

## **SIX SIGMA PROGRAMME : INDIAN STATISTICAL INSTITUTE, PUNE**

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Ladies and gentleman,

It is indeed a pleasure for me to be here today in your midst and to formally inaugurate this workshop on six sigma tools. I think you have made a wise decision and the investment in time you are making is worthwhile. I wish the workshop all success and hope all of you will go back to your respective organizations and become champions of a tool, that will enhance your productivity as well as your customer focus.

Six sigma came into prominence in the late eighties globally. I think Motorola was the first company to adapt it. Jack Welch, as CEO of GE converted six sigma which was an idea/tool into a corporate movement. Subsequently many large companies adapted it and succeeded in creating value of the practices of six sigma.

There are several quality tools today at the disposal of the management of organizations. There are merits in many of them. Several of them use overlapping concepts. Yet six sigma has captured the imagination of managers because of a few reasons. Firstly six sigma has an external focus, it begins with the question – who is my customer and what his needs are. Many other quality management tools are focused on processes internal to organizations. Six sigma begins with identification of customer needs, translates this into critical to quality parameters, which in turn leads to a rigorous examination of internal processes. The second reason, is that six sigma tools and practices are more quantitative, grounded firmly on fundamentals of statistical methods. Therefore, any improvement is measurable. The old adage goes – you can improve only what you can measure and the more precisely you can measure, better will be the improvement. Lastly, by breaking down activities into projects, that you can define, measure, analyze and improve, you can determine financial contributions that an organization gains from implementation of six sigma.

Just like any other initiative, successful implementation of six sigma practices require strong leadership commitment, tenacious internal champions, supportive management infrastructure and trained personnel. If anyone of this element is missing, the initiative is unlikely to succeed.

The fundamental objective of six sigma is to meet or exceed customer expectations of your business. Six sigma has wide applicability, from manufacturing to services as long as you can define a process by which your actions are fulfilling a customers demand. Thus six sigma is not limited to production floor. You could implement six sigma in your cafeteria or in a hospital. In the end six sigma strives to achieve primary performance drivers – namely resource management, technical advancement, risk management, speed to market, technical performance etc. The six sigma methodology allows all processes to be rendered to a common denominator – defects per unit and sigma. By doing so it allows an organization to benchmark one process, products and performance against another. Because it creates and institutionalizes the common quality language and goal, six sigma significantly heightens quality awareness and provides a framework identifying and maintaining process improvements. There are two challenges implicit in six sigma. One is to achieve 3.4 defects/10<sup>6</sup> opportunities. The second equally important challenge is to maintain it day after day, month after month.

A robust Information Technology infrastructure is a necessity to accomplish both these goals six sigma is heavily driven by quantitative analysis and the assumption that all processes must, to be efficient, be respectable – a lynch pin of six sigma is process control and consistency. But how do you gain control. The answer is through the integration of sophisticated well tailored IT solutions into key processes.

Institutionalizing six sigma has significant costs training, organization infrastructure building and time and effort of senior management. Unless these investments are made, it is unlikely to succeed. Additionally six sigma involves transforming people's mindset, a painfully slow process. Therefore, realizing success in six sigma requires enormous patience.

