### Article

# Is *Kaizen* Effective in Developing Countries? The Universality and Distinctiveness of *Kaizen*

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#### Abstract

Much existing research demonstrates the effectiveness of introducing *kaizen* to developing countries. However, the literal translation of *kaizen* obscures important connotations that are difficult to translate. Why is this seemingly simple term difficult to translate? It is also unclear how the method can be applied to private firms in other countries. This raises the question of which aspects of *kaizen* could or should be transferred. This study investigates historical and social background of *kaizen* as it developed in Japan with aid from the United States. This provides groundwork to examine the extent to which the *kaizen* approach can be exported to other countries. Though the benefits of *kaizen* are desirable, they are difficult to extricate from other aspects of the management-labor relationship historically practices at large Japanese companies. In particular, the worker protection aspect of *kaizen* cannot be transferred directly to other countries where companies' commitment to lifetime employees is different. Therefore, it is vital for those on both the Japanese and foreign sides to comprehend its connection to labor conditions.

**Keywords:** Management training, *kaizen*, Labor Union, ODA (Official Development Assistance), Aid.

### 1. Introduction

Kaizen, a "method of business management aiming for continuous operational improvements through a bottom-up, hands-on, participatory approach," has been adopted by many Japanese companies. For example, Toyota, one of Japan's leading automobile manufacturers, has adopted kaizen, and calls it as the Toyota Production System (TPS). Kaizen is also an important policy tool for the Japanese government's Official Development Assistance (ODA). The late Prime Minister Shinzo Abe mentioned the importance of kaizen when he addressed the opening sessions of the Fifth and Sixth Tokyo International Conferences on African Development (TI-CAD) held in 2013 and 2016, respectively. He identified kaizen as a crucial way of supporting

Africa through ODA. Subsequently, private sector projects have expanded to support *kaizen* in many African countries, such as Ethiopia, Tanzania, and Ghana. These efforts are not limited to

Africa. Beginning with *kaizen* support in Singapore, cooperation on *kaizen* has also been implemented through ODA in other regions in Asia, the Middle and Near East, Latin America, Eastern Europe, and elsewhere (Hosono, Page, and Shimada 2020; Shimada, Homma, and Murakami 2013).

Neither is the use of *kaizen* in Japan's international development cooperation limited to support for companies. It has also been adopted in the context of occupational training, healthcare (the Better Hospital Services program, for example) (JICA 2022), and a movement for improving living conditions. Essentially, *kaizen* has been implemented across various regions and sectors and is crucial to understanding Japan's international cooperation.

The Japanese word "kaizen" is generally translated into English as "continuous improvement" or just "improvement." However, its literal translation elides important connotations which are difficult to translate. This chapter will discuss the meaning of kaizen, its significance in the context of international cooperation, and why this seemingly simple term is difficult to understand.

### 2. What is *kaizen*? —Continuous operational improvements through a bottomup, hands-on, participatory approach

Kaizen, as described at the start of the chapter, refers to "improvement" or "continuous improvement" and is also known as TPS. Kaizen originated from initiatives in Japan and was popularized in the United States in Imai's (1986) English-language bestseller. It was received with interest, and the Japanese word "kaizen" became a commonly used term in Europe and the United States. The interest generated by kaizen in the United States was attributable to the historical background of the era. The 1980s was an era of economic stagnation in the United States, and there was a sense of urgency: if U.S. companies could not improve on Fordism, based on scientific management (Taylorism), which had been the dominant approach since the Second World War, then they would no longer be able to compete with Japanese companies. In this context, kaizen was introduced as the essence of "Japanese business management" and advocated as an improvement on Fordism.

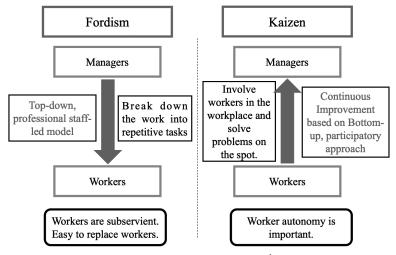


Fig. 1 Differences between Fordism and *kaizen* (Prepared by the author)

Kaizen has been variously defined within Japan and in the context of international development (Hosono, Page, and Shimada 2020; Ohno and Bodek 2019; Sonobe and Otsuka 2014; Imai 1986; 2005; Ohno 1982). However, the concept of kaizen as "continuous operational improvements through a bottom-up, hands-on, participatory approach" is common to all these definitions. As illustrated in Figure 1, This concept is more easily understood in contrast to the "top-down, specialist-led approach" common in Europe and the United States, of which Fordism is a representative example.

Fordism refers to a style of production introduced in the 1910s by the automobile maker Ford. Fordism arose from the management philosophy known as Taylorism. Its salient points include a top-down approach, with management making decisions that workers then implement. Fordism was first introduced in an era of intense labor union strikes. The factory would cease production whenever Ford's skilled workers went on strike. Fordism was devised to enable factories to continue operation by reducing the dependence on skilled workers as much as possible. Specifically, work was deconstructed into "simple, repetitive tasks" that even relatively unskilled workers could perform.

Fordism was accomplished in the following way. First, each process was "standardized," or codified as a simple task that anybody could perform. Second, the time required and speed of each standardized task were measured. Third, a target time was set for each task. Ford was thus able to manage how many iterations each worker could perform within a designated time. In this way, Fordism enabled factories to maintain efficient production by employing low-skilled labor, without risk of a limited skilled group of workers going on strike. The top-down approach is a feature of Fordism, with workers perceived not so much as autonomous actors but rather as subservient to the orders of their superiors. This aspect is very different from the *kaizen* approach, as described below.

Unlike in Fordism, workers in the *kaizen* approach are not units that can be replaced at will: rather, they participate in running the workplace through quality control circles (QCC), thereby raising their motivation. QCCs are groups that voluntarily promotes quality control activities within their own. Constant, incremental improvements in work efficiency are achieved through a bottom-up approach to eliminating *muda*, processes or activities that do not add value (Ihara 2016; Shimada and Sonobe 2021; Hosono, Page, and Shimada 2020).<sup>1</sup>

The important point here is that ways are devised to enhance the "motivation (yaruki)" of workers on the factory floor (genba). The genba is seen not as the site of tension between management and workers but as a forum for obtaining workers' agreement and encouraging autonomous work. This is quite different from Fordism's approach of "segmenting and standardizing work to transform it into repetitive tasks." Workers at the companies that inspired kaizen strive autonomously to find solutions to the problems they face on the factory floor (genba), even amid ambiguity, uncertainty, and imperfection.

At the core of *kaizen* lies a *genba-centred* philosophy. Rather than perceiving workers as units that can be replaced, the idea of *kaizen* is to empower workers to improve the company's

The Toyota Production System (TPS) is a well-known example of *kaizen*. TPS has been defined by Taiichi Ohno, who codified it as follows (Ohno 1982). 1) TPS is aimed at thoroughly eliminating waste through kaizen; 2) TPS promotes "just-in-time" and the automation of all processes (Toyota uses a unique way of writing automation—*Jidoka*—in Japanese, which includes the character for "human"); 3) In this way, TPS enables the visualization of the entire production line, and the identification of weak sections; 4) TPS involves the workers in running the workplace and resolving issues on the factory floor (*genba*). In other words, it is clear that TPS, like *kaizen*, refers to "operational improvements through a bottom-up, hands-on, participatory approach."

productivity (Hosono, Page, and Shimada 2020; Shimada and Sonobe 2021; Shimada 2015). As Shimada (2017 and 2019) discussed, this approach is one response to the concept of "decent work" promoted by the International Labor Organization (ILO). Kaizen was influenced by the ILO's Declaration of Philadelphia in 1944, which rejected the view of labor as a commodity and emphasized the importance of cooperation between management and workers to achieve greater productivity. This sparked the movement in postwar Japan towards "productivity improvement," described later in this chapter.

### 3. The role of *kaizen* in policy debate in international development

Two factors underpin the increased importance of kaizen as a policy for international development in recent years. The first factor is the reevaluation of industrial policy by international aid donors. Industrial policy is a government policy to intervene in a market (Shimada 2015; 2017; 2019, Noman and Stiglitz 2015; 2017, Noman, Stiglitz and Kanbur 2019, Higuchi and Shimada 2019). There has been an increasing focus on guiding corporate managers in developing countries using kaizen as one aspect of industrial policy.

The reevaluation of industrial policy began with the revision of market fundamentalism (a neo-classical standpoint in terms of economic theory, often referred to as "the Washington Consensus") at the World Bank. Since the 1980s, the World Bank has argued that governments should not interfere in markets. To this end, it directed policies aimed at reducing the role of governments, advocating "structural adjustment financing" and "business climate improvement." These approaches effectively dis-favored policies aimed at introducing kaizen as a part of government industrial policy.

The debate on industrial policy between Justin Lin and Ha-Joon Chang provided the catalyst that changed this approach (Lin and Chang 2009). At the time, Justin Lin was Chief Economist at the World Bank. Ha-Joon Chang, meanwhile, was renowned for his research in economic history, showing that industrial policy was the key to economic development in countries such as the United States and the United Kingdom. His argument was that industrial policy does not necessarily follow comparative advantage of the country (Chang 2002). After their debate on the role of governments, Lin advocated a neo-structuralist economic approach proposing more proactive industrial policy in line with the comparative advantage of a country (Lin 2014), but this was met with intense resistance from the mainstream economists within the World Bank, which opposed such intervention. Eventually, Lin chose to leave the World Bank. This debate continued to influence the aid community, even after Lin departed from the World Bank. The Donor Committee for Enterprise Development (DCED), a major private-sector donor committee, began discussing industrial policy.

At the same time, a series of research projects conducted by a group including Professor Joseph Stiglitz (Columbia University) and others began to discuss kaizen in contexts such as the revision of the approach to industrial policy and the consideration of approaches to development financing (Noman and Stiglitz 2015; Noman and Stiglitz 2017; Noman, Stiglitz, and Kanbur 2019).2 As part of this trend, the United Kingdom Overseas Development Institute (ODI) also

<sup>&</sup>lt;sup>2</sup> Stiglitz and Greenwald (2015), for example, lauded the role of kaizen (which they referred to as "just in time") in creating a "learning society." Otsuka et al. (2017) provided a new perspective on new theories of industrial policy through progressive empirical research on micro-economic factors such as kaizen, advocating the Training-Infrastructure-Finance (TIF) strategy. The TIF strategy emphasizes a specific sequence (order) of implementation with sequential support from developing human capital to building infrastructure and supporting finance.

produced a paper considering the role of *kaizen* as a tool of industrial policy (Lemma 2018). The reassessment of the importance of support for companies in developing countries—in the context of this revision of industrial policy by donors—was an important factor underlying Japan's more active implementation of *kaizen* support.

The second factor behind the increased importance of *kaizen* as a policy in recent years is the change in the tone of the development economics debate that coincided with the reevaluation of industrial policy. Until then, development economists had proposed that the economies of developing countries could not grow because of a lack of funding and technology (the gap approach). This approach changed with the spreading recognition of the greater importance of "management capital"—the ability to manage money, infrastructure, and technology and devise ways to generate profits from them (Bruhn, Karlan, and Schoar 2010; Mano et al. 2012; McKenzie and Woodruff 2014; Suzuki et al. 2014; Higuchi et al. 2019). The concept of management capital refers to the ability to manage a company. This could include *kaizen*. The acceptance of management capital produced a great deal of research, with organizations such as the World Bank also launching studies, which continuing to this day (Dinh et al. 2012).

In this way, the reassessment of industrial policy by donors and the increased importance of management capital in development economics gave rise to the new focus on *kaizen* cooperation mentioned at the start of the chapter in contexts including Japan's international cooperation.

### 4. Can *kaizen* be implemented outside Japan? Is it uniquely Japanese, or universal?

In the pages above, this chapter has discussed what *kaizen* is and how is it understood outside Japan. The concept of *kaizen* is sometimes considered deeply rooted in Japanese culture. Indeed, it has been argued that it is impossible to comprehend *kaizen* without an understanding of Japanese culture. For example, Taiichi Ohno, who codified TPS at Toyota, characterizes the concept of *kaizen* as "difficult to grasp."

It started as part of an attempt to develop original methods suited to Japan's economic climate. Ideas that were practised and emphasized in this context—like the "Kanban" system<sup>4</sup> and "automation" written with the addition of the character for "human"—were specifically designed to prevent other companies, especially those in developed countries, from understanding them: to make it difficult even to guess at their meaning. In this respect, perhaps it's inevitable that they're difficult to grasp (Ohno 1978, p. 9; emphasis added by the author).

That is to say, Ohno characterizes *kaizen* as difficult to understand because it was deliberately made to be so. Takahiro Fujimoto (2001) criticizes this obscurity, arguing that *kaizen* is not necessarily a new concept, nor one unique to Japan. Rather, Fujimoto argues that *kaizen* is the basic approach of industrial engineering (IE), and that its popularization as "Japanese" has led to confusion. Meanwhile, Womack et al. (1991) refer to TPS as a Lean production system

<sup>&</sup>lt;sup>3</sup> This ability was traditionally treated by economists such as Solow (1956) as a residual (not an important factor) in the production function. Now, however, management capital was reassessed as an "important factor in economic growth."

<sup>&</sup>lt;sup>4</sup> The *kanban* system is a method adopted by Toyota to manage production using blackboards and white-boards (*kanban*). It is used to control the flow of products between processes to ensure just-in-time manufacturing.

(or Lean method) and conceptualize it as a more universal management method, not limited to Toyota. In light of this discussion, *kaizen*, far from being a difficult concept to grasp, appears to

In other words, *kaizen* has been discussed in two completely different ways: on the one hand as a "distinctively" Japanese management method, and on the other as a "universal" management technique. Likewise, in the on-site (*genba*) implementation of Japan's international cooperation, there are two different approaches to the *kaizen* concept, depending on the project. For implementing some projects, it is considered necessary to teach counterparts about the culture and other aspects of Japan, while for others, counterparts are taught universal methods such as Lean production systems. For this reason, there are often substantial differences between the content of projects, even among those referred to as "*kaizen* projects." These differences sometimes obfuscate the meaning of *kaizen*.

### 4.1 Why did these differences in content arise? The dual origin of kaizen

be an extremely coherent management technique.

There are two reasons why these differences in content arose. The first reason is that, in the context of international cooperation, the concept of *kaizen* has two separate origins. The differences in origins are reflected in the differences in the content of *kaizen* projects. The second reason is the business management differences between Japanese-style and foreign companies. This chapter will discuss these reasons in detail.

First, it is necessary to examine the dual origin of *kaizen*. Two organizations—the Union of Japanese Scientists and Engineers (JUSE) and the Japan Productivity Center (JPC)—played a significant role in introducing the concept of *kaizen* to Japan. JUSE focused on "quality improvement," inviting Dr. W. Edward Deming from the United States, who introduced the quality control circle (QCC: small group improvement activities) method to Japanese companies.

By contrast, JPC was established to receive strategic assistance from the United States. The purpose of this assistance was not limited to "productivity improvement" but also incorporated "worker protection," with support for labor unions included explicitly among its goals. The aim of worker protection represents a significant difference between JUSE's "quality improvement" and JPC's "productivity improvement." The following section will discuss the cause of this difference before examining how these *kaizen* concepts were implemented in international cooperation.<sup>5</sup>

The emergence of a strong worker protection theme in JPC's productivity improvement initiatives is attributable to their implementation as a part of the assistance provided to Japan by the United States. This was partly due to the Cold War context. The United States aimed to retain support of keep Japan's labor unions for social-democratic 'Western' principles against a perceived threat from communist Soviet sympathizers. Rising wages was seen as one means to convince workers of the value of social-democratic capitalist principles (see Shimada 2017; 2018 a; 2018b; 2018c, and Nakakita 2008 for detailed discussions of this point.)

From the end of the Second World War until the mid-1950s, Japanese companies were also subject to antagonism between management and workers, with frequent strikes. The initial introduction of productivity improvement to Japan through U.S. assistance in 1955 gave rise to a vehement backlash from labor unions, particularly the General Council of Trade Unions of Japan

<sup>&</sup>lt;sup>5</sup> Kaizen could be either labor using technology or labor saving technology depending how it is applied. Labor using technology increases the productivity of labor and may not necessarily lead to unemployment. On the other hand, labor saving technology reduces the number of labor one the technology applied.

(JCTU, commonly known as Sohyo). Unions were deeply concerned that productivity improvement would lead to a reduction in employment. To reduce concerns of labor unions, those labor union leaders were also sent to the United States in addition to corporate managers such as Tai-ichi Ohno, who, as Toyota's Vice President, introduced *kaizen* to the company from the US, as described above. This was intended to reinforce the idea that productivity increases would be clearly reflected in workers' pay, and win over skeptical ('Soviet-leaning') labor union leaders. At the time, Japanese companies had an antagonistic relationship with labor unions. They deeply opposed involving worker protection or labor unions in productivity improvement. However, at the insistence of the United States (especially the U.S. Embassy in Tokyo), aspects such as worker protection were included as essential elements of U.S. productivity improvement assistance to Japan.

Essentially, the differences between the JUSE and the JPC can be defined as the difference between the JUSE's focus on quality and productivity from a management perspective and the JPC's approach to productivity with consideration for labor unions.

These two original approaches are variously adopted in the implementation of *kaizen* projects. The *kaizen* initiatives currently implemented by JICA and other organizations in locations such as hospitals emphasize worker protection, such as preventing the infection of healthcare workers. In contrast, little mention is made of worker protection or labor unions in JICA's *kaizen* projects targeting companies, partly because labor issues are often a delicate subject. Thus, the approach adopted by ODA *kaizen* projects targeting companies is close to that originally espoused by JUSE. In fact, *kaizen* did not appear in the names of JICA projects until after the second half of the 2000s; previously, such projects were all characterized as quality or productivity improvement projects. These projects came to be called *kaizen* projects to make them easier to understand in a Japanese domestic context. However, they still rarely incorporate worker protection. These two differences are essential for the issues discussed in the following section.

## 4.2 Is *kaizen* effective overseas? Or is knowledge of Japanese culture necessary to comprehend it?

Is *kaizen*, then, effective overseas? Or must one first learn about Japanese culture in order to comprehend it? The answer to both of these questions is "yes and no." To begin with, *kaizen* was originally introduced to Japan from America as a management method aimed at improving quality and productivity. To revisit the description by Fujimoto (2001), it is precisely because *kaizen* is one of the methods of industrial engineering (IE) that was introduced to the United States and took root in Japan. In fact, it is not a peculiarly Japanese concept but rather a universal management technique that can be transferred through international cooperation. It is thus effective overseas. In this sense, the answer is "yes." The "quality improvement" approach of JUSE does not include worker protection, so can be transferred. On the other hand, however, the worker protection aspect of *kaizen* is not so easy to transfer. This is especially true for JPC's "productivity improvement," which focuses on workers.

Worker protection includes the raising of workers' wages, improving occupational safety, and most importantly, encouraging labor unions to form. This is because of the significant differences between Japan and other countries in employment practices and labor unions. The relevant Japanese business management systems can be summarized under three heading: company-based labor unions, lifetime employment, and seniority systems.

Unlike in many countries, where labor unions are formed across an industry or sector, each labor unions in Japan are formed in a single company. Many large companies in Japan have in-

corporated a system of lifetime employment, where employees are expected to work at the same company from the time when they graduate from university until they reach the designated retirement age, often 60 years old. In addition, the compensation system is structured so that pay increases are based on seniority (age). These systems differ substantially, not only from those of Europe and the United States but also from those used in developing countries. In this context, the worker protection aspect of Japanese kaizen cannot be directly applied in a foreign context without significant investment laying the groundwork.

The relationship between employment and productivity is important to understanding these business management systems. An increase in productivity will lead to a reduction in the number of workers. This is the cause of the concerns expressed by some that increasing productivity through "labor-replacing technologies" such as AI will result in shrinking employment. Kaizen initiatives are aimed at increasing productivity. Therefore, these initiatives will result in fewer workers: those who engage in kaizen will effectively put themselves out of a job. As stated at the beginning of the chapter, kaizen refers to "operational improvements through a bottom-up, hands-on, participatory approach." Why, then, would workers be motivated to engage in this bottom-up, hands-on, participatory approach if it will only lead to unemployment?

Japanese workers' proactive engagement in productivity improvement is supported by systems such as lifetime employment (workers are guaranteed a job) and company-based—rather than industry-based—labor unions (it is not assumed that workers will change employers). The nature of relations between employers and workers varies widely in developing countries where international cooperation projects are implemented. While some countries (such as South Africa and many countries in Latin America) have strong, organized labor unions, some do not. In some countries, workers are in a position to oppose management. In others, workers are at the mercy of overwhelmingly powerful employers.

The description of the kaizen approach is often understood in Japan in relation to the existence of company-based labor unions, seniority systems, and lifetime employment. This is why the topic of kaizen, although it may appear simple to comprehend, requires an understanding of business management systems specific to Japan.

### Opposing Japanese assessments of kaizen

This section examines voices opposing kaizen. Kaizen has prompted conflicting responses in relation to the social structure of Japan. Of course, the same is true overseas.

Conflicting perceptions specifically refer to the following. Kaizen has been lauded as an example of the success of the "Toyota Way." Kaizen has also been the target of criticism, however. Since kaizen is the core of the Toyota way. This criticism is centred on two points: the intensification of labor and the bullying of subcontractors (Kamata 1973; Aoki 1978).6 The shifting of the burden onto subcontractors in the context of Toyota-style management, in particular, has become a social issue, with then Prime Minister Takeo Fukuda even being questioned about the matter at a meeting of the Budget Committee in Japan's House of Representatives (Ihara 2017). These are discussions based from the perspective of workers against kaizen, and it is

<sup>&</sup>lt;sup>6</sup> Examples of the former include the reportage-style Automobile Despair Factory (Jidosha Zetsubo Kojo) by Satoshi Kamata (1973), who actually worked at a Toyota factory, and The Real Toyota (Toyota Sono Jitsuzo) by Satoshi Aoki (1978). Examples of the latter include The Tragedy of the Toyota Production System—The Lament of Employees and Subcontractors: The "Kanban" People (Toyota Seisan Hoshiki no Higeki-"Kanban" Ningen ni Sareta Shain, Shitauke no Dokoku) by Koji Tatezawa (1985).

quite different from the paternalistic tone of employers' perspectives. The involvement of workers, which is essential for kaizen, only occurred inside the company (or its union) among its permanent employees, rather than across the industry. To improve productivity, their demands of subconractors are sometimes intense.

This situation is further complicated by the fact that labor unions themselves have assumed different approaches. In some cases, conflicting standpoints are the result of two competing labor unions established at the same company, one of which is dominated by company management—hence, the Japanese term "subservient union (*Goyo Kumiai*)." These "subservient" labor unions prioritize adherence to the interests of corporate management (In many companies, it was vital for employees to join these unions to gain promotion. In the past, those who chaired such unions—Ichiro Shioji at Nissan, for example—were able to acquire substantial power inside companies). At the same time, some unions engaged in activities quite distinct from this cooperative approach to industrial relations, taking positions antagonistic to corporate management. Thus, even among labor unions, there was a difference of opinion on the assessment of *kaizen* in terms of how employees should be made to work.

In summary, even in the Japanese domestic context, two different perspectives on *kaizen* have long existed: the view of *kaizen* in terms of quality and productivity (the corporate perspective) and the perspective of workers. This duality is linked to the ambiguity of the term and the various meanings that it has taken on.

At the same time, there is a pervasive attitude within the basic *kaizen* approach that "important on-site (*genba*) matters must be considered on-site (*genba*)." This *genba-shugi* (a belief in the hands-on or on-site approach) has the effect of further obfuscating the meaning of *kaizen*. As discussed in the previous section, *kaizen* refers to efforts to find appropriate "on-site" solutions to improve productivity, in contrast to production improvements based on a Fordist, top-down approach or formal solutions prescribed by experts. The direction of *kaizen* improvements is, therefore, completely unpredictable. This makes it a very challenging method from an organization management perspective. At the same time, however, *kaizen* does not seek a "definition" or "formula" for its solutions but rather seeks to find "solutions adapted to the specific situation (*genba*)." Solutions will differ depending on the company and the specific situation (*genba*).

For this reason, in any discussion of *kaizen*, it is necessary to understand the "context" to comprehend the term's meaning. In other words, *kaizen* is not the "application of a predefined methodology" but rather "the discovery of solutions in the context of each company or specific situation (*genba*)"—not "logic" but "context." In Japan, it is often necessary to "read the room" or "read between the lines" according to TPO (time, place, and occasion). This is undoubtedly also linked to the emphasis on *genba* at Japanese companies.

However, this overemphasis on the search for *genba*-based solutions also produces scattered effects rather than an overall logic. Despite its simple definition, the content indicated by the term *kaizen* defies clear description and has taken on extremely broad connotations. Consequently, *kaizen* has become an enigmatic term. This is not simply an issue of translation: the substance of *kaizen* itself is also plural and context-dependent.

### 5. Conclusion

As described in this chapter, *kaizen* refers to a management method to achieve continuous operational improvement through a bottom-up, hands-on, participatory approach. In Japan, it draws on two derivations: the initiatives focused on quality improvement introduced by Dr. Deming from the United States, and "productivity improvement including support for workers'

unions," likewise from the United States, implemented as part of U.S. aid for Japan. It can therefore be transferred to other countries. There is much existing research demonstrating the effectiveness of introducing *kaizen* to developing countries. Therefore, this type of cooperation will likely be effective in the future.

However, a few points must be considered regarding the transfer of *kaizen* through international cooperation. As discussed in this chapter, Japan is home to a characteristically Japanese style of business management centered on company-based labor unions, seniority systems, and lifetime employment. This differs substantially from business management in other countries. Worker protection in Japan has been premised on Japanese-style business management. Therefore, the worker protection aspect of *kaizen* cannot be transferred directly to other countries, where conditions are different. Neither should *kaizen* in other countries be characterized in terms of how it is implemented in Japan. This is because of the inevitable difference in the company's commitment level between lifetime employees and other workers.

When introducing the *kaizen* method in a foreign country, it is vital to comprehend it based on an understanding of national differences in labor conditions and management practices. Cooperation based on the recognition of these differences will aid in mutual understanding. Moreover, the introduction of *kaizen* overseas may not increase workers' pay, as it has in Japan. It is also uncertain whether employment will grow as a result. To improve the living standard of developing countries, it would be necessary to complement *kaizen* with some additional support in the area of worker protection depending on the country's situation. Some countries have strong labor unions, but some do not. More research is needed on what kinds of worker protection are needed to support the *kaizen* approach.

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