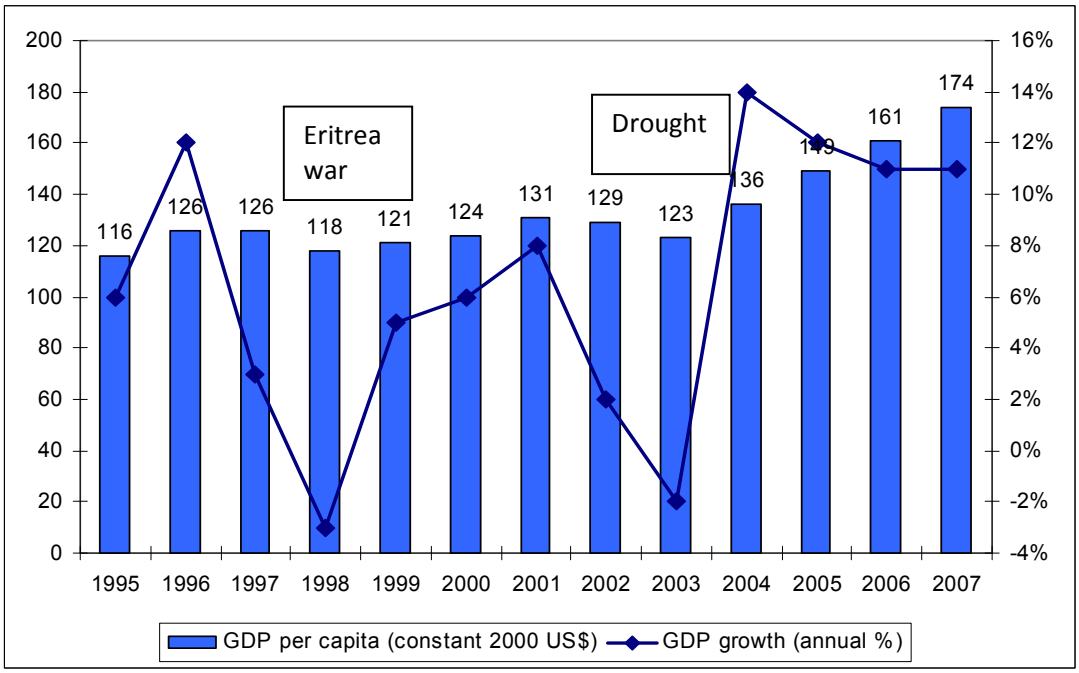
Examination of some Western versus Japanese management techniques in the context of Ethiopia

I. Country Context

The Population size of Ethiopia is estimated at about 80 million in 2008: classified into 83% rural and 17% urban. Despite fast economic growth in recent years, the structure of the economy has stayed unchanged for many decades (see table 1 below). The contribution of the industrial sector has remained at an average value of about 13.12 % for the last two decades (World Bank 2008). Since 1995 Ethiopia experienced a rise in GDP that was interrupted by the Ethio-Eritrean War in 1998 and a serious drought in 2003 (see figure 1 below).

Figure 1: GDP per capita and GDP growth in percent



Source: The World Bank

The Ethiopian Economy has undergone many rounds of reform since 1991 which have improved the business environment. According to the African Development Bank (AFDB, 2008), the participation

and output of the private sector in the economy has markedly improved in comparison with the early 1990s. Furthermore, the environment for doing business in Ethiopia (measured in terms of starting and closing a business, labor hiring and firing, registering property, getting credit, and contract enforcement) improved and became comparable to that of Kenya, Tanzania, Uganda and the SSA average (World Bank, 2005). Private investment, as a percentage of GDP, increased from 9.6 percent in 1992-1996 to 31 percent in 1996-2005. Foreign direct investment, however, remained fairly low. The fact that Ethiopia is landlocked may mainly explain the low level of FDI flow.

II. The industrial sector

Ethiopia's industrial base is still extremely narrow. Industry, including mining and quarrying, manufacturing, electricity and water as well as construction accounts for 13.12% of GDP at constant prices, and manufacturing only 5% (UNIDO 2009, WB 2008). The contribution of manufacturing has always remained less than 6 percent between 1998 and 2007. The private sector is predominately small, informal and service-oriented, with a challenging environment for business expansion. Access to land and credit are often mentioned as major constraints for business expansion. Particularly, one of the commonly cited problems in the financial sector in Ethiopia is the so called missing middle – SMEs can't get credit from formal banks and MFIs because formal banks ask high valued-collaterals and MFIs have limited capacity and outreach. However, having all these constraints the micro- and small-scale enterprises in Ethiopia account for 89.75 percent of total industrial employment (CSA 1995/96)

Table 1: Structure of the Ethiopian Economy

% of GDP	1987	1997	2006	2007
Agriculture	54.3	57.6	47.9	46.3
Industry	13.3	10.7	12.7	13.4
Manufacturing	5.5	5.0	4.5	5.1
Services	32.5	31.7	39.4	40.3
Household final consumption expenditure	79.0	78.8	86.4	83.9
General government final consumption expenditure	10.6	8.0	12.1	10.6
Imports of goods and services	11.7	17.9	36.5	32.2

Source: Ethiopia at a glance (World Bank 2008)

The share of large and medium scale manufacturing industries in GDP was 3.4 percent in 2006/2007 and that of small scale and cottage manufacturing industries 1.6 percent. The manufacturing sector is dominated by light manufacturing such as food processing, textiles and leather which account for nearly 70% of manufacturing value added. Based on my own observation[1], the most common problems faced by manufacturing enterprises, including large and small ones are the following:

- Shortage of raw materials in the required quality and quantity (very weak supply side)

[1] I visited most of the leather shoes factories (both small and large ones), garment and textile producers and cut-flower farms in Addis Ababa in September 2008; and metal and engineering firms in May 2009 for a preliminary survey through discussions with owners/managers

- Shortage of foreign exchange (especially since 2008)
- lack of access to financial resources
- Power and water supply interruptions
- Machinery breakages and shortage of spare parts
- Low level of technical and technological capability
- Weak industrial linkages and linkages with universities and research institutes are virtually non-existent.
- Low level of appropriate institutional support
- Lack of knowledge of foreign markets/demand

The share of manufactured exports to total exports of the country remains low and only leather and leather products and textiles contribute to the country's export performance, representing about 10 percent of the aggregate export earnings in 2007/8. Generally speaking private sector development activities are still relatively new to Ethiopia, and they are often not adequately organized yet. As a result, a common platform is often missing, and private sector's capacity is still very weak. To strengthen the capacity of the private sector, international cooperation in the field of private sector development has been increasing over the years together with the gradual privatization of the Ethiopian economy. Several donors and organizations are committing their resources to support the development of MSME in Ethiopia.

III. International transfer of management systems

> *"Japanese management practices succeed simply because they are good management practices. This success has little to do with cultural factors. And the lack of cultural bias means that these practices can be – and are – just as successfully employed elsewhere" (Masaaki Imai, 1997)*

Western system versus Japanese system

In response to globalization and growing competitiveness of world markets, enterprises are continually looking for different management techniques to make their business operations competitive. A wide range of systems such as Kaizen (which includes 5S, TQM, TPS, etc), benchmarking, Business Process Re-engineering (BPR) and so on have been deployed as drivers to improve competitiveness (Lee and Oakes, 1996). Kaizen is based on continuous improvement principles to facilitate change on a constant and progressive basis. BPR, on the other hand, advocates large step changes using structural process re-design and a fundamental rethinking of the business. In spite of their differences, these two approaches are seen by some researchers as being compatible. For example, Love and Gunasekaran (1997) have presented TQM (one of the Kaizen toolkit) as a good starter for BPR and MacDonald and Dale (1999) believe that BPR and TQM can be used jointly since they have many common features.

Wide range of literatures (e.g. Hammer, 1990; Chan and Peel, 1998; Childe et al., 1994) indicate that BPR is normally used on a once-and-for-all basis. The application of BPR to a large extent involves considerable upheaval in the company and it is not a technique that can be used whenever a flaw is found in a process. There are some questions that arise with respect to compatibility when two or more different management techniques are jointly implemented and applicability across different cultural settings: first, can BPR and Kaizen be implemented jointly by the same company? Put differently, is a

company that has undergone BPR (Kaizen) suitable platform for the application of Kaizen (BPR) principles? Second, which one (Western or Japanese management technique) is the appropriate way to transform a company operating along traditional lines such as the Ethiopian industrial firms? Is there any problem of applying the management techniques (be it Japanese or western) across different cultural settings? However, these questions are so wide and may require an intensive work. This piece of work tries to shed light on these issues in a way that stimulates further scrutiny and investigation.

Each company re-engineers its processes in a different way; however, there are some similarities and common characteristics that can be found in any re-engineering process. Then it becomes worthwhile to analyze to what extent these characteristics favour or impede the implementation of Kaizen. Grover and Malhorta (1997) consider that continuous improvement can often serve as the building block for subsequent innovation efforts. On the other hand, Leach (1996) argues that continuous improvement is a better and less risky means of making changes in a company than re-engineering, claiming that a continuous improvement process helps to maintain stability. Re-engineering does not allow workers to assimilate the changes made and that when re-engineering leads to downsizing, the commitment of employees decreases. The implementation of BPR in the public sector in Ethiopia recently resulted in the reduction of workers who were found to add no value (e.g. deputy department heads and many other intermediaries).

MacDonald and Dale (1999) indicated the main differences between Kaizen and BPR as follows[2]:

[2] MacDonald and Dale (1999) indicated the main differences between TQM and BPR. However, according to their definition of TQM is exactly the same as that of Kaizen. At least TQM is one of the toolkits of Kaizen

- Large step changes are riskier, more complex and more expensive than continuous improvement. This implies that Kaizen may be preferable for developing countries for certainty, cost and simplicity reasons.
- Re-engineering places more emphasis on equipment and technology rather than people; Kaizen is the opposite. Developing countries are generally relatively technology scarce and relatively labour abundant though workers in developing countries may not be highly skilled.
- Re-engineering tends to concentrate on one process at a time using a project planning methodology, whereas Kaizen takes a more holistic view of the organization, building improvement into all aspects of business operation.

Complementarity and some Positive factors that Contribute to joint implementation

The purpose of introducing a new management technique is to boost productivity and hence remain competitive in the global market. When an enterprise implements Kaizen, workers develop certain important qualities such as team working, problem analyzing, finding a solution independently, acquiring training skills, etc. Therefore, workers become more conscious that a static position cannot be maintained if the enterprise wishes to successfully compete in the global market. This gradual but continuous change with in enterprises and workers' cumulative knowledge helps to realize large step innovations by implementing BPR or benchmarking. Conversely, one may also argue that a re-engineered enterprise might have acquired a culture for change and improvement which is conducive to implement Kaizen. Put another way, although BPR is fundamentally designed and controlled from the top of the organization, BPR principles must be communicated company-wide and training and education programmes implemented to teach employees their tasks in the new process design (Grover and Malhotra, 1997). In this way, organizations develop effective vertical and horizontal communication

channels, and training and education infrastructures which are very useful for the implementation of Kaizen.

In the western approach (e.g. BPR and benchmarking) changes are dictated by top management whereas the Japanese approach (e.g. Kaizen) requires the active participation of the entire workforce (including executive's commitment) across the organizational hierarchy. The fact that top management commitment is important for the implementation of Kaizen shows that the barrier might be less in companies that underwent BPR, where top managers are more aware of the need for radical improvement in processes to maintain competitiveness. Dixon et al. (1994) have studied companies which have simultaneously developed Kaizen and re-engineering initiatives and found that there were several similarities. In both cases the size of the initiative affected the entire company, cross-functionality was a requirement, IT was important for re-engineering and considered to be useful for continuous improvement, and management support was needed in both initiatives. Childe et al. (1994) note that one of the benefits of BPR is that it "establishes mechanisms to ensure continuous improvement of the re-design processes. This is so because BPR is regarded as a direct method to introduce dynamism and awake the organization from its traditional position. After a radical change in the design of the process, continuous improvement would perhaps be seen as contributing to adjustments and improvements to the re-engineered process.

Characteristics of Business Process Re-engineering which may hamper Kaizen implementation

The main criticism against BPR is that it frequently brings about downsizing and, as a consequence, the opposition and lack of commitment of employees (e.g. Leach, 1996). This might present a barrier to the introduction and development of Kaizen since it is likely that employees will not be too eager to participate because of distrust from the previous bad experience of BPR. With re-

engineering, many non-value-added activities and operations are eliminated and this leads to displacements of employees from their current positions. Perhaps, those companies that are able to relocate their employers in other positions can contribute to improving the working atmosphere and levels of trust. According to Martinez et al (2008)[3] the application of Kaizen can also lead to similar changes. However, they gave the example of a U.K. automotive industry supplier which motivated its employees to participate in continuous improvement by guaranteeing sustained employment; this has been possible by the continuous growth that the company has experienced over many years. In the case of BPR, the application of this employment strategy would require radical growth, which is not so easy.

Characteristics of traditional firms and other important Considerations

Some of the most common problems facing traditionally managed organizations are: high defect rates, excessive inspection costs, lack of communication, unsatisfied employees and dissatisfied customers all leading to high levels of operating costs. These problems are partly to be avoided up on the implementation of improved management techniques such as Kaizen. However, it is also true that some basic conditions such as motivated workers, some level of skill for them to be able to understand trainings and team discussions, top management commitment, good worker – management relationship, etc are quite essential. Thus such issues should be assessed in advance. As employees' commitment is a key point for the success of a Kaizen policy, the level of employee satisfaction and their commitment to the organization need to be evaluated prior to the introduction of Kaizen. Generally traditional enterprises do not attach great importance to training and the level of employee skills and knowledge is

[3] Martinez et al (2008) took the case of TQM for their analysis, but according to their definition, TQM is continuous improvement.

likely to be low. The introduction and development of Kaizen begins with training, education and the motivation of personnel and other necessary changes in the workforce management system.

The industrial sector in developing countries in general and in Ethiopia in particular is dominated by traditional firms. Martinez et al (2008) lists the following characteristics of traditional firms in developing countries in general. This is true for the industrial firms in Addis Ababa based on my own observations in different times.

- Top management tends to focus on the use of financial measures to evaluate process performance. They are rarely involved in making process improvements.
- Supplier selection is essentially based on price; other criteria are given scant consideration.
- Employees have low levels of empowerment and autonomy, and teamwork is rarely used
- The relationship between employees and management is antagonistic. Employees do not identify their aims with that of the organization.
- Rare inter-department communication/consultation
- Main emphasis is on detection and control activities. The use of quality management tools and techniques is given minimal consideration
- Low incentive mechanisms (workers are poorly motivated)

One of the underlying conditions for the implementation of Kaizen is the presence of incentive packages that motivate workers. Every company employee is encouraged to come up with ideas – however small – that could improve his/her particular job activity, job environment or any company process for that matter. The employees are also encouraged to implement their ideas as small changes can be done by the worker him or herself with very little investment of time. However, the incentive mechanisms are poor in developing countries esp. in Ethiopia. Other important conditions may relate to

workers' level of education. For the workers to be able to follow and understand the Kaizen event, workers need to have some level of education. Perhaps this problem tends to be lower in Ethiopia as the average level workers' education is relatively better. For example, average years of schooling of workers for the customer order based tailors (or traditional sector) is about 9 years whereas for the ready made garment producers (modern sector) is about 14 years (GRIPS/EDRI, 2007)

Challenges encountered during BPR implementation in the public sector

BPR has been widely implemented in the public sector of Ethiopia. This is so because Services delivered by public institutions are characterized by: very sluggish, costly (high transaction cost), incompetent (not up to the needs of customers) and unresponsive. However, private firms have not adopted it yet in Ethiopia. There are good examples to tell about the changes brought by the implementation of BPR in some of the public offices. The experiences of the Ministry of Trade and Industry (MOTI), the Ethiopian Investment Commission, and the Ethiopian Customs Authority are instructive examples of how institutions can be transformed to be more responsive, efficient and effective. These three public institutions were taken as good examples in the IMF Country Report No. 06/27 for Ethiopia (2006). For instance, in the License and Registration Department of MOTI, it was taking a company 26 working steps and 35 days to secure a trade license, but after BPR it takes only 6 work steps and 34 minutes.

However, there are a number of problems I found when I go around and ask people what they think about BPR and how they evaluate BPR in their offices. Below I summarized the most common reflections I gathered from different people. First, some BPR teams were inappropriate. There were frequent cases where the BPR team does not comprise people from the operations. It is a commonsense that an employee working in the operations department knows more about the processes in that

operation and may be able to identify the problems. BPR teams mostly comprise executives who do not have detail knowledge of actual operations. Second, no salary adjustment was made that can motivate workers. Workers ended up having more workloads than before with the implementation of BPR in the public offices in Ethiopia but compensations were not adjusted accordingly. Third, there are some public offices that are highly inter-connected in the sense that their services are horizontally or vertically interrelated. For example, import/export companies visit the Ethiopian Customs Authority (ECA), MOTI and banks (e.g. National bank) one after another to get their works accomplished. Then reengineering only one or some of the interrelated service providing public institutions does not bring the desired effect if all the interrelated institutions do not implement BPR. Fourth, executives (especially heads/directors of departments) were observed to resist every effort to improve the public institutions and reject expert suggestions if the change/suggestion is going to have negative impact (such as decreasing workers) on themselves, their relatives and friends employed in the institution. It does not matter whether the newly introduced method (such as BPR) has a significant positive impact in improving the competency and service provision of institutions or not; the first issue they analyze is whether the new system will impact them negatively or not. If it does they make every effort to hinder it or at least delay it.

Fifth, some of the benchmarks chosen were to some extent unrealistic. BPR has some steps during its implementation. The first is analysis of the current situation; the second is studying what to do to solve the problems and the third is taking a benchmark. The main problem observed was in taking a benchmark. The benchmarks were either unrealistic or obsolete. Let me give the example of the implementation of BPR in the customs office which seems to have taken unrealistic benchmarks. In customs practices (such as collecting customs/duties, etc), England was taken to have best practices.

Probably in England the major objective is not to collect tax; the main objective may be to boost trade. In England import taxes are almost zero which is also a requirement of the WTO[4]. However, in Ethiopia (or generally in developing countries), collection of taxes is a major objective and import duties are generally high. Therefore one can see that there are tremendous differences in policies and objectives between England and Ethiopia though England has the best practices in customs issues. If import duties are high, then customers tend to evade taxes by making a lot of fakes in the process. Customs workers spend a lot of time, energy and resource on detecting such fakes and end up providing less facility and service to customers. On the other hand, if we take India's customs duties and rates, they are roughly similar to that of Ethiopia's. However, India delivers more improved and transparent services to customers than Ethiopia does. The world Customs Organization (WCO) accepts India's customs duty system and recommends other developing countries to adopt Indian type. So isn't India a more realistic benchmark than England for Ethiopia? The second aspect of benchmarking problem is taking very old practice as benchmarks. For example SME practices of the Germany 1960s were takes as best practices for the current Ethiopian SMEs. I am of the view that a lot of things have changed and old practices have less room for improvement and updating.

Conclusion

The application of BPR involves considerable change (rethinking) in the company and it is not a technique that can be used whenever a certain process went wrong. However, though successful re-engineering has the potential to bring about a better process design but perhaps it may not the optimal one. Re-engineering a process is not a mathematical optimization procedure and, therefore, any new

[4] Import duties are almost zero; if they need to restrict imports, they impose quotas for some products

process will be amenable to further improvements once it has been implemented and subjected to operating experience. Then kaizen becomes a proven way to help make these further changes, on a continuous basis. Moreover, Childe et al. (1994) note that one of the benefits of BPR is that it "establishes mechanisms to ensure continuous improvement of the re-design processes. This is so because BPR is regarded as a direct method to introduce dynamism and awake the organization from its traditional position. After a radical change in the design of the process, continuous improvement would perhaps be seen as contributing to adjustments and improvements to the re-engineered process.

Large step changes can only be realized at wide intervals of time. when an enterprise implements Kaizen, workers develop certain important qualities such as team working, problem analyzing, finding a solution independently, acquiring training skills, etc. Therefore, workers become more conscious that a static position cannot be maintained if the enterprise wishes to successfully compete in the global market. This gradual but continuous change with in enterprises and workers' cumulative knowledge helps to realize large step innovations by implementing BPR.

Which technique to choose depends on many factors. The nature and existing conditions of enterprises in the industrial sector (e.g. whether they are traditional or not), resources, and preferences (e.g. stability versus upheaval and certainty versus risk)

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