summarize that management processes deal with the design, streamlining, and further development of organizational value creation. The SGMM distinguishes between three basic management processes: Orientation, strategic development, and operational coordination. Normative orientation processes serve to reflect on and clarify the normative foundations of the organization, while strategic development processes involve the development

and realization of a sustainable strategy. Operational coordination processes deal with prioritizing and coordinating business tasks and activities.

Business processes comprise the primary value creation of the organization. At the center of cross-organizational value creation is thereby customer orientation. Business processes are often divided into customer, service creation, service innovation, and core processes. On the contrary, support processes provide critical infrastructure structures and resources for the efficient execution of management and business processes. Support processes include recruiting, developing, evaluating, and rewarding employees to build a supportive corporate culture. Other tasks involve operating the physical and IT infrastructure, risk management, and legal affairs.

2.4 Trompenaars and Hampden-Turner Cultural Dimensions

Trompenaars & Hampden-Turner (1998, pp. 1–30) developed a framework that analyzes countries' cultural differences and how they affect the process of doing business and managing. The same authors observed that many international companies fail to globally apply standard management methods such as TQM because they underestimate the influence of culture.

As illustrated in Figure 3 by Trompenaars & Hampden-Turner (1998, pp. 22–25), culture consists of three layers. The authors explain that explicit culture is the observable reality such as language, food, and buildings. They are the symbols of a deeper level of culture: norms and values. While norms refer to a group's shared sense of what is right or wrong, values determine the definition of good and bad. Finally, the authors highlight that implicit culture is the deepest level and comes down to the core of human existence. It is, for example, the way people unconsciously solve problems, and each culture differs from others in the solutions it chooses.
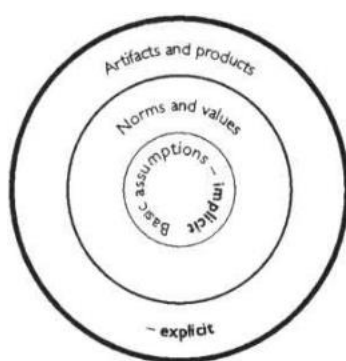
Figure 3: Three Layers of Culture (Trompenaars & Hampden-Turner, 1998, p. 22)

The problems - or dilemmas as they are called in the book - stem from three main areas: relationships with people, the perception of time, and the influence of the environment (Trompenaars & Hampden-Turner, 1998, p. 26). As shown in Figure 4, the same authors have identified seven cultural dichotomies in these three areas. The following explanations of the dimensions are based on the statements of Trompenaars & Hampden-Turner (1998, pp. 31–156).

Universalism	**Rules vs. Relationships**	Particularism
Individualism	**Personal vs. Collective Benefit**	Communitarianism
Affective	**Emotional Expression vs. Control**	Neutral
Specificity	**Low vs. High Context**	Diffuseness
Achievement	**Doing vs. Being**	Ascription
Sequential	**Linear vs. Cyclical Time Perception**	Synchronous
Internal Control	**Internal vs. External Orientation**	External Control

Figure 4: Trompenaars-Hampden Turner's Cultural Dimensions; Adapted from (Dela Cruz, 2020)

Universalism values clarity based on standards, uniform procedures, consistency, structure, and the letter of the law. Generally, rules and systems prevail over everything else to lead an orderly social life. On the contrary, particularism prioritizes relationships. It requires flexibility based on relations, is comfortable with ambiguity and pragmatic responses, and relies on the spirit of the law, but always in the context of relationships.

In an individualistic society, the focus is on the individual. People are selected for jobs based on their skills and compensated based on their performance. Success is often attributed to an individual. Conversely, in a communitarian society, the focus is on the group. There is an emphasis on culture-based selection of employees, consensus-based decision-making, and team rewards. Successes are typically attributed to a group and not an individual.

Highly affective cultures are characterized as humorous, expressive, verbally communicative, and tactile. They are often described as hysterical or overreactive. On the other hand, neutral cultures are rather serious, controlled, communicate non-verbally, and tend to be non-tactile. They might be described as being too cold, distant, or evasive.

Specific cultures are often described as analytical or differentiated. They appreciate verbal communication, easy contact, open and direct interaction, and numbers. This view contrasts with diffuse cultures, which are considered more holistic and integrated. They see the context, are slower to get personally involved, have polite and implicit communication, connect issues, and value relationships.

Achievement and ascription deal with the question of how status is accorded. In achievement-oriented cultures, status is gained by what one does. By performing well, any

individual can achieve status. In ascription-oriented cultures, status is more about who a person is: family background, age, gender, education, and position.

In the perception of time, there is the sequential or synchronous view. In sequential cultures, time is described as linear. An activity is made at a time, situations are planned, time is divided into different blocks, and considered universal. In synchronic cultures, time is cyclical. Activities can be done in parallel, multiple paths lead to one goal, time horizons blend, and time is subjective.

Lastly, an internally directed person is not comfortable losing control, can be dominant or aggressive, plans and controls, and does preventive maintenance. Conversely, an externally oriented person goes with the flow. He or she focuses on others and anticipates, is comfortable with ambiguity, reacts to the environment, and responds with options and scenarios.

2.5 Situational Leadership Model

The statements in this chapter regarding the SLM are based on the theory of Hersey & Blanchard (1988, pp. 169–201). They explain that the amount of guidance (task behavior) a leader gives, the amount of support (relationship behavior) a leader provides, and the amount of willingness shown by followers in performing a particular task, function, or objective are all factors of situational leadership. The authors assert that there is no perfect leadership style for influencing people, which is illustrated in Figure 5. Instead, any leadership behavior can be more or less effective depending on the readiness of the person a leader is trying to influence.

Figure 5: Situational Leadership Model (Hersey & Blanchard, 1988, p. 171)

Leadership style one implies a high degree of guidance and a low level of supportive behavior. In other words, the leader tells the employees what to do and how to do it. At the next level in quadrant two, the employee is not yet able to complete a task independently, but is willing and confident to try. In this phase, the focus is on selling, with the manager continuing to guide and support the employee through clarifying behavior.

In leadership style three, a person can perform a task but has just developed this skill and has not yet had the opportunity to gain experience. Therefore, a leader should give little guidance but take a supportive and communicative role through participating. In the fourth and last quadrant is a person who is willing and ready to perform a task. Therefore, the appropriate leadership behavior is delegation, where the employee can perform the task independently with relatively little guidance from the manager.

3 Results

In this chapter, the prerequisites and the success factors of the kaizen implementation are examined using the SGMM. The research is based on primary and secondary research.

3.1 Interviews

The author of this paper conducted five semi-structured interviews according to the methodology described in chapter 1.2. The interview summaries can be found in Appendix B.

The ZHAW professor and senior expert confirm that the primary success factors for a sustainable kaizen implementation are top management commitment, people development, organizational culture, and organizational structure. All interviewees agree that an appropriate (leadership) culture is fundamental to adopting kaizen. In addition, everyone shares the view that kaizen is not a short-term project and needs a long-term commitment from management and employees. Lastly, a hierarchical structure is considered a significant barrier.

However, there were differences of opinion, particularly concerning employee motivation and the approaches to optimizing the entire value chain. The following chapters will go into the individual aspects in more detail.

3.2 Management Processes

This chapter analyzes the management processes that should be in place for successful kaizen implementation. According to the ZHAW professor, an essential prerequisite is that top management truly supports kaizen because no one can force them to do it, and the implementation will fail without their commitment. According to Liker & Franz (2011, p. 60), another prerequisite is the *Hoshin Kanri* process, which refers to the process of breaking down the corporate vision into tangible plans and actions.

3.2.1 Management Commitment

Paipa-Galeano et al. (2020) argue that transforming the corporate culture at such a profound level will not work without the commitment of the C-suite. It acts as a primary catalyst because it determines the level and allocation of human, financial, and technological resources for kaizen activities (Yokozawa & Steenhuis, 2013). This argument is supported by García et al. (2014), who discovered a positive correlation between top management commitment and employee motivation based on quantitative research.

Rich & Bateman (2003) assert that a lack of resources is a distinct cause of kaizen failure. Paipa-Galeano et al. (2020) outline that resources include not only financial means but also time, personnel, infrastructure, and training. According to the same authors, a significant barrier to

adopting kaizen is the lack of alignment between the organizations and CI objectives, which forces management to compromise. Maarof & Mahmud (2016) conclude that resource availability and easiness of deploying human resources are the main contributing factors in sustaining process improvement activities. Moreover, Medinilla (2014, p. 26) warns that a lack of resources leads to employees solving problems superficially and often not even recognizing the root causes. In fact, this phenomenon is regularly observed by the interviewees.

The board member of SIGA and the lean manager of Schmidlin consider it fundamental that the organization makes sufficient resources available so that the submitted CIP suggestions can be processed. According to the board member, it is meaningless if a company demands 50 CIP suggestions from each employee but only has the capacity to process 15 of them. No timely feedback on CIP suggestions leads to employee frustration and harms the kaizen culture.

Visible Support

Holweg et al. (2018) measured that visible support from senior management resulted in 35 percent greater improvement within one year. Imai (1986, p. 15) confirms that it is common for Japanese executives to devote an entire day listening to presentations of best-practice examples and awarding the best ones. The professor from ZHAW argues that top management can show commitment by not delegating kaizen but by living it as a role model. For example, management can enforce the philosophy by regularly visiting kaizen boards or taking *Gemba* walks. In addition, successful projects should be celebrated. He underlines that without the support of the management, no ideas will come from the base.

It is evident that executive management must be trained to live up to this role model function. American steelmaker Worthington Industries, for example, has developed a two-week executive immersion program with *Gemba* visits to other sites and companies (Ghelber et al., 2017). According to the interviewees, Schmidlin and SIGA executives made trips to Japanese kaizen factories to experience the philosophy at the *Gemba*. The board member of SIGA claims that this business trip was an eye-opener for him. He experienced firsthand in a workshop how significant the leverage effect of continuous small improvements can be and came back to Switzerland full of enthusiasm for kaizen. The ZHAW professor supports the hands-on approach and believes a coaching or mentoring program makes more sense than weeks of classroom instruction.

Top-down vs. Bottom-up Implementation

According to Yokozawa & Steenhuis (2013), the West and Japan have different understandings of CI. While they characterize it as top-down and specialist-led in the West, the Japanese view calls for bottom-up and employee involvement. Bwemelo (2014) highlights the benefits of the bottom-up approach that forms the core of kaizen. In this paradigm, individuals

are promoted, motivated, and rewarded to work towards a shared vision and boost improvement (García-Alcaraz et al., 2017). Consequently, management's role is not to dictate the improvements but to establish an environment where employees can achieve their maximum potential and receive recognition.

The senior expert argues that implementing kaizen requires a mix of the top-down and bottom-up approaches. First, top management must express a clear commitment to kaizen. Then, the intended design of the philosophy is communicated downward. In addition, leadership must initiate the necessary structural (chapter 3.6) and cultural changes (chapter 3.7). After that, the bottom-up approach becomes highly relevant. Employees must identify potential for improvement and submit their ideas upward. Together with management, they are responsible for sustaining and progressing kaizen. The lean manager confirms the significance of the top-down approach. In his opinion, senior leadership needs to pass on the philosophy from level to level to ensure that all senior leadership is on board. He stresses that the higher up skeptics are found, the more challenging the kaizen adoption is. Furthermore, he concludes that it is the management's responsibility to continuously demand kaizen from the employees; otherwise, it will become stale.

In contrast, the board member of SIGA had less positive experiences with the top-down approach. He is not convinced of actively demanding kaizen. At his company, it had led to managers telling employees how to improve processes. Although employees had gone along with this reluctantly, they switched back to the old processes behind the managers' backs. It was not until the top management approached employees directly and asked for input that they were able to build an efficient kaizen culture. The board member thinks that the top-down approach did not work because managers were afraid of losing power. In his opinion, the appropriate leadership culture is a core prerequisite for the kaizen implementation. The topic of leadership is examined in more detail in chapter 3.7.3.

3.2.2   Hoshin Kanri

Liker & Franz (2011, p. 60) explain that *Hoshin Kanri* (management and control of the company's direction) refers to the process of breaking down the corporate vision into tangible plans and actions. According to them, Toyota develops a ten-year vision in each decade, divided into five-year interim plans for each unit. The same authors specify that these contain financial, personnel, and product development aspects and are regularly adapted according to the PDCA approach to reflect environmental changes.

According to Liker & Franz (2011, pp. 64–67), every January, the Toyota president makes a speech with a review of the last year and an outlook for the following year. After that, all regions, units, and teams have until the end of March to get their detailed annual plans approved. By the middle of the year, everyone reflects in the spirit of kaizen and can adjust the targets if necessary.

The same authors assert that this participative goal-setting process enables horizontal collaboration across all parts of the organization and ensures that every employee understands his or her contribution to the achievement of the long-term vision.

All interviewees agree that every employee needs to know the company's long-term vision, mission, and strategy. However, no interviewee mentions that the *Hoshin Kanri* process should be implemented in as much detail as at Toyota. Only the lean manager confirms that he sets individual goals with the departments at Schmidlin on an annual basis. On the contrary, the senior expert emphasizes that almost any suggestion that improves efficiency is an asset for the long-term strategy. Accordingly, the senior expert and the professor believe that the individual suggestions will not contradict the long-term corporate strategy. The board member of SIGA even states that it would not be appropriate to break down the vision into tangible goals for the employees in a top-down manner. Ultimately, employees should independently determine where they can contribute to the long-term company strategy with their CIP suggestions.

Hoshin kanri refers not only to the breaking down of targets but also to their adherence and control (Liker & Franz, 2011, p. 60). García-Alcaraz et al. (2017) summarize that management must be able to measure the current improvement progress. Nguyen (2019) reinforces the need for appropriate tools to measure and potentially adjust CI activities. However, Medinilla (2014, p. 25) warns that management should not tie kaizen too strictly to key performance indicators (KPIs), especially in the initial phase, as an over-emphasis ignores that CIs are incremental and not revolutionary.

In practice, there are different approaches. The lean manager explains that at Schmidlin, they measure the most important KPIs directly on-site, for example, with a simple tally sheet. The data is recorded and presented to management every week. Deviations are discussed immediately and, if required, supported by corrective measures. At SIGA, the most relevant KPIs are visualized in a cockpit in each department. In the case of processes, the main factors measured are lead time, quality, and costs. Today, the board member would add the factor of employee satisfaction. This opinion is shared by the senior expert, who identifies the number of CIP suggestions, the number of implemented proposals, the efficiency gain, and employee satisfaction as the leading KPIs.

3.3 Business Processes

Bwemelo (2014) argues that SOPs are the baseline for any CI activities. The lean manager of Schmidlin explains that all standards and process times are recorded on an internal portal called DokuWiki. Employees can access these standards from their computers or terminals in production. According to the lean manager, the standards are a basis for training new employees,

a starting point for all improvement activities, and a prerequisite for job rotation. Similarly, the department head at LUKS states that all processes are documented according to the same structure. The reader will find an example of an SOP at SIGA in Appendix A.

Medinilla (2014, p. 97) claims that taking a whole-system approach with an eye to the big picture is critical, rather than improving the system through suboptimization. The ZHAW professor, the board member of SIGA, and the lean manager of Schmidlin agree that the cross-departmental optimization of business processes is one of the most significant challenges for which many organizations have not yet found a suitable solution. To support interdepartmental improvements, Schmidlin and SIGA have introduced an improvement day. Every tenth workday, operational business is suspended, and departments tackle cross-functional improvement projects. However, both companies note that they still work more often on intra-departmental issues. According to the board member, SIGA attempts to organize the value chain in a more process-oriented way. He underlines that process-oriented value creation design means that the organizational structure is oriented more towards the process chain than functional areas, which helps companies to become more customer-focused.

The professor emphasizes that the organization must manage to break through the silo thinking of employees and create a customer focus. However, he underlines that the responsibility for increasing interdepartmental collaboration lies with the management. The senior expert believes that value stream thinking is the solution. He claims that the interdependencies are more transparent when the organization is divided into different value streams, and a holistic approach can be achieved. A completely different approach is taken at LUKS. Due to the hospital's rather bureaucratic and hierarchical organization, the teams focus mainly on intra-departmental processes, and employees are not actively encouraged to make suggestions for other departments.

3.4 Support Processes

This chapter primarily analyses three prerequisites related to support processes. An organization should adjust the hiring, development, assessment, and reward of employees; promote a kaizen mindset; and develop a system for submitting and sharing improvement suggestions.

3.4.1 Human Capital Management

Human capital management (HCM) plays a key role as employees are a central aspect of kaizen. According to Liker & Convis (2011, p. 49), HCM goes beyond pure human resources management tasks and emphasizes maximizing employee capabilities and engagement to build a long-term competitive advantage. They call for a paradigm shift towards seeing people as the organization's most important asset. This perspective is deeply embedded in Toyota's strategy and

contrasts with Scientific Management, a famous Western approach that prioritizes machines (Liker & Convis, 2011, p. 10). García-Alcaraz et al. (2017) underline that the integration of HCM is key to the success of improvement systems.

Recruitment

Saavedra & Opfer (2012) suggest that in the rapidly changing age of digitalization, soft skills and especially the willingness to learn are coming to the fore. Especially in an organization with a deeply integrated kaizen culture, employees are expected to do more than just perform their jobs (Liker & Convis, 2011, p. 4). Nguyen (2019) asserts that they are expected to bring a growth mindset that is always looking for improvements and creative solutions. He further argues that mindset is a variable that is difficult to change. Therefore, the recruitment process should not be reduced to skills only, but rather prefer people who can identify with the fundamental values of an organization's culture.

SIGA's board member is the only one to state that their hiring process has been completely revised. Since they are looking for eager employees who want to grow, soft factors such as willingness to change, curiosity, and communication skills are weighted much higher in the recruiting process. The board member believes that technical knowledge can still be gained through education, but soft factors are harder to develop. The ZHAW professor confirms this view. According to him, organizations are looking for employees who accept that processes may look completely different tomorrow than today. He believes that intrapreneurs - people who think and act like entrepreneurs - are suitable candidates.

This statement contrasts with the senior expert who does not see any need to adapt the recruitment process. Similarly, the department head says that while the recruitment process has not been adjusted at LUKS, she observes the candidates' reactions to the kaizen culture during the interview or trial day. However, she has never perceived this to be a problem. At Schmidlin, participation in improvement days is mentioned as a requirement in the job profile, but no significant adjustments in the recruiting process have been made.

Development

Ghelber et al. (2017) underline that kaizen needs substantial investments in developing people. The reader should first take a look at the example of Toyota and Japanese Confucius to gain a clearer understanding of the purpose of personnel development methods.

Hayashi & Baldwin (1988) summarized that many Japanese organizations introduced long-term hiring and life-stage based wages when faced with a scarcity of skilled workers after the Russo-Japanese War. They claimed that due to the long absences during the war, a job rotation system was adopted, emphasizing the pragmatism and adaptability of Japanese companies. The Confucian culture reinforced this interdependence - while top management was committed to

long-term development and job security, they expected employees to demonstrate above-average dedication to their company (Hayashi & Baldwin, 1988).

Liker & Convis (2011, p. 49) see many similarities between kaizen and Japanese Confucius. For example, the lifelong pursuit of self-development and a self-critical attitude with constant reflection. Further, they recognize deep respect for senior people and the responsibility to support themselves and others develop. Liker & Franz (2011, p. 97) conclude that people development at Toyota is highly dependent on a *Sensei* whose task is not to improve processes but to guide, coach, and develop people at the *Gemba* during their kaizen journey. The core skill of every *Sensei* is thereby the PDCA cycle - analyze a situation, develop a vision, work towards that vision, reflect, and start again (Liker & Franz, 2011, pp. 380–385). It is evident that many kaizen aspects are rooted in the history of Japan.

After providing the background of kaizen development methods, this paper examines current practices. Magnier-Watanabe (2011) underlines that once an organization has recruited new employees, they should receive on-the-job training. Similarly, García-Alcaraz et al. (2017) emphasize the need to train employees using quality tools and teamwork techniques to identify and solve problems. This claim is backed by Georgise & Mindaye (2020), who identify the lack of knowledge and problem identification and resolution methods as one of the critical barriers to CI. Medinilla (2014, p. 26) warns that using shortcuts and workarounds instead of understanding all the causal relationships may lead to further problems and neglect of the fundamental issues. To prevent this effect, Liker & Franz (2011, p. 68) propose that employees should develop ingrained mental circuits for finding solutions. Paipa-Galeano et al. (2020) conclude that employee training should include problem identification and solving skills, data analysis, and teamwork.

The senior expert and the professor confirm that an employee must learn a basic toolset to drive improvement. They mention methods such as 5-Why, 5S, or value stream mapping. According to the senior expert, the basics can be taught in a few hours. The training of managers is more advanced and takes about a day. Beyond that, there is always a need for specialists who receive in-depth training with problem-solving techniques and more expertise to assist with workshops or special topics. Both interviewees claim that it is mandatory to support the theory blocks with practical application at the *Gemba*. They further see great potential in introducing coaching or mentoring programs to develop employees on the job. However, the professor acknowledges that he has rarely seen such programs in such a pure form as in Japan. Instead, it is more common to find central lean units which coordinate kaizen activities.

New employees receive kaizen training at all interviewed companies as part of the employee onboarding process. It consists of both theoretical and practical parts. SIGA attaches

particular importance to *Dojos* (training place) and the 4-step method. The company follows the approach of learning by doing. However, different approaches are pursued in the continuous development of employees. At Schmidlin, the skills matrix is a central management tool. It provides the basis for rotation planning, employee evaluation, and salary development. In addition, employees review specific methods and current issues for a maximum of 15 minutes on each improvement day. LUKS does not have an established standard process for employee development related to kaizen. On the contrary, SIGA recently launched its "SIGA Grow" program, where employees can independently enroll in various modules taught by the internal employee development office (R. Sieber, personal communication, April 19, 2022).

Job rotation continues to be an essential instrument for people development in kaizen (Ghelber et al., 2017). Magnier-Watanabe (2011) argues that it increases motivation and allows the employee to break out of isolationist thinking and understand the organization from a holistic perspective. According to García-Alcaraz et al. (2017), job rotation reduces employee turnover and increases organizational flexibility, enhancing competitiveness. Schmidlin and SIGA support job rotation for the reasons mentioned above. While it is mandatory at Schmidlin, it is done on a voluntary basis at SIGA. At Schmidlin, it is planned by the management, and it is common to rotate every few hours. Thus, the job is more varied, and the company is no longer dependent on specialists. In contrast, SIGA does not want to force employees to rotate. However, it appreciates when employees move within the company to increase know-how and experience.

Performance Assessment

Ghelber et al. (2017) suggest changing performance evaluations by incorporating kaizen behaviors. Imai (1986, p. 14) confirms that the amount of suggestions is frequently used to evaluate the performance of employees and supervisors.

The ZHAW professor believes that a kaizen organization must move away from rewarding employees with the highest turnover or most ideas. According to him, Swiss people still live in a culture of rewarding the good and punishing the bad. However, kaizen organizations should reward good and bad ideas to stay innovative. He does not consider a quantitative evaluation of the submitted CIP suggestions to be suitable. Instead, if an employee submits comparatively few ideas, the supervisor should address the issue in a personal conversation.

In contrast, the senior expert does not feel that employee engagement in the kaizen culture is relevant to the performance assessment. However, he agrees that a quantitative assessment of CIP proposals is wrong. On the one hand, all employees are measured by the same criterion, even though there are always people who are more creative or better at planning than others. On the other hand, it leads to employees submitting the missing number of proposals of bad quality just before the deadline.

In practice, all interviewed companies have implemented the assessment differently. At Schmidlin, employees are assessed weekly to criteria such as the cleanliness of the workplace or standard-compliant working. In addition, the lean manager and the supervisor evaluate the submitted CIP suggestions according to quality. Lastly, employees receive a team rating for their performance on the improvement days. These results and the skills matrix serve as the basis for employee assessment and salary development. At SIGA, each employee must submit 50 CIP suggestions for improvement per year. The number of submitted suggestions is included in the employee evaluation. However, the board member is considering breaking down the number of proposals to the teams instead of the employees to strengthen collaboration and prevent internal rivalries. At LUKS, the number of improvements is not standardly measured. However, if an employee only submits a few ideas, the department head addresses the issue at the performance review. She is convinced that all employees have good ideas. According to her experience, a small number of suggestions is usually related to a lack of self-confidence or support.

Rewards

Bwemelo (2014) and Georgise & Mindaye (2020) claim that management should incentivize employees through monetary and non-monetary rewards. These findings contrast with Medinilla (2014, p. 63), who asserts that monetary rewards and bonuses are ineffective in creative knowledge-based environments. Liker & Convis (2011, p. 11) confirm that Toyota evades tying rewards to specific metrics, fearing that people will focus only on what is measured and neglect other parts of their job.

Neither the ZHAW professor nor the senior expert would consider individual monetary rewards. They describe financial incentives as counterproductive, crowding out intrinsic motivation. This effect is confirmed by Deci (1971), who researched the impacts of externally mediated rewards and found that paying people to do something they already want to do can kill their intrinsic motivation. Therefore, the professor and the senior expert prefer non-monetary rewards, such as recognition or working time to implement the CIP suggestion.

Although LUKS does not pay premiums for suggestions, the department head believes financial incentives could motivate employees. Schmidlin has introduced a bonus system where employees receive money for high-quality suggestions. However, according to the lean manager, this reinforces internal rivalry, a reason why he would not reintroduce this system in retrospect. He would instead focus on non-monetary rewards such as team events. According to the SIGA board member, a sense of achievement is much more motivating than financial rewards. He claims that the salary is only a hygiene factor and not an incentive for superior performance and that it is easier for a company to pay out money than to truly help employees succeed, although the latter is more effective than the former.

Motivation

Sanchez-Ruiz et al. (2020) identify resistance to change as one of the top three barriers to kaizen implementation in Spain. Their findings are in line with Georgise & Mindaye (2020), who state that lack of employee motivation is the second most crucial barrier to kaizen adoption in Africa, and Oki (2012), who emphasizes that worker acceptance must first be established before kaizen becomes productive. Medinilla (2014, p. 28) has studied the introduction more closely and argues that if a company distributes its employees on a normal distribution curve, only a minor part called early adopters are enthusiastic from the beginning. According to the same author, the crucial part consists of the early and late majority, who either remain silent or are skeptical. This phenomenon is known as the diffusion of innovations and is illustrated in Figure 6.
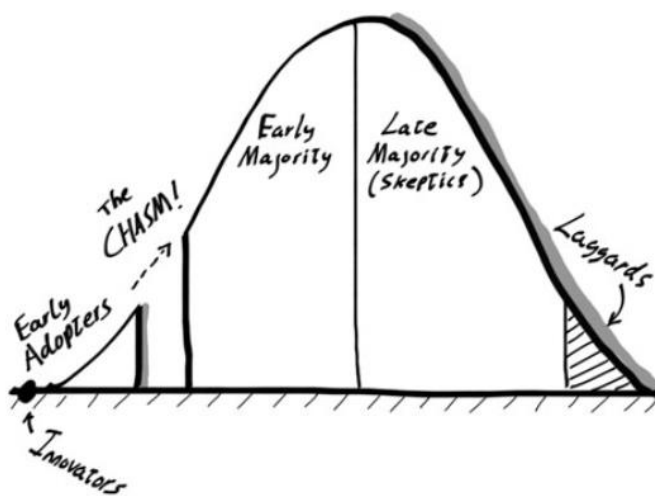
Figure 6: Diffusion of Innovations (Medinilla, 2014, p. 28)

Medinilla (2014, p. 28) underlines that Kaizen should be introduced in an isolated environment by early adopters so that the success stories can be spread to win over the majority. Chandrasekaran & Toussaint (2019) reinforce that managers should spread their own success stories to real problems in their organization, which is more successful than referring to others like Toyota.

García-Alcaraz et al. (2017) observe that another critical barrier to implementing kaizen in Western countries is employees' convictions. The same authors further outline the value of fostering a sense of belonging to the organization so that workers feel engaged and committed to the organization's long-term viability. This effect leads employees to commit to improving processes that directly affect them (Paipa-Galeano et al., 2020).

Similarly, Recht & Wilderom (1998) demand that an organization should invest significant resources in employee empowerment and adopt a no-layoff policy. This view is supported by Paul Brunet & New (2003), who assert that a significant determinant is an intrinsic motivation created by a psychological contract between the organization and its employees, for

instance, lifetime employment, profit sharing systems, and team-oriented annual goals. While some companies may find it challenging to provide lifetime employment, recent studies have shown intrinsic motivation and a growth mindset as critical factors (Nguyen, 2019). Frackleton et al. (2017) argue that HCM plays a crucial role in getting people into a growth mindset and encouraging independent thinking by letting them struggle and learn. Nguyen (2019) agrees that SMEs should conduct training to promote a growth mindset in CI practice.

Another prerequisite, according to the literature, is that management, as Toyota did after World War II, should communicate a sense of urgency (Liker & Franz, 2011, p. 62; Yokozawa et al., 2011). Medinilla (2014, p. 25) warns that people might not understand the need to go the extra mile or participate in the CIP unless there is a compelling reason. In his interview, the board member of SIGA emphasizes that the pressure to survive is an essential prerequisite for dealing with change and learning to appreciate it.

Similarly, the ZHAW professor mentions that people need a positive or negative target vision to change. In the kaizen context, a positive target vision can be that companies motivate their employees with the perspective of leaving work sooner or making customers even more satisfied. On the other hand, a negative target vision is that an organization constantly finds mistakes and wants to turn off that pain. The professor emphasizes that egoistic reasons tend to work better than idealistic ones. According to him, the organization should show the employees the personal benefits, such as less administrative work or the right to shape the day-to-day business. This statement is confirmed by Holweg et al. (2018), who suggest motivating employees by focusing on their pain points, for example, paperwork.

The LUKS department head asserts that employees need to understand the rationale and benefits of kaizen before they will embrace the philosophy. In addition, the SIGA board member mentions that employee motivation is strongly related to leadership culture (chapter 3.7.3). Similarly, the lean manager believes that when employees feel respected and empowered, it motivates them tremendously. Medinilla (2014, p. 32) agrees that empowerment and ownership can be powerful concepts that make everyone feel that improving the system is their job and that they have the authority to call for changes.

There is significant disagreement on the interview question about whether all employees can be motivated for kaizen. While the board member of SIGA strongly disagrees, the senior expert believes that anyone can be convinced to embrace the philosophy. The board member of SIGA reasons that there are always employees who dislike change and prefer to be told what to do. According to him, when an organization puts change at its core, it has to present employees with a choice: Either they appreciate change and stay in the company, or they resent change and are in the wrong place.

The board member finds approval from the ZHAW professor. He believes that there will always be a small percentage of employees whom emotional or logical arguments cannot convince. However, at the beginning of the implementation phase, the organization must seek to engage all employees. From a discussion with American kaizen specialists, he gathered the rule of thumb that four enthusiastic employees roughly compensate for one skeptic. Therefore, he would not invest too much time in the skeptics but instead support and promote the dedicated employees.

The senior expert believes that an organization can expect all its employees to participate in kaizen and improve process structures as part of their job. However, an organization should not assume that every employee wants to change the organization fundamentally. He acknowledges that there will always be some employees who like change less than others. Nonetheless, all employees want to do their job as well as possible and are willing to change things to improve their work. He has never seen an employee completely refuse to participate in kaizen. From the senior expert's perspective, employees do not need to be motivated for the philosophy. Instead, an organization must focus on eliminating the demotivating factors such as no timely processing of CIP suggestions or a toxic corporate culture where people work against each other instead of with each other.

In addition, the senior expert calls for the organization to create ownership of their suggestions at the employee level. This way, the employees are directly involved in the implementation and cannot complain that others are to blame if their ideas are not pushed forward. The department head from LUKS and the lean manager from Schmidlin agree with the senior expert that all employees can be motivated for kaizen, although some more and some less strongly. The skeptics, in their opinion, need more support or can be involved in simpler projects.

3.4.2 Suggestion System

A suggestion system is a method by which employees can communicate their ideas bottom-up in the hierarchy (Bwemelo, 2014). According to Imai (1986, p. 14), it is an integral part of kaizen. Medinilla (2014, p. 88) distinguishes between push-based and pull-based feedback tools. According to the same author, push-based ideas refer to a suggestion box or informal conversation, whereas pull-based ideas come from constantly visualizing information to discover deviations.

García-Alcaraz et al. (2017) explain that companies use individual and group suggestion systems such as quality cycles to encourage participation in CI efforts. Aoki (2008) questions the effectiveness of individual suggestion systems and considered group-based suggestion systems superior.

The senior expert highlights that it is vital to document the previous and new state of processes. The documentation includes a shared definition of the baseline, analysis of the situation, and description of the problem. Then, a solution is developed using standard problem-solving mechanisms, and the new state is measured. In this way, the creator of the suggestion knows directly how much efficiency improvement it has achieved and can become aware of the leverage effect of its suggestions. Another benefit is that the creators experience a sense of accomplishment by measuring how much they have advanced the company.

In practice, the improvement system varies depending on the degree to which kaizen is integrated into the culture. According to the department head, employees at LUKS can write down CIP suggestions on a blank paper and post them on the kaizen board. Every second week they have a kaizen meeting of a maximum of 15 minutes where the suggestions are discussed with the team. The CIP suggestion is implemented and tested in a two-week test phase until the next team meeting. If it was successful, it is implemented permanently or otherwise reversed.

According to the board member and lean manager, SIGA and Schmidlin have a comparable 9+1 system. Employees submit CIP suggestions for improvement during nine working days, which they implement either directly in day-to-day business or on the tenth improvement day. This improvement day takes place every two weeks, and throughout it, operational business is completely suspended to concentrate on CIs. The lean manager underlines that at Schmidlin, about 25 to 30 teams work on different projects every improvement day.

Nevertheless, there are differences in the organization of the suggestions system. According to the board member, the suggestion system at SIGA is completely digitalized for efficiency reasons. Employees have to formulate their ideas according to AZPERK (initial situation, goal, planning, decision, realization, control) and specify at least three possible variants for execution in each CIP suggestion. Every department has a daily meeting of a maximum of 15 minutes at which the new CIP suggestions and other topics are discussed. An example of the SIGA template can be found in Appendix A.

Schmidlin's suggestion system is still organized physically according to the lean manager. He explains that the employees write their CIP suggestions on a blank template and can submit them to kaizen boards or in mailboxes. They are then collected once a week, evaluated, recorded, and distributed to the responsible departments. Once the proposal is implemented, it goes back to the creator for validation. The lean manager states that Schmidlin has already considered digitizing the suggestion system, but they fear that they will receive fewer suggestions and therefore tend towards a hybrid solution.

The ZHAW professor suggests that building internal marketing helps to share best-price examples. For example, the organization might consider setting up a dedicated wiki page, a

newsletter, a forum, or short stand-up meetings (Medinilla, 2014, p. 55). The lean manager highlights that at Schmidlin, 10 to 15 teams briefly present their projects to the entire workforce to share ideas and best practices on each improvement day.

3.5 Governance

Liker & Convis (2011, p. 54) emphasize the significance of defining an organization's core values and behavioral norms to align kaizen with them. Liker & Franz (2011, p. 59) argue that employees are better motivated by a vision with deeper social meaning beyond just making a profit than by a localized goal with no apparent purpose. This view is confirmed by Medinilla (2014, p. 10), who asserts that Toyota sees kaizen as having a more noble cause beyond simply reducing costs. Furthermore, the same author maintains that kaizen is not a temporary effort but a lifelong journey of searching, reflecting, learning, and improving.

Sturdevant (2014) identifies transparency and honest reflection as essential corporate kaizen values. Magnier-Watanabe (2011) summarizes that a high level of trust and a no-blame culture is necessary for managers and employees to report mistakes. Medinilla (2014, p. 24) confirms that managers' attempts to hide mistakes and focus on blaming someone for a problem rather than debating ways to improve are the main barriers to implementing kaizen. The same author further concludes that if an organization does not have any problems, it has a huge problem. Moreover, Sturdevant (2014) claims that managers still prefer to focus on the good things rather than areas with optimization opportunities, even though honest reflection and ambitious goals are prerequisites for new challenges.

The senior expert emphasizes that the appropriate organizational behaviors and values are a foundation for employees to report mistakes and submit ideas. In an error-oriented blame culture, no employee will voluntarily report an issue. Therefore, the organization needs to create a problem-solving, and improvement-oriented atmosphere where mistakes are part of the game and employees see them as an opportunity to improve. Ultimately, the senior expert believes that a person learns more from failures than successes. The department head at LUKS highlights that it is essential that employees do not fear consequences for making mistakes or coming up with bad ideas. The board member of SIGA agrees and adds that a working environment needs to be created where employees are bothered by mistakes and report them. At SIGA, it is constantly reinforced that mistakes are assets and that the processes are to blame for mistakes, not the people. According to the board member, a current issue at SIGA is that people tend to become conformists above a specific size of an organization. He thinks they tend to report what the management wants to hear instead of raising anything problematic, which means problems no longer come to light.

Another governance issue is the relationship with stakeholders in the company. The senior expert emphasizes that the stakeholders are also a part of the kaizen culture. Traditional instruments such as supplier or customer surveys or feedback loops can be used to integrate stakeholders and identify the potential for improvement. Similarly, the lean manager explains that at Schmidlin, they work closely with key suppliers and customers to improve interface processes. The board member of SIGA agrees and asserts that it is of no use if a company can react flexibly to market changes but its suppliers cannot. In addition, investors must be convinced of kaizen and understand that it is not a quarterly project. According to the board member, it helps that SIGA is owner-managed and therefore has more flexibility for long-term projects than publicly traded organizations. The lean manager confirms that Schmidlin is also owner-managed.

3.6 Strategy

Paipa-Galeano et al. (2020) assert that one of the main barriers to adopting kaizen is the lack of alignment of organizational strategy with CI objectives. The same authors specify that it is necessary to prioritize CI goals, communicate strategic objectives to all levels of an organization, and measure and visualize the progress with a measurement system to incorporate kaizen into the organizational strategy efficiently. For employees to direct their CIP suggestions to the long-term organizational strategy, management must set clear improvement goals that deliver the most customer value. Medinilla (2014, p. 88) warns that an organization cannot strive for everything simultaneously - bigger, cheaper, faster, and better.

Likewise, the lean manager emphasizes that the CI strategy must be aligned with the customer focus. He believes that a company must first find out what its customers want and what they are willing to pay for it. In the case of Schmidlin, which produces bathtubs, shower bases, and washbasins, the primary targets are fast, customized, and of high quality. Imai (1986, p. xxxii) highlights that a kaizen strategy must seek to satisfy the customers and serve their needs to stay in business and make a profit. He concludes that CI activities eventually lead to increased customer satisfaction.

Béndek (2016) and Hosono (2009) state that many organizations overestimate the short-term benefits of kaizen because CIs do not immediately lead to sharp cost reductions. Moreover, they assert that many Western organizations mistakenly see kaizen as a tool primarily designed to cut costs; however, this paradigm does not align with the long-term perspective of Japanese companies. Although cost reductions are a part of kaizen, according to Liker & Convis (2011, p. 9), short-term savings should not be the only focus because not all factors, for instance, training or leadership development, have an immediate calculable return on investment. Chiarini et al. (2018) similarly recommend that management focuses on long-term performance rather than quarterly results. Magee (2008) acknowledges that Toyota executives are never heard talking

about numbers; instead, numbers are a byproduct of day-to-day operations and serve more as validation than substance to build long-term success. Imai (1986, p. 165) concludes that if an organization concentrates on people development and process improvements, profits will increase on their own. All interviewees mention that the main barrier is that kaizen is seen as a short-term or temporary project. According to the board member of SIGA, after 15 years of working with kaizen, the company is far from reaching its target. The professor summarizes that kaizen implementation is a marathon and not a sprint.

In addition, interviewees agree that sustaining kaizen over the long term is a major strategic challenge. The board member of SIGA confirms that kaizen is currently no longer as effective in the company as it was when it was introduced. For him, success factors for long-term sustainment are the appropriate organizational structure and culture. Additionally, it is equally crucial to allow change at the highest level and keep capacity free for managing change.

The senior expert often experiences a similar pattern in practice. When introducing kaizen, many organizations start to apply standard concepts such as 5s or Kanban. At some point, the progress decreases, and they start to put kaizen into context by developing operating systems such as the Toyota Production System. Over time, the number of CIP suggestions and efficiency gains decreases again, so kaizen must be anchored at a more profound level which needs to be done through leadership performance. The ZHAW professor agrees that visible management commitment (3.2.1) and rituals such as kaizen meetings, kaizen boards, and *Gemba* walks help sustain it over the long term. Moreover, kaizen must be a strategic priority. The LUKS department head confirms that rituals are necessary, as the daily work routine is fast-paced and ideas are quickly forgotten.

3.7 Culture

García-Alcaraz et al. (2017) highlight the need to align the organizational culture and kaizen. As a consequence, many authors have researched the influence of culture on kaizen adoption in different societies (Hosono, 2009; Oki, 2012; Rich & Bateman, 2003; Shaari, 2010).

Yokozawa & Steenhuis (2013) measured that the two national cultural factors of employee willingness (commitment) and employee discipline correlate positively with kaizen transfer. Moreover, the same authors argue that it is easier to transfer kaizen to Southeast Asian countries than to Europe because of their closer cultural proximity. Within Europe, according to the same authors, implementation is more feasible in Germany than in the Netherlands because although German workers generally show less eagerness than in Asian cultures, they are more obedient. For example, German employees are assumed to have a stronger sense of discipline.

However, as soon as something is not included in the job description, employees do not feel responsible or obligated to do it - at least not without any extra (monetary) incentive.

3.7.1 Trompenaars and Hampden-Turner Cultural Dimensions

Since culture is highly complex and challenging to measure, it is hard to compare two cultures with each other. However, one approach is provided by THTCD, which identifies seven cultural dimensions (Trompenaars & Hampden-Turner, 1998, pp. 31–156). The meaning of these dimensions is outlined in more detail in chapter 2.4.

The results of this comparison must be interpreted with caution. On the one hand, the Japanese kaizen culture cannot be equated with the general Japanese culture, and, on the other hand, the corporate culture is not the same in all Swiss companies. Nonetheless, the comparison provides a basis for identifying gaps between Japanese and Swiss cultures and for deriving some possible management dichotomies.
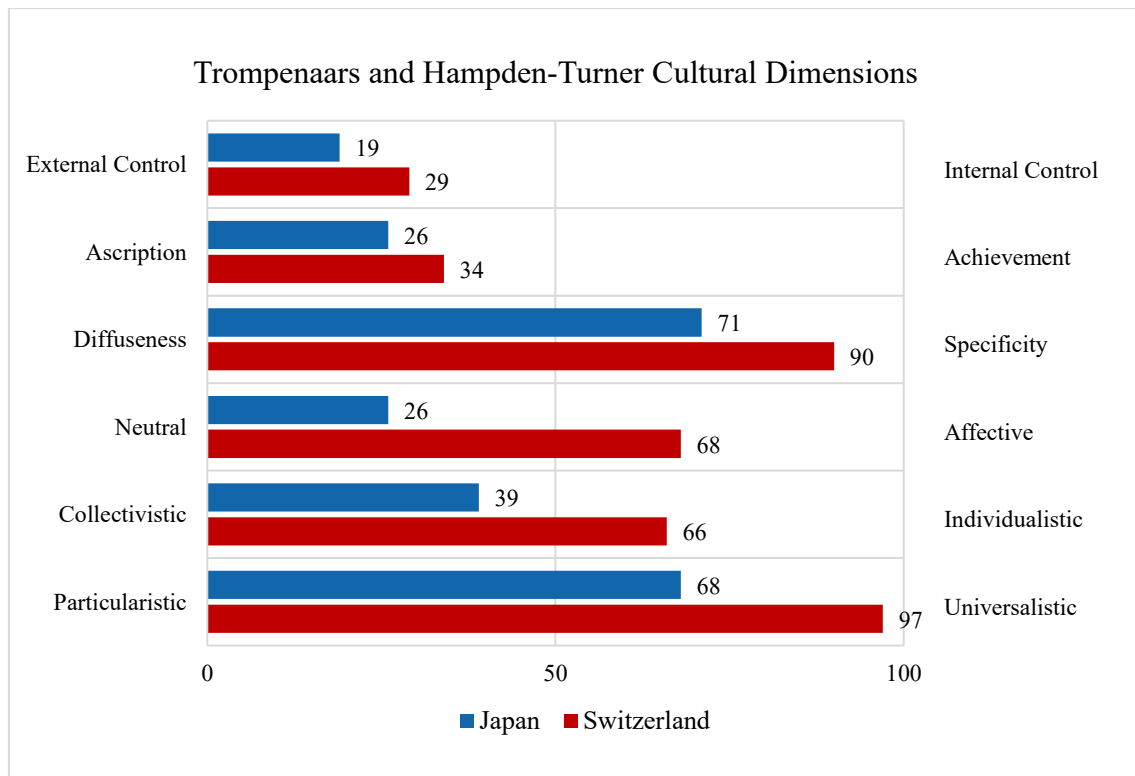
Figure 7: Cultural Comparison of Switzerland and Japan; Adapted from (Trompenaars & Hampden-Turner, 1998)

Figure 7 illustrates that Japan tends to be classified on the left in all dimensions, while Switzerland follows a rightward trend. The most significant differences are in the areas of context, emotional expression, social behavior, and rules and relationships. These four dimensions are examined in more detail in the following chapters.

Specific vs. Diffuse

Although both societies tend toward specificity, Japan is still slightly more diffuse while Switzerland is very specific.

Specific	Diffuse
Mechanism	Organism
Division of Labor	Integration of Labor
Results	Processes
Bottom-line	Goodwill
Text	Context
Report	Rapport

Table 4: Management Dichotomies in Specific vs. Diffuse; Adapted from (Trompenaars & Hampden-Turner, 1998, pp. 31–156)

As shown in Table 4, diffuse cultures have a more holistic approach to problem-solving than specific ones. Diffuse cultures view an organization as a constantly changing organism in which different parts are interrelated, and changes emerge. On the other hand, a high degree of task specialization, departmentalization, many layers of management, and centralized decision-making characterize the mechanistic view. This perspective explains why division of labor is seen as the basis for specialization and efficiency in the specific view. The other approach focuses less on specialization and more on integrating the workforce into the organism of the organization.

In specific societies, the focus is on results and facts, meaning that workers have clear assignments with goals and focus on achieving them. Ultimately, the supervisor is mainly interested in the bottom line. In diffuse cultures, instructions tend to be ambiguous and without clear goals, and the worker is expected to choose the right way to improve the quality of a process on his or her own. The employee is judged by the effort and less by the results.

Finally, THTCD asserts that the Swiss language is low context, while Japanese is one of the top high-context languages. While Swiss people mean what they say, the Japanese statements are more ambiguous. This difference is expressed in the sense that the specific supervisor prefers a rapport with results and numbers, whereas in Japan, the personal relationship is paramount.

In summary, it will now be apparent to the reader that kaizen is a reconciliation of both dimensions. The organization is seen as a constantly changing organism, and the holistic approach is more relevant than clear boundaries. Although kaizen is process-oriented, KPIs are measured to determine deviations, which means that results are equally relevant. Even though employees have to follow SOPs and show discipline, they are not only seen as part of a system but as the core of the organization. Further, it is evident why job rotation is considered a crucial tool for kaizen. The organization and its environment are constantly changing, and employees move

within the organization to respond to these changes. In addition, the employee gains a more holistic approach to the organization and its processes.

As mentioned earlier, the mechanistic and organic ways of thinking are two completely different ways of looking at the design of an organization. Liker & Franz (2011, pp. 83–86) observe that, in general, Western organizations with a mechanistic mindset repeatedly fail to implement kaizen.

Factor	Mechanistic thinking	Organic thinking
Worldview	A simple linear chain of cause and effect	An interdependent, interacting system
View of environment	Control it, buffer organization from change	Embrace it, respond flexibly to change
Role of people	Extensions of machines	Thinking and improving
View of people	Interchangeable parts	Appreciating assets
Controls	External supervisors, specialists	Internal self-regulating subsystems
Management style	Autocratic, command and control	Participative, collaborative
Purpose	The organization's goals only	Members' and society's goals
Risk-taking	Discouraged, if it is not broken, do not fix it	Encourage, experimentation is the best teacher
Change management	The primary responsibility of management and staff specialists	The primary responsibility of work groups

Table 5: Mechanistic vs. Organic Thinking; Adapted from (Liker & Franz, 2011, p. 85)

Table 5 shows the reader the difference in the employees' roles from the two points of view. They are exaggeratedly seen as interchangeable extensions of machines without responsibility in the mechanistic paradigm. Moreover, the management and the specialists are responsible for change management, and nothing should be fixed that is not broken.

In the more complex organic paradigm, they are an organization's core. They have more responsibility and are expected to drive the changes. Learning by doing is the best method for personal development. From these two opposing perspectives, it is recognizable that kaizen tends to follow the organic way of thinking.

Neutral vs. Affective

The most significant difference between the Swiss and Japanese cultures can be found in this dimension. While affective cultures are more expressive in their behavior, neutral societies

tend to be more restrained and controlled. However, there is no association as to how this is relevant to the kaizen culture. Therefore, this dimension is not discussed any further.

Individualism vs. Collectivism

While Japan is strongly collectivistic in its orientation, Switzerland is more individualistic. Table 6 below again lists some management dichotomies.

Individualism	Communitarianism
Shareholder	Stakeholder
Profitability	Market share
Competition	Cooperation
Referee	Coach
Lone Hero	Hero Escorted
Voting	Consensus

Table 6: Management Dichotomies in Individualism vs. Communitarianism; Adapted from (Trompenaars & Hampden-Turner, 1998, pp. 31–156)

In the individualistic view, the focus is on the individuals, numbers, and profits. There are clear boundaries within which employees are allowed to move. Everyone has to stand up to everyone else, and success is usually attributed to an individual. In the communitarian approach, the group opinion is in the foreground. There is more emphasis on collaboration, and success is mainly attributed to teams. Boundaries are less clear, and employees can go beyond boundaries with support. It can be concluded that kaizen is built more on teamwork and collectivism.

Universalism vs. Particularism

Although both cultures tend toward universalism, Japan still has a slightly more particularistic approach. To this end, Table 7 presents some management dichotomies.

Universalism	Particularism
Scientific management	Human relations
Global corporation	Multinational corporation
Mass Production	Customization

Table 7: Management Dichotomies in Universalism vs. Particularism; Adapted from (Trompenaars & Hampden-Turner, 1998, pp. 31–156)

The universalistic approach follows classical scientific management concerning the view of man and machine. Moreover, everyone must follow the same rules, and personal relationships do not justify exceptions. The global corporation treats all markets equally, and the products follow clear standards. On the other hand, the particularistic approach views personal relationships as valuable, which means that the rules can be bent depending on the customer, employee, or market. In this context, kaizen pursues a reconciliation of both perspectives.

Although it places a high value on personal relationships and employees, universal standards and mass production are equally fundamental elements.

3.7.2 Perception of the Interviewees

In general, all interviewees perceive a difference between the general Swiss corporate culture and the Japanese kaizen culture. According to the ZHAW professor, there is a deep respect for employees in Japan. In contrast, there are still many hierarchical cultures in Switzerland where the employee does not dare to say anything to the boss, which leads to ideas coming top-down instead of bottom-up.

The senior expert explains that, probably due to the influence of the samurai culture, loyalty towards the company, precision, meticulousness, and the urge to constantly look for improvements are generally higher in Japan. They are also better in incremental improvements with minor progress day by day. On the other hand, Swiss managers value big throws and radical improvements. Similarly, the lean manager believes that Swiss persons sometimes do not take enough time to create a shared understanding of the problem but instead look for a quick fix. Imai (1986, pp. 23–28) confirms that it is evident that Western companies often prefer the great-leap approach, while Japanese companies generally favor the gradualist one.

The department head from LUKS, the lean manager, and the senior expert perceive Switzerland as more individually oriented than the Japanese kaizen culture. For this reason, the senior expert would not set individual objectives or rewards with employees but instead promote the team culture in companies to avoid reinforcing individualism.

Both the board member and the lean manager claim that Japanese employees have a different mentality in terms of striving for perfection. Moreover, in Japan, kaizen is strictly enforced down to the last employee, whereas in Europe, it is usually done only half-heartedly. However, the board member emphasizes that he is not convinced by either the Asian or the European management culture. He believes that there must be better approaches in which the employees at the *Gemba* are given more opportunities.

3.7.3 Leadership

Ghelber et al. (2017) call for an organization to free itself from its traditional leadership methods to make way for kaizen leadership. In a kaizen organization, the leader's primary role is to develop his or her employees and be a true advocate of CI (Paipa-Galeano et al., 2020). Ghelber et al. (2017) specify that a leader can contribute the most value through teaching and mentoring. Moreover, great leaders are responsible for challenging their employees - if they do not come up with good ideas, it is seen as a failure on the part of the leader (Chiarini et al., 2018). According

to Sturdevant (2014), a suitable method is that instead of telling employees what to do, a manager should present them with the vision and let them solve the issue themselves.

In summary, the organization must be prepared to align its leadership culture with kaizen. Frackleton et al. (2017) explain that organizations need a paradigm shift from managers to leaders that frees them from a hierarchical mentality and creates ownership at all levels. Furthermore, the same authors found that outcomes increase exponentially once organizations stop focusing exclusively on results-based management. Liker & Convis (2011, p. 8) underline that kaizen will not become self-sustaining without managers' constant vigilance and commitment. Lastly, Medinilla (2014, p. 95) asserts that shop floor management (SFM) is crucial; otherwise, kaizen could be seen as another form of top-down corporate policy.

According to the ZHAW professor, the leadership role of managers changes substantially with the implementation of kaizen, at least in theory. Instead of the traditional leadership culture, the concept of servant leadership is moving to the forefront. In servant leadership, managers serve as facilitators so that employees can perform at their best. However, the professor observes that the leadership role often changes relatively little in practice.

A different view is taken by the other interviewees, who see the leadership culture at the core of kaizen. The senior expert emphasizes that sustaining kaizen over the long term is a leadership responsibility. He sees employee involvement and SFM as essential elements across all levels and hierarchies. According to him, more employee responsibility leads to higher satisfaction and much higher outcomes. SFM is also mentioned in the literature by Aoki (2008) and Chiarini et al. (2018) as an essential kaizen tool.

The SIGA board member argues that leadership culture is one of the most significant success factors in kaizen adoption. He sees the new role of managers, similar to the ZHAW professor, as a facilitator to enable employees to perform at their best. He refers to the SLM as the basis for the management culture at SIGA. The model is introduced in chapter 2.5. According to him, micromanagement, or first-quadrant leadership, is a significant barrier to kaizen. He concludes that an organization cannot expect employees to participate and make suggestions if, at the same time, they are always dictated what to do and how to do it.

The board member sees coaching and staff development as the main task of kaizen leaders. Their task is to bring employees from the first quadrant to the fourth, where they perform independently in the company's interest. The HCM strategy must support this change, and classroom teaching is not suitable for this, especially from the second quadrant onwards. Consequently, he considers coaching and mentoring programs to be crucial instruments for further developing employees. He emphasizes that an employee is not typically situated in one

quadrant but that it depends on the task. Lastly, he concludes that many managers fall back into first-quadrant leadership because of time pressures or fear of losing power.

Another issue is the development of new leaders. According to the SIGA board member, many leadership programs train potential leaders only until the second quadrant. However, it is critical that what is learned is put into practice immediately after the training to achieve the fourth quadrant. To do this, tools such as mentoring or coaching programs again become imperative.

Approaches to leadership development can also be found in the literature. According to Liker & Convis (2011, pp. 66–68), Toyota attaches a great value to the *Sensei*. The same authors point out that a *Sensei* needs about 25 years of practical kaizen experience to teach other managers in the best possible way. Ghelber et al. (2017) explain that at Export Development Canada, 70 percent of executives are promoted from within. The same authors believe that an essential capability of managers is a holistic understanding of the company. Therefore, potential managers are often assigned a project in an unfamiliar area that affects the entire company prior to being promoted.

3.8   Structure

García-Alcaraz et al. (2017) claim that the organizational structure is one of the main barriers to kaizen adoption in Western countries. Hayashi & Baldwin (1988) and Yokozawa et al. (2014) observed that Japanese companies tend to be more organically structured than non-Japanese cultures and that kaizen does not work well with hierarchical structures.

As already established in chapter 3.7.1, a mechanistic organization structure has a high degree of standardization and formalization, while an organic organization structure has a low level of specialization and hierarchy (Adler, 1999). Yokozawa & Steenhuis (2013) underline that Japanese organizations leverage this mixture for competitive advantage by developing mechanistic structures such as standardization to decrease variation in processes and establishing them on organic structures such as teamwork and employee participation to reduce bureaucracy. Evidence of this reconciliation can be found in Table 8.

Factor	Mechanistic structure	Organic structure
Control	Tight formal control of most operations through sophisticated control and information systems	Informal control, heavy dependence on informal relations and norm of co-operation for getting work done
Standards	Strong emphasis on always getting personnel to follow the formally laid down procedures	Strong emphasis on getting things done, even if this means disregarding formal procedures

Environment	Holding fast to true and tried management principles despite any changes in business conditions	Adapting freely to changing circumstances without too much concern for past practice
Job Description	Strong emphasis on getting line and staff personnel to adhere closely to formal job descriptions	The requirements of the situation and the individual's personality define proper on-job behavior

Table 8: Mechanistic Structure vs. Organic Structure of Organizations; Adapted from (Covin & Slevin, 1998, p. 232)

Kaizen relies on informal control and ad hoc informal relationships to drive improvement in the area of control. On the other hand, great emphasis is placed on having employees follow formal processes. While kaizen promotes that the enterprise is constantly changing and job descriptions are to be viewed loosely, employees must still adhere to policies and procedures when changes occur. It becomes evident that a kaizen structure contains mechanical and organic elements.

All interviewees maintain that cross-functional cooperation to enhance the entire value chain is essential but difficult to foster. In the literature, fluid and prompt interdepartmental communication - horizontal and vertical - and a structure that is as horizontal as possible are brought up as possible approaches (Frackleton et al., 2017; García-Alcaraz et al., 2017). Magnier-Watanabe (2011) maintains that the greater degree of autonomy gained through a horizontal structure stimulates exchange through informal ad hoc relationships within the organization.

According to the ZHAW professor, a radical kaizen implementation in terms of corporate structure would be self-organization. However, he has rarely observed this in practice. A less dramatic implementation is still a hierarchy, but with a stronger focus on participation where employees are involved in decision-making. The senior expert also concludes that an organization must shed the directive and adopt a participatory approach. He claims that an organization needs to reverse the hierarchical pyramid and put processes at the top.

These perspectives are consistent with the practical implementation at Schmidlin and SIGA. According to the lean manager, Schmidlin has created a flatter organizational structure. They have also introduced a central lean unit that reports directly to management. According to the board member of SIGA, the company is currently struggling with challenges in this area. Due to solid growth in recent years, new levels of management have been introduced, increasing hierarchy and service areas, which is toxic to the kaizen culture. He summarizes that information is filtered too tightly with many management levels, leading to executive management receiving almost no information and, therefore, skipping all levels and micromanaging the company in the first quadrant. The higher inefficiency of kaizen in larger organizations is confirmed by Nguyen (2019), who examined that SMEs are more successful in implementing kaizen.

4 Discussion

The overall results confirm the impression that employee development is at the core of kaizen. If employees do not engage in the kaizen culture and contribute suggestions and ideas, then kaizen is a token exercise. In particular, the term employee empowerment is widely used in the literature associated with kaizen. Similarly, all interviewees consider employees a core element of the philosophy. In the following chapter, the reader will find a model that concludes the most significant learnings from the results and the literature review.

4.1 Kaizen Implementation in Swiss SMEs Model

An organization must enable its employees to do more than simply execute their processes. With kaizen, the management is no longer solely responsible for the company's development, but the employees are given more responsibility and autonomy to advance themselves and their work. They are expected to continuously look for improvements while working independently and striving for perfection. Therefore, Figure 8 places employee empowerment at the center. The three prerequisites, the properties of the structuring forces, and the PDCA principle are discussed in the following chapters.
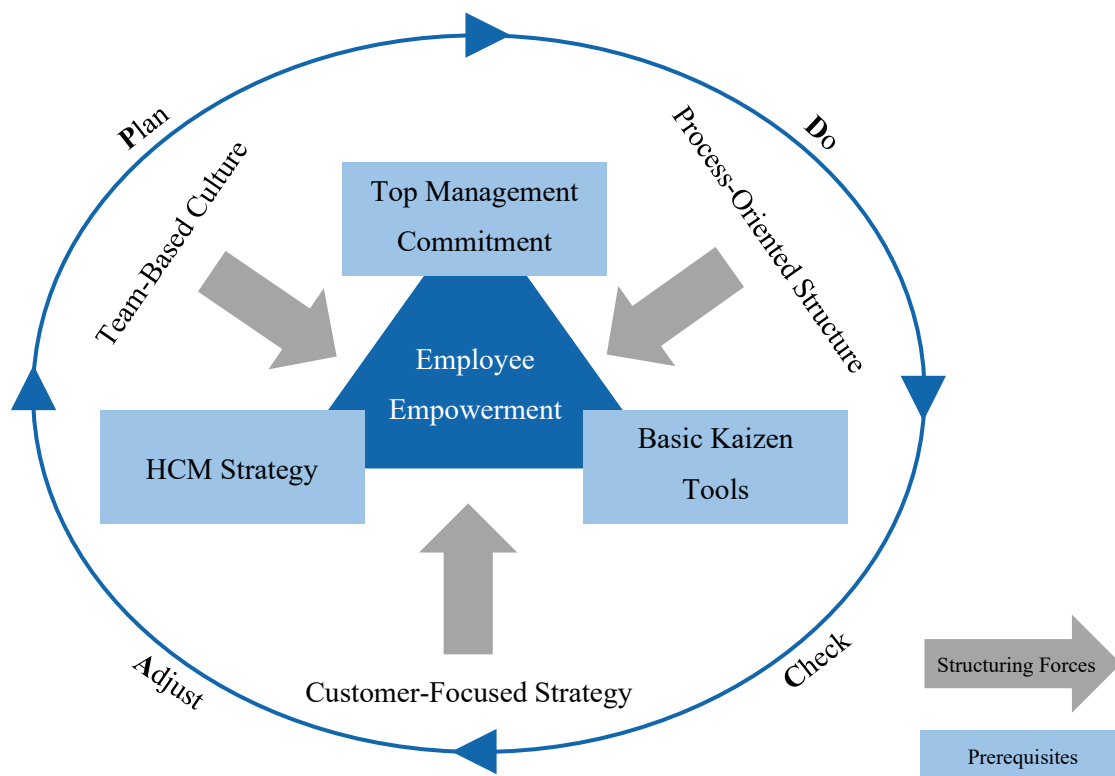
Figure 8: Kaizen Implementation in Swiss SMEs Model

4.1.1 Prerequisites

Three prerequisites are considered particularly relevant to employee empowerment: top management commitment, HCM strategy, and basic kaizen tools. The individual factors are outlined in detail in the subsequent sections.

Management Commitment

This finding confirms previous results, where management commitment was suggested to be a prerequisite for the kaizen implementation. Several aspects have to be taken into account here. On the one hand, studies have shown that visible support measurably increases improvements (Holweg et al., 2018). Visible support means, for example, *Gemba* walks, attending kaizen meetings, or recognizing employee efforts by listening to best-practice presentations.

On the other hand, top management determines the allocation of corporate resources, for example, financial and human resources and technology. First, enough resources must be spoken for the kaizen implementation. The philosophy is not a short-term project, but needs long-term changes in the corporate structure and culture, and the resources necessary should not be underestimated. The SIGA board member highlights an additional point: An organization must have sufficient capacity to implement the employee's proposals. Under no circumstances should it demand more suggestions than it can process. If employees do not receive feedback on their suggestions, they perceive kaizen as a token exercise, which is a strong demotivating factor.

Different views exist on whether kaizen needs to be demanded top-down or driven bottom-up. Top-down advocates argue that kaizen will not be sustained over the long term if management does not repeatedly demand it from the top. Others respond that there is something wrong with employee motivation if kaizen has to be demanded top-down. In my opinion, the solution is a reconciliation of the two perspectives. On the one hand, management must initiate the design and changes necessary for the kaizen implementation top-down. Nevertheless, the bottom-up aspect is fundamental, where employees must be intrinsically motivated to submit proposals to shape the company's advancement.

The last element of top management commitment is *Hoshin Kanri*. Employees must understand the corporate vision, mission, and core values to work together towards a shared understanding of true north. How the vision is broken down to the individual parts of the organization depends on management paradigms and varies from company to company. Additionally, the measurement and visualization of the primary KPIs such as employee satisfaction, number of suggestions, and increase in efficiency belong in this area. However, the latter should not be focused on too much initially, as the real gains follow in the long term.

Basic Kaizen Tools

This factor is not explicitly mentioned as a success factor in the literature, but it was frequently mentioned in the interviews. A basic set of tools must be instituted for kaizen to thrive. These include SOPs, TQM, and a physical or digital suggestion system through which employees can submit their CIP suggestions. An internal marketing strategy for sharing best practice examples should bolster the suggestion system. Furthermore, employees must be trained in the most suitable methods for finding, identifying, and solving problems, such as the 5-Why method or value stream mapping.

Another basis is the approach of on-the-job development, which includes coaching, mentoring programs, or job rotation. A best-practice example from Schmidlin is the skills matrix as a management and planning tool to measure individual employees' progress and identify further development potential. In this context, the senior expert considers SFM, the management of employees at *Gemba*, as a success factor. Another great example is SIGA, where employees have to document their suggestions in a standardized way according to the AZPERK method and come up with several possible ways to implement them. On the one hand, this helps avoid directly implementing the first best idea. On the other hand, all ideas are structured in a consistent pattern, which is helpful for mutual understanding of the suggestions. In addition, both companies have implemented a 9+1 improvement system, which seems to work well despite the potential for development.

Finally, it should be said that the tools should not be duplicated and applied. Every organization needs to have a basic set of tools to prevent barriers such as failure to identify problems and their root causes and lack of standards. However, each organization must place the tools in their own context and adapt them accordingly to maximize their effectiveness.

HCM Strategy

Another crucial factor in creating employee empowerment is an appropriate HCM strategy and kaizen leadership. To build a long-term competitive advantage, the organization must maximize employee capabilities and engagement. This finding confirms previous results where people development, motivation, and leadership were suggested to be significant success factors for the kaizen implementation. As noted above, most of the literature and interviewees agree that employees are to be continuously developed on the job and that individual monetary rewards are less effective. After that, two different paradigms crystallize, explaining different recruitment, assessment, and employee motivation approaches.

One perspective believes that not all employees can be motivated for kaizen. Consequently, adjustments in the recruitment process are necessary to find the most suitable employees. The recruiting process should generally emphasize soft factors such as willingness to

change or communication instead of technical knowledge. In addition, employees are assessed periodically on a measure such as the quality or quantity of proposals to maintain a certain level of control. The organization must also actively motivate employees, for example, by showing them their own advantages or creating a sense of urgency. Employee development aims to bring them into a growth mindset where they can constantly seek new challenges and grow.

In the other view, employees do not need to be explicitly motivated for kaizen. The organization can expect employees to participate and improve process structures as part of their job. It is not assumed that employees will refuse change in the long term. Consequently, nothing about the recruitment process needs to be adjusted. Moreover, employees do not need to be controlled for the number or quality of suggestions, as it is understood that employees will drive improvements within their capacity. Although employees do not need incentives, the organization must eliminate demotivating factors, including a lack of capacity to process suggestions or a toxic corporate culture.

Finally, the right leadership culture is a fundamental element. A suitable basis for this is the Western approach of situational leadership. Depending on the stage or task of the employee, they need a different kind of support from their manager. The goal is to rapidly develop the employees into the third or fourth quadrant in most tasks and thus turn them into intrapreneurs, employees who act and think like independent entrepreneurs. In any case, micromanagement should be avoided. The organization cannot tightly manage and control employees but at the same time expect them to make improvements independently and work across departments. Of course, to embrace such a leadership culture, the organization needs suitable managers with leadership training. In many kaizen companies, leaders come from within the organization and are trained in an approach of theory blocks and practical application with coaching or mentoring programs.

In summary, the area of employee motivation is itself a vast psychological research topic on which there is not yet extensive literature in the context of kaizen. Moreover, the existing literature often contradicts itself. In my opinion, each company must choose its approach based on its corporate philosophy and align its HCM strategy accordingly.

4.1.2 Structuring Forces

Following the SGMM, employees and managers are in an environment of structuring forces that determine the work atmosphere, the coordination of the different value creation activities, and a long-term assurance of competitive advantage. Without an environment aligned with kaizen, the philosophy will not succeed. Consequently, a team-based culture, a process-oriented structure, and a customer-focused strategy are further drivers of success in kaizen implementation.

Team-Based Culture

An organization needs to create a culture where employees constantly look for improvement and strive for perfection. Rituals, in particular, help to integrate kaizen more deeply into the culture. In addition, kaizen will not thrive without a team-oriented corporate culture. A no-blame mentality is critical to achieving this atmosphere. Mistakes and problems are assets to move the company forward. A transparent and honest atmosphere must be created where employees are praised for reporting mistakes and can own up to them. After all, the processes, not the employees, are to blame for mistakes.

Japanese culture is somewhat more diffuse than Switzerland, and kaizen has perfected the reconciliation between the specific and the diffuse orientations. With an organic approach and respect for employees, standards are created and continuously improved, leading to better operational KPIs. However, it is not always facts and figures that matter, but context. An organization must create a healthy mix between bureaucracy and autonomy and create a more holistic view of the company in the eyes of the employees. Job rotations or *Gemba* visits to other departments are possible best practice examples to achieve this perspective.

Furthermore, the Japanese culture is more collectively oriented than the Swiss. The kaizen culture relies on collaboration across multiple functions and capabilities to find the best solution. For this very reason, the HCM strategy should ensure that performance appraisals or reward systems do not foster the individualistic element. Instead, ideas and specifications should be attributed to entire teams to promote collaborative behavior and cross-departmental cooperation.

Customer-Focused Strategy

Another influence on employee empowerment is corporate strategy. The company must first define what the customer wants and is willing to pay for it. After that, the long-term corporate strategy must be aligned with customer needs, and kaizen must become a priority. An organization must ensure that the CI and organizational goals do not contradict each other, which is frequently mentioned as a barrier in the literature.

Collaboration with stakeholders is also a part of corporate strategy and kaizen. It is recommended to involve essential stakeholders such as investors, suppliers, and customers with traditional instruments to identify potential through the internal company area and increase quality and efficiency with improvements.

Another aspect is that kaizen must not be seen only as a cost-cutting tool. Although this is an implicit result, cost should not be the primary consideration, as a considerable initial investment is required before incremental efficiency gains are achieved. Instead, kaizen is a philosophy that empowers employees to have a more profound role in the company, and it has a deeper social meaning than simply making a profit.

Process-Based Structure

Lastly, a suitable corporate structure can support the implementation of kaizen. A kaizen structure is characterized by low hierarchical levels, flat structures, and process orientation. The structure should move from a directive to a participatory approach and create ownership at all levels. Moreover, it should foster informal ad-hoc relationships and intradepartmental communication to move the organization forward. A hierarchical structure means that management sits at the highest level and dictates what employees should do and how processes are to be designed. However, in a kaizen culture, the processes should be at the top, inspiring employees to develop ideas and improvements. Management thereby acts as a facilitator, creating an ideal atmosphere for employees to thrive.

4.1.3 PDCA

Lastly, the entire organization is in a constantly changing business environment, and it is thus essential that a company continuously reflects and adapts to the internal and external influences according to the PDCA principle. The primary insight is that even a well-functioning kaizen organization is never finished. SIGA's board member confirms that after 15 years of kaizen, the company has not yet reached even half of its ambitions and is constantly introducing new tools and methods to respond to changing internal and external influences. The example shows how crucial it is to reflect and never stop striving for perfection.

4.2 Limitations

Swiss SMEs that would like to introduce kaizen in their organization have a good guide with the model from Figure 8. However, the results should be interpreted with caution since the primary research is based on five semi-structured interviews. A larger sample of companies and employees should be questioned to make a general conclusion. The external validation of the results remains to be done due to the scope of this thesis. The relevance of the model will become apparent as soon as Swiss SMEs apply it as a basis for implementing kaizen. If they succeed in practicing the philosophy over the long term (at least five years) without significant decreases in suggestions and employee satisfaction and measurable increases in efficiency, the model is considered valid.

5 Conclusions and Further Research

The thesis clearly shows that implementing kaizen is a long-term and challenging process. From the literature and interviewees, it can be concluded that kaizen is implemented differently in each organization. It is ineffective to duplicate the individual kaizen elements and apply them in an organization without profound changes in the structuring forces. Instead, while an organization must copy the basic elements, it is essential to adapt them to its variables in terms of processes, places, people, and other unique characteristics.

The main objective of this thesis was to find the prerequisites and success factors for the Toyota-based kaizen implementation in Swiss SMEs. According to this thesis, these are management commitment, basic kaizen tools, HCM strategy, team-based culture, customer-oriented strategy, and process-based structure. The individual success factors are placed into context in Figure 8.

The general conclusion arising from this thesis is that employee empowerment is at the core of a kaizen organization. It must maximize employee capabilities and engagement to build a long-term competitive advantage. Employees and managers should be inspired with a passion for excellence, an obsession with customer satisfaction, and the pursuit of perfection. Worker-management relations must be built on trust and collaboration toward shared objectives instead of working against each other.

The literature and interviewees disagree on whether all employees can be motivated to engage in kaizen. However, they all share the view that kaizen motivates employees and increases the company's attractiveness as an employer. Furthermore, kaizen goes beyond a purely economic perspective. It incorporates the social dimension, in which a corporation and a person are not simply judged in terms of costs and results. Instead, the human being and personal relationships become increasingly relevant.

There are various avenues for future research. For example, further clarification is needed in the field of employee motivation in association with kaizen. Additionally, the interviewees believe that there is not yet a perfect solution for sustaining kaizen over the long term and fostering cross-departmental communication and collaboration to improve the value chain. Consequently, further studies could include a time dimension or focus on cultural or structural issues of an organization. Moreover, since this study concentrates only on SMEs, future research should examine whether comparable factors exist in larger companies to deepen the understanding of how kaizen can be successfully transferred in companies of all sizes. Lastly, it is recommended to validate the results of this thesis with a quantitative research approach.

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Appendix

Appendix A: Kaizen Templates

CIP suggestion template at SIGA

Appendix

SOP template at SIGA

Name AVB / Name SOP / Nom FTS			Titel / Title / Titre			Hauptverantwortlicher Bereich / Responsible dpt. / Dpt. responsable		XY	Template version no.	4.0
Ausführende Funktionen / Executing Functions / Fonctions d'exécution			Ausführende / Executor / Exécutant		Aktualisierungsdatum / Date of review / Date de revision	dd.mm.yyyy	Häufigkeit/Jahr / Frequency p.a. / Fréquence p.a.	0	Zeitaufwand/Jahr (Std.) Workforce / p.a. (h) Investissement / p.a. (h)	0.0

Nr. No. No.	Bereich Dpt. Dépt.	Arbeitsschritte Workflow Flux de travail	Adressierung Addressing Adressage	Hilfsmittel (Foto, Manual, Video) Utilities (picture, manual, video) Moyen (photo, manual, vidéo)	Arbeit / Work / Travail	Laufweg / Route / Route	Maschine / Machine / Machine	Warten / Waiting / Attente	Parallel zu / parallel to / parallèlement à
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36									
37									
38									
39									
Total / Total / Total					0:00:00	0:00:00	0:00:00	0:00:00	
Zeitaufwand / Workforce investment / Investissement de la main-d'œuvre					0:00:00				
DLZ / Process time / Temps du processus					0:00:00				

Appendix B: Interview Summaries

Interview Alfred Angerer

- Interviewer: Joris Muff, International Management student, ZHAW School of Management and Law
- Interviewee: Prof. Dr. Alfred Angerer, ZHAW School of Management and Law
- Date, time: 07.04.2022, 10:00 am to 10:34 am
- Location: Microsoft Teams (online)
- Evaluation: Paraphrased summary
- Validation: The interview was validated by Mr. Angerer via email on 21.04.2022.

<u>Introduction</u>

Can you briefly introduce yourself? How did you first come into contact with kaizen?

I am a professor in the field of healthcare management, but I have also worked in other industries in the past, for example, as a trainee at Nestlé or as a consultant at McKinsey & Company. I obtained my doctorate in retail trade processes. I got to know kaizen mainly at McKinsey & Company as a consultant because you can hardly get around kaizen on the topic of process optimization.

Without going into detail right now, what would you say are the most important prerequisites for a Swiss company that wants to introduce kaizen?

I like to think according to the "Can Do, Want To, Allowed To" principle. In the area of "Can Do", the employees must have the appropriate basic knowledge about kaizen. Concerning "Allowed To", management must provide sufficient resources such as finances and time so that kaizen can be practiced. Finally, there must be pressure to change in the area of "Want To". As long as the company is doing well, and the money is flowing - meaning there is no noticeable pressure to change - nothing will change.

The "Can Do" factor probably is the easiest one to implement. In a one-day training in an SME, I could teach the employees the basics of the kaizen philosophy.

<u>Employees</u>

Employees are an essential cornerstone of kaizen. How can they be motivated for the idea of kaizen?

We need a reason to change. This reason can be either a positive or negative target vision. A positive target vision might be to motivate employees with the prospect of getting off work earlier or making customers even more satisfied. A negative target vision could be that a company is constantly discovering mistakes and customers are constantly complaining, and the company wants to end this "pain".

An organization has to create one of these two target visions for change to make a difference. Most of the time, selfish reasons work better than idealistic ones. Take healthcare as an example: Saying that healthcare would profit through kaizen is an argument, but not as strong as telling the employee that they would benefit from kaizen because they would have less administrative work and more time for patients. In other words, it is best to create a reason that is linked to the employee's personal motivation.

In your opinion, can all employees be motivated for kaizen? If not, what do you do about it?

There will always be a small proportion of employees who cannot be persuaded to adopt kaizen with either logical or emotional arguments. Of course, you never know from the beginning which people belong to this small part. That is why the company should try to involve everyone as much as possible. Over time, it will become clear which people cannot be motivated for the idea.

It is a challenging issue how to deal with these individuals. From discussions with many American kaizen specialists, I have learned that they used to invest a lot of time in such people. Today, they assume that this was probably wasted time and would instead invest more time in the dedicated staff. A rule of thumb that has not been scientifically proven is that four enthusiastic employees roughly compensate for one complainer. If people cannot be motivated in the long term, they will eventually move on.

How does HRM need to be designed to be suitable for kaizen?

Recruitment

A kaizen organization will not need employees who only do what their boss tells them to do. Instead, it needs people who accept that life is constantly changing and that a process may look very different tomorrow than it does today. Suitable candidates are so-called intrapreneurs - employees who act and think like entrepreneurs. Other possibilities in the hiring process would be psychological tests, in which, for example, the resistance to change is measured. However, I have never seen this in practice.

I think that a manager senses in an interview whether the person is full of ideas and innovative or simply likes to do their job from nine to five. In summary, the organization should definitely pay attention to hiring the right people for the kaizen culture already during the hiring process.

Development

In hierarchical settings, the organization needs to get the hierarchical thinking out of people. Initial training, for example, in classroom teaching, is fundamental to getting to know the philosophy and methods. A coaching mentoring program would be helpful for implementation in everyday life, but I have rarely experienced this in pure form as in Japan in my focus on healthcare. It is more common to find a central lean unit that coordinates the kaizen activities.

Another factor is rituals, for example, where teams meet periodically before a kaizen board. Furthermore, you need strong role models in the management who drive projects forward and always start new initiatives. Most of the time, there are more ideas in the early stages, and over time this subsides.

Performance Evaluation

A kaizen organization must move away from the practice of rewarding employees with the highest turnover or the most ideas. We still live in a culture of rewarding what is good and punishing what is bad. However, organizations should praise bad ideas as much as good ones, otherwise, innovation cannot happen. Furthermore, I do not think a quantitative assessment of submitted proposals makes sense. If an employee only submits a few suggestions, the supervisor should address this in a personal conversation.

Reward

I keep hearing how counterproductive individual monetary rewards are but have not yet come across scientific evidence. If someone is considering monetary rewards, then team bonuses could be considered. However, I prefer non-monetary incentives. The Cantonal Hospital of Basel, for example, does not give employees money but instead gives them recognition and working time to implement good ideas.

How can the organization support employees to detect and report problems and identify the root causes?

The organization must provide sufficient time. If employees are not given enough time to analyze the problem, it will only be dealt with superficially. Further, basic methods such as "5-Why" must be trained. In terms of on-the-job training, employees should receive support during

projects in the form of coaching. A pure kaizen course in classroom teaching is of less use in this respect.

Management

How can top management support the introduction of kaizen?

It should not delegate kaizen but live it in a role model function. Management must take the philosophy seriously and enforce it through regular visits to the kaizen boards or *Gemba* walks. Successful projects should be celebrated. Without support from management, no ideas will come from the base.

How is the executive management trained for kaizen?

First, they must really want it because no one can dictate it to them. The basics can be trained in a few days. After that, a coaching/ mentoring project makes more sense than several weeks of classroom teaching.

To what extent does the leadership role of managers change with the introduction of kaizen?

In theory very strong but in practice relatively little. Theoretically, the leadership situation turns 180 degrees. In line with the idea of servant leadership, the manager does not have to generate the ideas himself but must act as a facilitator to get the employees to perform well - a kind of service provider for his employees. Practically, with the introduction of kaizen, a manager must certainly allocate more time for *Gemba* Walks or listening to ideas.

Structural forces

What are the differences between the cultural values of "Japanese" kaizen and the general corporate culture in Swiss companies?

I have never been to Japan myself. However, as it is said, employees are taken very seriously and respected in the Japanese kaizen organization. In Switzerland, there are still many hierarchies where the employee is afraid to say anything to the boss. Accordingly, ideas usually come from top-down instead of bottom-up. In this context, I do see a larger cultural gap from Swiss companies to the idealistic Japanese kaizen organization.

How is it ensured that employees' suggestions for improvement contribute to the long-term corporate strategy?

All employees must know the long-term vision, mission, and strategy. Once this context is in place and the general values of the organization are known, I do not believe that the individual suggestions will contradict the overall strategy. If unsuitable suggestions are made, it is the task of the managers to reject them and discuss them with the employees - not every idea is automatically pursued.

What are the requirements in terms of organizational structure to make kaizen work?

A radical solution would be self-organization without leadership, but I rarely encounter this in practice. A smaller solution is still a hierarchy, but with a higher focus on participation. The individual teams are involved in decisions. In general, employees should be given more authority. Managers should set the goals and not the path to give employees more freedom.

How does the company facilitate process improvement along the entire value chain rather than isolated in individual departments?

I have seen this problem in several organizations, and there is still no perfect solution for increasing cross-departmental collaboration. It is easier to optimize individual departments. Management must manage to break through the silo thinking of employees and create an understanding of the overall entity. If only department A benefits only in a cross-functional process optimization but department B does not, this can only be solved with management support. In general, this is one of the most difficult challenges in the kaizen culture, and its responsibility lies with management.

Many companies struggle to sustain kaizen over the long term. What can be done to prevent this?

The long-term sustainment is indeed a big problem; you can repeatedly notice how the ideas diminish over time. Rituals can help against this. In addition, management has to constantly promote kaizen from the top, bring new initiatives and never let up. Another suitable method is to build up internal marketing with best-practice examples.

Particularly in a crisis situation such as the pandemic, one could observe that kaizen was the first thing to be thrown overboard in many hospitals. However, once the crisis period is over, it is up to the management to revive it so that it does not dry up.

Conclusion

What is a mistake you have often observed when companies implement kaizen?

Mistake #1 is that organizations duplicate the kaizen tools from other companies without adapting them and then wonder why kaizen fails to thrive. In mistake #2, management instructs

employees to do kaizen but does not change their structure or culture. In mistake #3, companies fail to embed kaizen in the company culture for the long term. After a while, the ideas diminish, and it slowly dies out.

An organization needs to understand that kaizen implementation is a marathon, not a 100-meter sprint. Well-run organizations in the U.S. started doing kaizen in 1999 and, by their own statements, still have not reached their goal 23 years later.

Interview Andreas Graf

- Interviewer: Joris Muff, International Management student, ZHAW School of Management and Law
- Interviewee: Andreas Graf, LEAN-Manager, Wilhelm Schmidlin AG
- Date, time: 13.04.2022, 10:00 am to 10:50 am
- Location: Wilhelm Schmidlin AG, Gotthardstrasse 51, 6414 Oberarth
- Evaluation: Paraphrased summary
- Validation: The interview was validated by Mr. Graf via email on 29.04.2022.

Introduction

Can you briefly introduce yourself? How did you first come into contact with kaizen?

I originally got to know kaizen in the machine industry at Esec. First, I was responsible for the know-how transfer of the machine assembly. Later on, the topic of lean management came into play with the aim of transforming batch processing into flow production. This topic became my main activity. In the meantime, I have more than 15 years of kaizen experience and have been working as a Lean Manager at Wilhelm Schmidlin AG since 2015. My main tasks are the organization and supervision of the improvement days and the planning and monitoring of the key topics.

I read that you introduced kaizen resp. SchmidLEAN in 2011. Would you say that it is still being used as effectively in your company as it was when you started?

Yes, absolutely. Wilhelm Schmidlin AG is owner-managed, and both owners are big fans of Toyota. They have acted as role models and are still involved in workshops and activities today.

Employees

Employees are an essential cornerstone of kaizen. How could they be motivated for the idea of kaizen?

You have to sell them the right to participate in the day-to-day business. They can raise problems and ideas and are involved in solving these issues. If they feel respected and empowered, that is an significant motivating factor. In addition, management must show support and commitment.

In your opinion, can all employees be motivated for kaizen? If not, what do you do about it?

There are always employees who are more committed to kaizen and others who would rather "just" work. You have to approach people individually and support especially the people who want to move with Lean and kaizen. I also take this into account when planning the improvement days by assigning easier and more difficult projects to people accordingly.

How was HRM transformed as a result of kaizen?

Recruitment

Participation in improvement days is included in the job profile. This calls for creativity and innovativeness.

Development

Newly recruited employees receive an initial training with me, which provides information about the most important methods and basic knowledge of lean management and kaizen. The training consists of a presentation and explanation of the suggestion system and skills matrix individually on site. In addition, the employees receive an introduction to the DokuWiki, where all standards for the processes are documented. On the improvement days, which take place every fortnight, there is a maximum of 15 minutes of theory, where important current topics are addressed, and all methods are repeated from time to time.

Job rotation is a key aspect of SchmidLEAN. On the one hand, it makes the job more varied and attractive, and on the other hand, the company is no longer dependent on specialists, as a process can be carried out by several people. The skills matrix serves as an appropriate tool for this purpose. All employees and processes are listed on it, which are then rated from one (no skills) to three (master). The management thus has an overview of which employees can do what and thus carry out operational planning. It is common for production to rotate after every few hours or half days. This gives employees a fresh perspective and allows them to derive improvements. Standardized workplaces are an important prerequisite for this.

Performance Evaluation

The department head assesses the weekly performance according to criteria such as tidiness in the workplace, performance, or compliance with standards. The number of suggestions is statistically recorded and evaluated on a scale according to quality by the lean manager and the division head. The performance on the improvement days additionally results in a group evaluation. All these results and the skills matrix are addressed in the employee evaluation. The skills matrix also serves as a basis for the further development of wages.

Reward

We have introduced a bonus system across the company. From a certain quality rating of a suggestion for improvement, the employee can achieve a payout of a certain amount. The problem with money, however, is that it strengthens internal rivalry. I therefore rather recommend non-monetary rewards such as team events to strengthen cooperation. Once you start with monetary rewards, it is difficult to come back from it.

How do you support employees to detect and report problems? How do you make sure that they identify the real root causes?»

Employees can submit their ideas via the suggestion scheme. You have to constantly remind them about kaizen. Sometimes you no longer even notice a deviation from the standard, so *Hansei* is critical. It is the responsibility of the employees to report the error as soon as it happens. Wilhelm Schmidlin AG always emphasises that the process and not the person is to blame for mistakes.

A problem can also be that many mistakes are discovered simultaneously, but none are properly focused on. We measure the most important KPI's regularly so that we can react immediately to outliers. Measurement is essential because, otherwise, you do not know where to start.

Management

How can top management support the introduction of kaizen?

Management plays a significant role in kaizen implementation. It must be done top-down, passed down from level to level. All leadership must be above board because the higher up skeptics are found, the more difficult it is to implement kaizen.

How was the executive management trained for kaizen?

The business owners and managers have been to Toyota in Japan and visited some plants to see kaizen in action.

To what extent does the leadership role of managers change with the introduction of kaizen?

The leadership role is central to kaizen. Managers are responsible for keeping the skills matrix as a management tool, determining rotation schedules and deviations from 5S.

Structural forces

What are the differences between the cultural values of "Japanese" kaizen and the general corporate culture in Swiss companies?

There are generally considerable differences. Toyota has an entirely different mentality when it comes to striving for perfection. The management demands absolute discipline down to the last employee, whereas things are approached more loosely here.

When a problem arises, we usually look for a quick solution in Switzerland. In contrast, you first sit down together in Japan and discuss the problem very intensively. They want to understand the problem properly before anything is done. Sometimes we do not take enough time to create a shared understanding of the problem.

In general, people in Switzerland are a bit more individualistic than in Japan. Everyone wants to contribute to the discussion with their opinion, which is certainly a good thing. Consequently, the moderator as the meeting coordinator plays a more important role here.

How is it ensured that employees' suggestions for improvement contribute to the long-term corporate strategy?

Our employees know our vision: to deliver fast, customized, to the quality standard of Switzerland, and reliably. The "fast" factor in particular can be measurably improved thanks to the lead time. In addition, there are always annual targets that are defined individually with the departments.

What are the requirements in terms of organizational structure to make kaizen work?

In the beginning, the management did the planning of the improvement days. Over time, a Lean manager was employed and attached to the management as a staff position. In general, the organizational structure has become flatter in recent years. In addition, an R&D department and a quality department were created as operational units.

How does the company facilitate process improvement along the entire value chain rather than isolated in individual departments?

This is indeed a challenging issue. We often work on isolated issues within departments. However, we keep discussing that we need to collaborate more at interfaces to create a greater leverage effect. In addition, we are focusing on our core processes to improve performance in line with our core values (fast, customized, Swiss quality standards, and reliable).

To what extent are stakeholders involved in the kaizen culture?

We have already worked on issues with a key supplier and individual customers of ours. However, we do not do this periodically but rather individually.

Many companies struggle to sustain kaizen over the long term. What can be done to prevent this?

Kaizen must be repeatedly addressed and demanded by the leadership; otherwise, it will quickly fall asleep. I have already experienced this myself in another company.

Do you measure the progress of kaizen? How?

We measure the most important KPI's directly on-site, for example, with a tally sheet. These are then recorded in a statistic and presented to the management on a weekly basis. Any deviations are discussed, and appropriate corrective actions are taken.

How exactly does the suggestion system work? (How can employees submit suggestions? Who assesses them? When?)

Employees can fill out their own ideas on a blank template and put it directly on a kaizen board or in a mailbox. The suggestions are collected once a week, evaluated according to quality, and recorded statistically. Then they are distributed to the responsible departments. As soon as the suggestion is implemented, it goes back to the creator for validation. If a suggestion cannot be implemented, it is mandatory to give feedback to the creator.

On improvement days, several smaller issues or one large issue are dealt with by a group. The implementation of smaller suggestions can also be done during the day-to-day business. On each improvement day, between 25-30 teams are formed, and about 10 to 15 implemented results are presented in the evening, preferably with a direct before/after comparison.

We currently receive around 2700 suggestions for improvement per year and have therefore already thought about digitizing the suggestion system. However, we fear that we will receive fewer suggestions for improvement as a consequence. Moreover, it is a foreseeable effort to record the suggestions manually. However, a hybrid solution would be conceivable, in which the cards are recorded in writing and then scanned in, for example.

How are the SOPs documented?

We document all standard processes on DokuWiki. Furthermore, we have installed terminals in many places where the standards can be accessed directly. The standards are used for training new staff and as a starting point for improvement projects. In addition, the target is to record the process time for all standards.

Conclusion

Aside from what we have discussed so far, are there other important requirements for organizations to implement kaizen?

An essential part of kaizen is customer focus. The company must find out what the customers' needs are, what they want and what they are willing to pay for it. Once this is known, lean management must be aligned accordingly.

What would you do differently today regarding the implementation of kaizen?

I would no longer introduce monetary incentives. Moreover, I sometimes think that there are too many issues and that we, as coaches, cannot optimally supervise all teams. That being said, kaizen is an essential foundation of Wilhelm Schmidlin AG, and we are very proud of what we have achieved to date.

Interview Erich Sannemann

- Interviewer: Joris Muff, International Management student, ZHAW School of Management and Law
- Interviewee: Erich Sannemann, Senior Expert, STAUFEN.INOVA AG
- Date, time: 02.05.2022, 13:00 pm to 13:51 pm
- Location: Microsoft Teams (online)
- Evaluation: Paraphrased summary
- Validation: The interview was validated by Mr. Sannemann via email on 16.05.2022.

Introduction

Can you briefly introduce yourself? How did you first come into contact with kaizen?

My name is Erich Sannemann. I am 55 years old and have already spent a lifetime in the field of operations in factories all over the world - for example, in Africa, Europe, and Asia. For the past four years, I have been back in consulting, managing various projects in the field of

operations. This ranges from specialist consulting and efficiency enhancement to entire empowerment programs aimed at developing organizations to the point where they can improve on their own.

Without going into detail right now, what would you say are the most important prerequisites for a Swiss company that wants to introduce kaizen?

You can look at kaizen in a narrow or broader sense. In the broader sense, there are two main ways of thinking. On the one hand, there is the short, medium, and long-term elimination of problems and malfunctions. On the other hand, there is the methodology of continuous improvement. This means that already efficient processes are further optimized, and employees do not settle for the first best result.

In the context of problem-solving, kaizen implies that the whole staff must have a mindset and attitude that identifies and reports failures. In the sense of continuous improvement, kaizen requires that management genuinely drives and supports it.

Employees

Employees are an essential cornerstone of kaizen. How can they be motivated for the idea of kaizen?

In my opinion, it is not necessary to motivate employees for kaizen because every employee wants to do his job well, which includes improving processes. However, an organization must make sure that it eliminates the demotivating factors. One could be, for example, that the organization does not take the suggestions seriously, and the employee gets the feeling that nothing happens in response to his improvement suggestions. Another demotivating factor might be a selection committee that makes intransparent decisions, creating the same feeling of frustration. Moreover, a toxic culture where ideas are stolen and the creator gets nothing out of it - neither financially nor in terms of appreciation - has a demotivating influence.

It is essential to document the before and after state of the processes. This includes a joint definition of the baseline, analysis of the situation, and description of the problem. Then, a solution is developed using standard problem-solving mechanisms, and the new state is measured. In this way, the creator knows directly how much increase in efficiency his suggestion for improvement has achieved and can raise his awareness of the leverage effect of his suggestions. Measurement is a vital prerequisite for appreciation and a sense of achievement because, in practice, I often experience that employees underestimate the impact and number of their ideas. The final requirement is that employees are made responsible for their suggestions for

improvement. This way, they are directly involved in the implementation and cannot blame others if the idea is not taken forward.

In your opinion, can all employees be motivated for kaizen? If not, what do you do about it?

Yes absolutely. I think that all employees can be motivated for kaizen. This is also independent of the hierarchy. While strategic improvements tend to come from the top level, operational improvements tend to come from the bottom level. Ultimately, top management should introduce their ideas to the teams so that they come from the bottom up.

I am a total opponent of monetary incentives. In my opinion, kaizen is part of the job, and companies can expect their employees to participate in kaizen and improve process structures. Of course, some employees generally do not like change. Nevertheless, everyone prefers to be able to do his job as well as possible. If a person cannot do the job as well as he or she is capable of doing it, he or she is willing to change something within that context. In many cases, people blame the boss or work colleagues in such situations, but when the organization holds employees accountable for improvements, these accusations quickly stop. Moreover, I have never experienced an employee completely refusing to participate. Even the biggest skeptics have tried to improve processes or issues so they can do their job better.

How does HRM need to be designed to be suitable for kaizen?

Recruitment

No, in my opinion, nothing needs to be adapted in the recruitment process. It is instead a question of the corporate culture in a company. That is, whether the culture promotes that employees are able to, want to, and are allowed to engage in improvements. In very hierarchical organizations, it is very challenging to push through improvements.

Development

As mentioned before, in my opinion, every employee has the intention that things can get better than the current state. Only very few say that they do not care about anything. However, in order for them to be able to drive improvements, the organization must give the employees the appropriate basic toolset. I often use the term rookie day, where I train employees for one to two hours on the topic of kaizen. This includes, for example, the four lean principles or the nine types of waste. Of course, the management has to be introduced to the topic in more detail, which takes about half a day to a day. Finally, the organization should provide in-depth training to some experts, especially in problem-solving techniques, so that they can help with workshops or special issues.

In summary, multi-level thinking must be incorporated, and everyone should have at least a basic skill set. Also crucial for the training is the practical aspect at the *Gemba*. A theory block without concrete application is of no use. This can be done, for example, in small sequences of a few hours to whole weeks. I consider coaching and mentoring programs to be very important as well.

Performance Evaluation

Measuring the number of suggestions for improvement is misguided and counterproductive. There are always people who are more creative or better at planning than others. When an organization measures the number of suggestions for improvement, it judges all employees on the same criterion.

In addition, I have often seen in practice that employees in an organization with a prescribed number of improvements usually submit the missing number in low quality immediately before the deadline. Instead, the organization should encourage its employees to make mistakes and see them as opportunities. It should take employees' suggestions seriously and involve them in implementing their suggestions. I find this much more relevant than discussing the employee's commitment to the kaizen culture in a performance review.

Reward

Monetary rewards are counterproductive. It should be in everyone's interest to participate and improve processes. I have met many great people who just want to do their jobs, nothing more, nothing less. They come to work for the money and do not want to advance the company. However, when it comes to making their jobs easier, even they are on board. The company should not expect every employee to fundamentally change the company.

How can the organization support employees to detect and report problems and identify the root causes?

This is a corporate culture issue. In a highly error-oriented culture, no one wants to make mistakes and will not report them voluntarily. You have to create a problem-solving and improvement-oriented culture where mistakes are part of the game. The culture must allow for mistakes and encourage employees to learn from them. After all, you learn more from failures than from successes.

Secondly, employees must be given specific instruments, tools, and methods. A brief comment on this: When introducing kaizen, many companies start to apply a concept such as 5S or Kanban. At some point, they do not get any further, and then they start to put the methods into context and develop production systems such as TPS or operating systems.

Over time, the number of improvement suggestions and efficiency gains decreases again, so the company needs to anchor to the next level of leadership performance. This is where mentoring programs, employee involvement, and co-creating ideas and solutions play a significant role. This no longer means the team leader tells employees what to do and how to do it. I have often seen in practice that employees are unhappier when the leader tells them what to do. More personal responsibility has usually led to higher employee satisfaction. It takes more time than the directive approach, but the outcomes are usually much better than when the management does everything itself. The organization needs to reverse the hierarchical pyramid to put processes at the top. And the people who know the processes best are the ones who execute them every day.

Management

How can top management support the introduction of kaizen?

You can have the top-down approach and the bottom-up approach. In kaizen implementation, it has to be both. First, management must declare top-down that it wants kaizen and how it wants to implement it. This includes cultural changes. Then, the ideas must come up bottom-up from the core processes.

Kaizen is unique and is designed slightly differently in every organization. Leadership must involve the grassroots and work with them to introduce, maintain and develop kaizen. Cultural change is usually a prerequisite for this.

How is the executive management trained for kaizen?

Management can be trained through workshops. They need to understand the purpose behind the philosophy, but basically, the training is not much different than for the employees.

To what extent does the leadership role of managers change with the introduction of kaizen?

They need to move away from a directive approach toward a participatory approach.

Structural forces

What are the differences between the cultural values of "Japanese" kaizen and the general corporate culture in Swiss companies?

Probably due to the influence of samurai culture, loyalty to the company, precision, meticulousness, and the urge to constantly look for improvements are generally higher in Japan. Although we are also long-term oriented in our culture, we are still very close to the Anglo-Saxon

quarterly thinking. In addition, we place much emphasis on efficiency, even though kaizen may be less efficient initially and only bring greater benefits over time.

Japan is also more focused on incremental, continuous improvements made in small steps every day. We like the big throw, where everything happens at once. Accordingly, we are better in the radical or the big leaps, whereas it sometimes feels like it takes an eternity in Japan.

It is probably the case that we in Switzerland are more individualistically oriented. So to mitigate this effect, I would not set individual goals in performance reviews. I would instead define them for the whole team or department and motivate them to contribute ideas. As I said, I would not use the number of suggestions as a criterion but instead collaboratively identify the areas and processes that still have the most potential for optimization and focus on them.

How is it ensured that employees' suggestions for improvement contribute to the long-term corporate strategy?

I assume that the organization defines strategic themes. From this, strategic projects are derived, and the company should see that part of the improvement proposals contribute to these topics. On the other hand, every improvement that increases efficiency is a gain for the long-term corporate strategy. In my experience, the individual suggestions do not contradict the overall corporate strategy.

What is impressive is that in Japan, even production lines, which are shut down in three months, are improved until the last day because findings from this line can be implemented again in new lines.

What are the requirements in terms of organizational structure to make kaizen work?

The organization should be more participatory rather than directive.

How does the company facilitate process improvement along the entire value chain rather than isolated in individual departments?

This is an end-to-end view from the suppliers to the end customers. I tend to prefer value stream thinking. You have to divide the company into value streams, and thus you can see much better how processes are interconnected. Employees need to have a holistic approach instead of departmental thinking. When improving processes, all departments concerned have to be involved in problem-solving.

Many companies struggle to sustain kaizen over the long term. What can be done to prevent this?

The anchoring is a leadership challenge. A personal patent remedy is shop floor management across all areas and hierarchies.

Furthermore, in my opinion, some key figures should be included. These can be, for example, the number of improvement suggestions, the number of implemented improvements, the productivity or efficiency gain, and the employee satisfaction. The more satisfied the employees are, the more improvement-friendly the company is.

To what extent are stakeholders involved in the kaizen culture?

Of course, they are also part of the process. With traditional instruments such as supplier or customer surveys or feedback loops, stakeholders are involved and can identify potential for improvement.

<u>Conclusion</u>

What is a mistake you have often observed when companies implement kaizen?

That in the beginning, everyone is enthusiastic about kaizen. Shortly after that, it falls silent and is thrown overboard because it is not taken seriously enough, or priorities in the company change. Kaizen is a long-term investment and needs commitment. For example, if it is viewed as a short-term project about image building, it will not work. In the short term, kaizen only costs time and other resources. The real gains follow in the long term.

Interview Irène Isenschmid-Muff

- Interviewer: Joris Muff, International Management student, ZHAW School of Management and Law
- Interviewee: Irène Isenschmid-Muff, Department Head 2nd floor, Luzerner Kantonsspital Wolhusen
- Date, time: 07.04.2022, 14:00 pm to 14:46 pm
- Location: Luzerner Kantonsspital, Spitalstrasse 50, 6110 Wolhusen
- Evaluation: Paraphrased summary
- Validation: The interview was validated by Ms. Isenschmid-Muff via email on 28.04.2022.

<u>Introduction</u>

Can you briefly introduce yourself? How did you first come into contact with kaizen?

Kaizen was introduced at LUKS as a pilot project at the Wolhusen site in 2019 as part of lean management. An internal process manager with many years of lean experience led the

introduction. She trained all departments one after the other, and since then, kaizen has been part of our culture. However, we have already practiced the possibility of submitting suggestions for improvement in a less consistent form.

I read that you introduced kaizen in 2019. Would you say that it is still being used as effectively in your company as it was when you started?

In the beginning, there were many ideas, but they have decreased slightly over time. As a leader, you always have to make sure that kaizen does not fall asleep and motivate the staff to come up with new ideas. Every second Tuesday, we have a short kaizen meeting to integrate it into our daily work routine. I am a big fan of kaizen myself, because in my opinion, the people at the grassroots level have the best suggestions.

Employees

Employees are an essential cornerstone of kaizen. How could they be motivated for the idea of kaizen?

Employees need to understand the rationale behind kaizen. This can be done through education. In addition, the employees should be shown their own advantage, for example, that their work will be facilitated as a result. Unfortunately, due to a lack of resources and irregular working hours, the planning and implementation of suggestions often falls to the department heads. Involving the staff would certainly motivate them even more.

In your opinion, can all employees be motivated for kaizen? If not, what do you do about it?

For the most part, I think so. We are a mixed team consisting of certified nurses, health professionals, and nursing assistants. In general, it is noticeable that the less educated the employee is, the more difficult it is for him to put ideas on paper. For this reason, acceptance is probably somewhat lower among these people. As a countermeasure, they can be coached and supported in formulating ideas. Employees need to be actively encouraged and understand that there are no negative consequences for bad ideas.

How was HRM transformed as a result of kaizen?

Recruitment

The recruitment process has not been adapted at LUKS. However, one of the things I look at during the interview and trial day is how they respond to the kaizen culture. In general, I have never found a problem here; mostly, it fails because of other things.

Development

All existing staff has received several hours of face-to-face training. For new staff, this is part of the employee orientation process. There is no follow-up course. However, certain topics are briefly addressed at the kaizen team meeting.

Performance Evaluation

For me, it is not the number of suggestions that is decisive, but rather the quality. Someone who comes up with many good ideas will definitely get positive feedback. For people with fewer ideas, I address this during the performance review. I am convinced that everyone has good ideas; experience has shown that fewer suggestions are usually related to a lack of self-esteem or support.

Reward

I can imagine that financial compensation would be motivating, but I would not base it solely on the number of suggestions but rather on the overall commitment to the kaizen culture. However, as a strictly regulated public institution, the hospital cannot pay such rewards.

How do you support employees to detect and report problems? How do you make sure that they identify the real root causes?»

It must have a healthy culture of dealing with mistakes. Everyone should be allowed to make mistakes without consequences and be able to own up to them. I believe that when someone makes a mistake, the whole team should benefit from it.

Due to the lack of time available to my staff, I occasionally take on an issue to investigate it in detail. Often the error is not directly what you think it is. For me, the focus is on quality and the patient, not on finding someone to blame.

Management

How can top management support the introduction of kaizen?

In our case, the introduction was decided by senior management. All ideas are recorded in a shared Excel list, which is regularly checked by the upper management. Sometimes they give feedback on individual ideas. Some ideas are also transferred to other departments.

I have supported the implementation by creating enough resources for training. I further plan the kaizen team meeting and always support and motivate my staff.

To what extent does the leadership role of managers change with the introduction of kaizen?

I already had an open leadership culture prior to kaizen. However, I have learned that I should encourage and praise the employees even more for good ideas. In a positive psychology course, it was said that an employee should receive about six praises for one criticism.

Structural forces

What are the differences between the cultural values of "Japanese" kaizen and the general corporate culture in Swiss companies?

In Switzerland, it is still prevalent that the boss says how something is to be done. However, this is not the idea of kaizen. Moreover, Switzerland is more individualistically oriented, whereas kaizen requires a team culture. As a manager, you have to be open and listen to the employees.

How does the company facilitate process improvement along the entire value chain rather than isolated in individual departments?

Due to the rather hierarchical and bureaucratic organization of the hospital, we focus on suggestions for improvement within the department. For example, it is not realistic for me to make a suggestion for improvement to a head physician. The staff should concentrate on "their" processes because they know them best.

Many companies struggle to sustain kaizen over the long term. What can be done to prevent this?

You have to bring up kaizen as a topic over and over again. In addition, you should be a role model yourself and motivate your employees to submit ideas. Everyday work is very fast-paced, and ideas are quickly forgotten. A well-established ritual like our periodic kaizen team meeting helps.

Do you measure the progress of kaizen? How?

For a long time, progress was measured in an Excel list. It showed how many ideas and how much time-saving were generated by individual departments. The list was maintained by the process manager for the whole site. However, since she has moved to other locations in the meantime, progress is no longer measured on a large scale.

How exactly does the suggestion system work? (How can employees submit suggestions? Who assesses them? When?)

The employees can write down the ideas on a paper. In doing so, they document the problem and a potential solution. The paper is then posted on the kaizen board. At the next team meeting (every fortnight), the suggestions are read out and discussed in the team. The meeting

lasts a maximum of 15 minutes. The solution is then tested in a two-week test phase and definitely implemented or reversed at the next meeting. Every month, we create an information sheet for the employees in which all changes are documented.

How are the SOPs documented?

All our processes are documented in a standard with the same structure. This is especially helpful for new employees and supports us in our daily work.

Conclusion

Aside from what we have discussed so far, are there other important requirements for organizations to implement kaizen?

Kaizen requires a lot of resources, especially at the beginning. It is not a small project that is introduced casually. However, experience has shown that it positively influences employee motivation.

What would you do differently today regarding the implementation of kaizen?

It was important that the introduction was done by an expert with the relevant knowledge. In addition, the real-life practical examples in the introduction directly at the workplace were very helpful for understanding.

Interview Reto Sieber

- Interviewer: Joris Muff, International Management student, ZHAW School of Management and Law
- Interviewee: Reto Sieber, Member of the Board of Directors and co-owner, SIGA Holding AG
- Date, time: 19.04.2022, 13:30 pm to 14:30 pm
- Location: SIGA Holding AG, Rütmattstrasse 7, 6017 Ruswil
- Evaluation: Paraphrased summary
- Validation: The interview was validated by Mr. Sieber via email on 28.04.2022.

Introduction

Can you briefly introduce yourself? How did you first come into contact with kaizen?

My name is Reto Sieber, I am Member of the Board of Directors and co-owner of SIGA together with my brother (50 percent each). We are the second generation to run SIGA; my father founded the company in 1966. My father generally ran the company in a very patriarchal way and managed his employees very closely. But as life goes, he fell ill and had to go to the hospital while I was still studying at the HSG in St. Gallen. I agreed to take over his position temporarily for the next three months. Those three months have since turned into 41 years.

However, I quickly developed considerable doubts because I saw the company's reality compared to the theory I had learned. My father was a typical sales pioneer. Everything around adhesive tapes was his topic - and he tried to monetarize everything. However, this led to small batches in production and trade. Moreover, he had little time for the individual product, so he could not go into depth - neither in market cultivation nor procurement or production. This led to quality deficiencies and high prices. In addition, we always had liquidity problems, which meant that we could either pay the wages or the suppliers - but certainly not both.

This reality of the company did not match the theories I had learned at the HSG. I recognized that SIGA could not survive in this state in the long term and knew that I had to make a fundamental turnaround. I did not want to and could not manage this task alone, so I brought my brother on board two years later. Since our parents were very dependent on SIGA for their livelihood and their retirement, we had much pressure to succeed in what we were doing. But there were issues all over the place, and one problem after another emerged. This pressure to survive was probably a basic prerequisite for dealing with change and learning to appreciate it. We tried to put the company on the right track following the trial-and-error principle. But since my father tended to shy away from change and we therefore wasted a lot of energy in discussions, we gave him an ultimatum after nine resp. seven years in the company: either you or us. That is how we finally took the reins.

We were lucky to be in the right place at the right time with the right issue. At that time, the topics of saving energy, Club of Rome, finite resources, and limits to growth were emerging strongly. We invested in this area, and coincidentally, the building envelope sector became an increasingly important topic at that time, first nationally and then internationally. The more we grew as a company, the more mistakes we made. We tried to bring in a certain degree of standardization and, for example, introduced SAP. In retrospect, we realized that the system made us rather limited and inflexible and resulted in more bureaucracy. My brother and I then looked for a new idea to make SIGA fit for the future.

At that time, I came across the book "The Toyota Way" by chance in Lucerne. After reading it, we knew that this philosophy was just the right thing for us. My brother happened to have a contact with an entrepreneur in Germany who was already practicing TPS and kaizen. We

visited him to see for ourselves and met Hitoshi Takeda, a leading Japanese lean expert. He invited us to a workshop in Japan, which we attended shortly afterwards with about five other companies. One of the tasks at the workshop was to submit 15 suggestions for improvement in two hours for what I thought was already an ideal workplace. During the two hours we had to observe the workplace at the *Gemba*, we were not allowed to talk or leave. At first, I could not imagine submitting even one suggestion for improvement, but then with some effort, I got about seven suggestions together and presented them. The next day, all the suggestions for improvement were implemented. After measuring the process times, we found that we had actually reduced the lead time slightly. If you extrapolate this to the number of processes in a company and the number of times they are executed every year, this leads to incredible savings. This was a huge eye-opener for my brother and me.

Back in Ruswil, we made the first mistake right away. We wanted to introduce kaizen top-down. We got the management together and got them excited about the ideas. They then stood at the machines and told the employees what they should do better. The staff went along with this reluctantly, but as soon as the managers were away, employees went back to doing the old processes. Consequently, we realized that our approach was wrong, and we needed to tackle the philosophy bottom-up. We motivated the employees directly at the *Gemba* and showed them their own added value (for example, less bureaucracy). Once you have won over the employees, you have to convince the management as well. They often have the impression that introducing kaizen means losing power. Finally, we have introduced the 9+1 system: During nine days, suggestions for improvement are collected, which are then implemented on the 10th day (complete standstill of the operational business). However, these improvement days have to be very well planned; you cannot just spontaneously tackle anything.

Employees

Employees are an essential cornerstone of kaizen. How could they be motivated for the idea of kaizen?

One thing became clear to me. You cannot have a hierarchical management structure with many management levels and long official channels. In this situation, practically no information gets from the lowest employee to the top management because there is a lot of filtering. This leads to top management micromanaging and skipping almost all levels. The problem with micromanagement is that you then often address people in the first quadrant *(The interviewee refers to the situative leadership model in the leadership statements),* even though they may be long-time employees and are actually in the fourth quadrant. You cannot ask employees to participate and suggest improvements when, on the other hand, you are addressing and managing

them in the first quadrant. I think kaizen or TPS often fails because the company's leadership culture is against it.

In your opinion, can all employees be motivated for kaizen? If not, what do you do about it?

No, of course not. Not all employees are in the third or fourth quadrant, there are always some who prefer the supervisor to tell them what to do and how to do it. I have a bold example: there are whole societies in our hemisphere where not many employees are in the third or fourth quadrant because they are used to being told what to do. Employees in the third and fourth quadrant are suitable because the manager's main task there is mainly to coordinate and, in some cases, to revise the staff.

You cannot engage employees who do not want to be integrated. If a company puts change at its core, it has to confront employees with a choice: Either they appreciate change and are in the right place, and if they dislike change, then they are in the wrong place.

How was HRM transformed as a result of kaizen?

Recruitment

The recruitment process has been completely revised. We are looking for people who are curious and want to develop themselves. Therefore, soft factors are essential and are already taken into account in the recruitment process, such as willingness to change, curiosity, or communication skills. The goal is to quickly get employees into the third and fourth quadrants. Technical knowledge can still be acquired through further training, but soft factors are far more challenging to learn.

Development

Dojo's and the 4-step method are essential tools in SIGA's staff training. It is vital that employees learn from their own mistakes and receive coaching when needed. If you want to reduce the leadership effort, you have to help the employees to reach the fourth quadrant. Classroom teaching is not suitable for this.

Job rotation is possible but not standardized in SIGA because, for me, a standard also implies coercion. If a worker is in the third or fourth quadrant, he or she is inherently open to taking on new jobs. SIGA appreciates it when people move around within the company; it significantly increases the know-how and experience of the employee.

Performance assessment/ reward

The number of suggestions for improvement is included in the employee evaluation. Currently, each employee has to make 50 suggestions for improvement per year. However, in my

opinion, the most motivating factor is the experience of success, i.e., when an employee can say that he or she has achieved something. People always think that employees can only be motivated monetarily, but in my opinion, the salary is less of an incentive and more of a hygienic factor. Furthermore, it is easier to organize monetary rewards than to actually help employees to succeed. We are also considering breaking down the evaluation of improvements to a team rather than to individual employees. The team as a whole unit should be in the foreground and discuss proposals together.

How do you support employees to detect and report problems?

You have to create an atmosphere where employees are not indifferent, but where they are bothered by mistakes and report them, and then action is taken. It is no use if we demand 50 suggestions per employee and year (about 25,000) and then can only process 1,000, while the other 24,000 come to nothing. You have to find a good balance and not ask for more than you can process as a company. If the employees do not get a reaction to their suggestions for improvement, then kaizen is quickly over. In addition, an open culture of mistakes is fundamental; it is not people who are to blame for mistakes, but processes.

How do you make sure that they identify the real root causes?

This is indeed a very big problem. In my opinion, it can only be solved with a suitable leadership culture. Sometimes people come to me with problems where I realize at first glance that this is not yet the real problem and that it lies somewhere else entirely. The larger an organization becomes, the more often this phenomenon occurs. Above a certain size, it is also difficult to prevent employees from becoming conformist. This means that they tend to report only what the management wants to hear and not to raise anything problematic. In this way, real problems no longer come to light. This is a big challenge at the moment because of the big growth. I'm not saying that kaizen is working for us in the way I think it should. We may be further along than other companies, but we are still far from perfect.

We aim to train employees in the most relevant methods for their area, as they help to solve problems as systematically as possible. This means first clarifying the initial situation and not jumping straight to the solution. A good example is the "5-Why" method, which contributes to better quality.

Management

How can top management support the introduction of kaizen?

By not micromanaging but by allowing employees great freedom of choice and flexibility in solving a problem. I do not think highly of actively demanding kaizen. Firstly, it tends to encourage that the number of suggestions is not aligned with what the company can effectively work on. Secondly, I cannot say that employees are motivated if I actively demand kaizen from them. As soon as I have to demand it, something is wrong with the motivation, for example, that the employees do not see any benefit.

How was the management trained for kaizen?

The worst thing is that we train leaders and then find that half of the training is not applied in practice. When we offer leadership training, the leaders should end up in the second quadrant. There is a need to immediately ensure that what is learned can be applied in practice. This requires a coaching/ mentoring program, which is unfortunately still lacking in our organization. This is, for example, a great advantage of the military: practically one day after NCO school, the NCOs can lead their own recruits and are further developed by the lieutenant.

To what extent does the leadership role of managers change with the introduction of kaizen?

The leadership role is changing a lot. Until now, the understanding of management was that a manager knows everything and tells the employees what to do. With kaizen, I see the leadership role more as a Scrum Master. I have to think about what my team needs to work optimally. I still believe that an employee essentially wants to perform and that a sense of achievement is the best motivation. Managers have to lead employees in the right way, depending on the situation. For example, I must not overburden a newcomer with tasks from the third or fourth quadrant. For me, coaching and staff development is the main task of managers.

Structural forces

What are differences between the cultural values of "Japanese" kaizen and the general corporate culture in Swiss companies?

You do not need to make any illusions, Japan is also very hierarchically structured. I am not a big fan of the Japanese or Asian management culture. The European one is a bit more liberal, but there must be better approaches in my opinion. If you talk about *Gemba*, you should also give the employees at the *Gemba* much more opportunities to have their say. If the leadership culture is not right, the rest is a token exercise.

In Japan, kaizen is demanded down to the last employee. In Europe, it is often only half-heartedly demanded and certainly not consistently implemented from the bottom up. For many managers, change is a threat because they are afraid of losing their power. At SIGA, the culture

has been strongly adapted, but we are far from where we want to be. After around 15 years, we are halfway there, but we are not yet satisfied.

Furthermore, an employee is not generally in the first, second, third, or fourth quadrant, but it is always topic related. With a new topic, one is not in the fourth quadrant but perhaps rather in the second quadrant. Many managers know the situational leadership theory inside out, but unfortunately, it is less consistently applied in practice. Often managers tend to micromanage due to time pressure.

How is it ensured that employees' suggestions for improvement contribute to the long-term corporate strategy?

First of all, fundamental proposals have to be made. The problem is that too many topics are taken for granted. Moreover, it is not enough for you as an employee to bring only a proposal. You have to win a majority so that controversial proposals have a chance. After that, a transparent decision must be made.

The company's vision and mission must be known. However, I do not entrust myself or top management with the task of breaking down this vision from the top down. Employees at all levels should think about how they can contribute to this vision and make suggestions.

What are the requirements in terms of organizational structure to make kaizen work?

Too much hierarchy is toxic. We have currently reached a limit where we have to look for new solutions.

How does the company facilitate process improvement along the entire value chain rather than in isolation in individual departments?

This is indeed a big problem. Unfortunately, silo thinking is still widespread in departments, and breaking through that is not easy. We are trying to be more process-oriented, which means that the organization should basically be more along the process chain and less along the specialist areas. The employees have to see that they are not working for their department but for the customer's benefit.

To achieve this, the departments must be broken up as much as possible, and the process chains must be designed to be as customer-oriented as possible. We have also had good experiences with Scrum teams. The improvement day on every tenth working day was an attempt to increase the number of improvement projects at the interfaces. Currently, this improvement day is somewhat exhausted and therefore needs to be reinvented.

To what extent are stakeholders involved in the kaizen culture?

Of course, important stakeholders have to be involved. It is no use if you as a company can react flexibly to market changes, but your suppliers cannot. That's why we also deal with issues with different stakeholders.

I read that you introduced kaizen in 2007. Would you say that it is still being used as effectively in your company as it was when you started?

No, I think the peak has been passed. The current system needs to be rethought. In doing so, we pay special attention to the leadership culture and process chains.

Many companies struggle to sustain kaizen over the long term. What can be done to prevent this?

You have to do everything we have discussed so far. The leadership culture and the organizational structure have to be changed. In order for it to be lived in the long term, the staff must be motivated. That means keeping capacity free so that changes can be implemented and also allowing change to take place in the first place. The fact that SIGA is owner-managed naturally gives us more flexibility for long-term projects than listed companies. With listed companies, I play with other people's money, with private companies with my own.

Do you measure the progress of kaizen? How?

Progress can be measured with different factors. In the beginning, we focused mainly on lead time, quality and costs. In the meantime, I would also measure job satisfaction. The departments visualize their most relevant key figures in cockpits.

How exactly does the improvement suggestion process work? (How can employees submit suggestions? Who assesses them? When?)

Employees can submit suggestions during nine working days, which the departments discuss in daily meetings. They are either implemented directly or scheduled for an improvement day (every tenth working day, the operational business comes to an almost complete standstill).

The suggestions are formulated according to the AZPERK method. In the past, they were written on a piece of paper, but we have digitalized the suggestion system in the meantime. This has mainly to do with efficiency considerations; for example, the suggestions can now be distributed more quickly throughout the company. However, there are advantages and disadvantages to both. An essential thing to me is the direct feedback to the person who wrote the suggestion.

Conclusion

Aside from what we have discussed so far, are there other important requirements for organizations to implement kaizen?

You have to be aware of what the prerequisites for the introduction are and what it entails. If the leadership culture and the organizational structure are not right, it is only a token exercise. Moreover, it must be supported by the board of directors and top management.

What would you do differently today regarding the implementation of kaizen?

Quite a lot. For example, I would put more emphasis on the leadership culture. If I want to introduce kaizen successfully, I have to make sure in leadership that I address the employees in the right quadrant. In a crisis, micromanagement can happen, but normally it should not.

Additionally, it must be possible actually to process the suggestions for improvement. It is no good if I call for improvements but then have no capacity to process them. Finally, it is clear that if top management is not prepared to accept change, then you can stop using kaizen.