

THE IMPORTANCE OF SIX SIGMA FOR SMALL AND MEDIUM ENTERPRISES IN THE ACTUAL ECONOMIC CONTEXT

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ABSTRACT

Without any doubt these are very interesting times that we live. Nothing is absolutely new or totally different. And even so thousands of companies have closed their activities not being able to manage this crisis. The remaining local companies, in special the small and medium enterprises should implement innovative solutions with long term result, in order to survive these times; and have a suitable strategy. This strategy can be implemented with the help of instruments like six sigma, business process reengineering that, applied each day can help managers solve problems related to poor quality and efficiency. Even if for the SME Six Sigma implementation can be somehow difficult, it provides several benefits and advantages for the company, the stakeholders, customers, and so on; and most important it helps the company saving money in a smart way.

KEYWORDS: *Six Sigma, small and medium enterprises (SME), crisis, costs, benefits*

Introduction

The passing on of the Romanian companies into a new stage of development raises new problems for the management teams. The way in which the most suitable solutions for the present economical context can be implemented represents a very important thinking issue these days.

The Romanian companies have to adopt, in the next future, innovative strategies that place them in front of the competition. The business model has changed over the years and thus the local companies have to understand the key elements of it and also how to improve the company's internal processes.

The economic context

The economic context requires that companies go beyond the activity which, in the last period, was based on spectacular increase of sales, in which the management was focused on gaining a market quota as big as possible, thus needing a high efficiency and cost savings. It is also noticeable that the Romanian business environment becomes more and more complex, the competition is stronger and stronger, this being the reason why is needed a set of instruments that help to manage a business in the new economic conjuncture, to know exactly where the risks, the advantages, the profits are, what the demand and supply will be over an year, or two, or three.

For the SME this period is even trickier because their resources are limited in comparison with the large companies, but they have, in fact, the advantage of faster adaptability to change.

Issues to focus on

Irrespective of the size of the company, during crisis times, a CEO should be very careful with the business that he is leading, and should focus on several ideas. The

consultancy company AT Kearney has made a list with 12 such issues, among them 3 being related with the goal for continuous improvement. The first one is about cutting unnecessary costs, meaning those costs which are peripheral and without them the company still functions without being affected. In production these costs are the ones that do not add value during the production cycle, thus being the ideal candidates for elimination or reduction. Six Sigma is focusing on reducing these costs, and also it emphasizes on reducing until elimination the costs associated with poor-quality.

The second one is directly related to the first. This is about giving the necessary attention to what costs are cut, because the first impulse of companies is to cut the costs from the support functions area like financial, IT, HR and/or legal. Reducing costs in these areas in an undifferentiated manner can lead to an increase of costs in the whole company, so this is not a good strategy. But, for long term results executives should simplify and atomize processes and to develop strategies for efficient externalization of appropriate operations.

The third issue refers to the efficiency of the production capacities. Companies in the production area should strive to use those techniques and instruments that have rapid tangible results, among these being also Six Sigma, a discipline that through statistical methods and techniques like variations reduction and defects elimination leads to an increase of customer satisfaction and cost savings.

In the Romanian SME the problem is in which measure can contribute the employee to the welfare of the organization, or at least the one from middle management. There are a lot of people that find themselves in managing positions and they do not know what to do, and what can be done. Many people have heard about Six Sigma, many times in connection with the success of big companies like GE, Motorola and AlliedSignal in saving billion of dollars with their Six Sigma initiatives. But how many of them really know what this represents in fact and how it can be used for the benefit of the organization?

In general, small companies know some things about this methodology and they fight in the dark for this type of benefits. Why they do not succeed? Is Six Sigma just for large companies?

Six Sigma application in companies

Six Sigma was created as an answer to a problem, problem that arises in any company, independent of its size. That problem was how to make more money and also to increase quality; and Six Sigma answer is to make money by improving customer value and efficiency. It is true that it was created and tested on a large company, but the problem is a general one and also the solution is a quite evident one. But this solution is not that evident to be achieved, because it needs some previous actions to be done before attacking it. "Although Six Sigma is not a completely new way to manage an enterprise, it is a very different one"¹.

Moreover, there are a set of requirements that need to be fulfilled to successfully implement Six Sigma discipline in any organization.

The first one is the support of the management team. This is also the first step of the implementation. When managers realize that the change is imperative, because the business is more and more complex and there is a strategy, a vision that has to be followed, they start to think how to implement this change and to try different instruments. If Six Sigma is the chosen one then they have to have some knowledge about this, to become familiar with what it can do for the company, and most important on how Six Sigma can improve and optimize processes by solving problems related to quality or efficiency. After

¹ Pyzdek, 2003, p. 11

this, they have to be very supportive and proactive in establishing the initiative, otherwise there will be a loss of money. If the top management is convinced about the possible results of Six Sigma and is very enthusiastic, then the employees will also trust it and will put their entire cooperation and interest, and more they will not resist change.

The second requirement is education and training. If the management is supportive and has realized the importance of Six Sigma in the organization, then it realizes also the importance of education and training for the personnel thus not considering that the investment in this is too big and not rewarding. The Six Sigma organization is different from the traditional one, and the knowledge, skills and abilities required for success in this new organization are different than those possessed by the majority of employees.

Training needs also to be done to the managers, in order to acquire more knowledge to support the initiative and even to participate in the whole projects that are going to be deployed. But also some first line employees should be trained because they are the ones involved in the projects deployment in the first place. In time, after several projects were successfully finished by the company, all employees should get some training with respect to Six Sigma because, even if they are not going to be part in any project of this type, they should be in the same boat as the others and should speak the same language. Plus, training gives them confidence in themselves, in the management, makes them feel important for the company and thus it gets them more involved in the day to day activities.

Moreover, from top to bottom and from bottom to top some education must be provided with respect to quality culture¹. It is well known that the organization's culture has a profound effect on the day to day activity, thus not understanding the cultural aspects of quality, long term improvements in quality are unlikely to be observed. Also, there can be invite some outside consultants to help the company with the first projects, until inside people will acquire the same degree of knowledge, and the costs related to these should not be considered as a cost but as an investment which will be successfully repaid in time.

The third requirement is the resource commitment. The Six Sigma projects take 3 to maximum 6 months to be completed, and in this period some employees should be allocated. If for the Master Black Belts and Black Belts the time allocation is 100%, meaning that this is their own occupation, the rest of the belts should be allocated less, but not less than 50% in order to achieve the results in time.

The last one, but not the least important is the connection with the recognition and reward system. The number one goal of employees is the paycheck, and even if they are involved with the heart in the projects, the salary can get them unmotivated. Recognition systems are important not because they improve work by providing incentives for achievements but because they make a statement regarding what is important for the company.

The best way and the successful story about how to set and manage these recognition systems are to connect the results of the bottom line with appropriate compensation decisions. Each company should find, based on its employees needs and wants, ways to reward the efforts of the employees in such a manner that they remain motivated and involved.

Six Sigma application in small and medium enterprises

Above are presented the four major requirements for successfully implementing Six Sigma within any company, no matter the size. Next, are presented the particularities of these requirements in SME.

¹ Juran and Gryna (1993) define the company quality culture as the opinions, beliefs, traditions and practices concerning quality.

The support of the management team, with all the attributes described above, is easier to be achieved in SME. Compared to large companies, the SME management teams are usually closer, cooperating and meeting in day to day activities, knowing each other and also knowing with more details the other employee teams, the problems, challenges, opportunities that arise. Because these types of companies are more agile, having a response time shorter, it is to achieve management agreement. Even if here also are present politics and procedure, usually they are shorter and require fewer steps to fulfill something, like buy-in management team members to help the company with the Six Sigma initiatives.

With respect to the requirement for education and training, this is harder for the SME. The costs for education and training are somehow standard, no matter the size of the company; they vary only with the number of personnel trained. But, for the first projects the investment is more or less the same, and for the small and medium companies this represents a bigger effort. Not to mention the fact that time is money, and the time away from the office represents lost revenue and production both for small and large companies, with the difference that the return on investment, a function of the potential savings, differs; if the large companies like GE or Motorola produced savings of billion dollars, SME produce savings of only thousands of dollars, and this, on the short term can be discouraging.

The resource commitment in SME can be somehow harder than in large companies. The main idea is the employee time, and as mentioned before, time is money both for the employee and for the company. But, it should be very clear that the time dedicated to process improvement is saved time for the production and is reflected in the productivity, that, in the final, it also comes to the saving available for the company. And, as the size of the company decreases, the potential saving also go down, and the relocation of resources means a great deal of effort.

For the forth requirement, meaning the connection with the recognition and reward systems, it is easier to fulfill. As mentioned before, SME offer the advantage of agility, faster responsiveness, less time for decision taking, and so on. Thus, if decisions are taken faster, it means that this transformation is done faster, for everybody's joy, and the remaining issue is to apply the same rigor of procedures with best results in large companies. For these new systems the HR department should be involved to change the employee responsibilities in the suitable manner for the day to day activities, thus the assessment being easy to complete.

Conclusions

These special times require that at the lead of the business be an educated manager, who follows success rules, establishes clear objectives, to agree them with the employees, to understand their necessity, and so on. Six Sigma already requires this, and moreover bring a lot of benefits for the companies implementing it. And even if its implementation is a bit harder for the SME, with a high degree of rigor, with consistency and trust, important savings can be made, in a suitable and sustained manner.

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