

# Project Management and Six-Sigma: A New Approach

PROJECT MANAGEMENT TECHNICAL DIVISION



by Ir. Noor Iziddin Abdullah bin Haji Ghazali

**THE** Project Management Technical Division (PMTD) of IEM organised a two-hour talk entitled “Project Management and Six-Sigma” on 18 September 2010 at the Auditorium in Wisma IEM, Petaling Jaya. The talk was conducted in collaboration with Genaxis Sdn Bhd, currently the first and only American Society For Quality (ASQ) Certified Partner in Malaysia.

The talk was delivered by Mr. Selveentharan Muniandy, the Chief Operating Officer (COO) of Genaxis. He is a professional member of the American Institute of Industrial Engineers and a Registered Graduate Engineer with the Board of Engineers Malaysia. He holds a Bachelor’s Degree (Hons) in Business Information System and is a Certified ASQ Master Black Belt Instructor, Six-Sigma Black Belt from General Electrics US and Starwood Hotels and Resorts Worldwide Inc. Mr. Selveentharan has previously conducted two other sessions on “Project Management and Six-Sigma” for IEM in 2009.

The primary objective of the talk was to introduce the participants to the use of the combination of tools of Project Management and Six-Sigma, which can play a significant role in the engineering environment. Project Management is a strategy applied in planning, organising and managing projects to ensure the success of completion of project goals and objectives. On the other hand, Six-Sigma is a statistical based process improvement methodology and risk management tool that helps in minimising errors and risk, reducing costs, improving workflow and increasing customer satisfaction.

Six-Sigma, at many organisations, simply means a measure of quality that strives for near perfection. But the statistical implications of a Six-Sigma program go well beyond the qualitative eradication of customer perceptible defects. It is a methodology that is well rooted in mathematics and statistics.

The objective of Six-Sigma Quality is to reduce process output variation so that  $\pm$ six standard deviations lie between the mean and the nearest specification limit. This will allow no more than 3.4 defect Parts per Million (PPM) opportunities, also known as Defects per Million Opportunities (DPMO), to be produced.

By implementing Six-Sigma wisely on carefully selected projects, companies will benefit from:

- Improved customer satisfaction
- Reduced cycle times
- Increased productivity
- Improved process flow, capacity and output
- Reduction in total defects

- Increased product reliability
- Decreased work-in-process (WIP)

Here is a brief explanation on Six-Sigma Green Belt and Black Belt:

## BLACK BELT (BB)

Black Belts are the heart and soul of the Six-Sigma quality initiative. Their main purpose is to lead quality projects and work full time until they are complete. Black Belts can typically complete four to six projects per year with savings of approximately \$230,000 per project. Black Belts also coach Green Belts on their projects, and while the coaching may seem innocuous, it can require a significant amount of time and energy.

## GREEN BELT (GB)

Green Belts are employees trained in Six-Sigma who spend a portion of their time completing projects, but maintain their regular work role and responsibilities. Depending on their workload, they can spend anywhere from 10% to 50% of their time on their project(s). As the Six-Sigma quality program evolves, employees will begin to include the Six-Sigma methodology in their daily activities and it will no longer become a percentage of their time - it will be the way their work is accomplished 100% of the time. This is how some companies have organisationally structured their Six-Sigma quality program. But how can one ensure that everyone is doing their job? How can one keep their employees motivated when fires are burning all over the corporate landscape?

This was the third time IEM had organised this kind of Project Management and Six-Sigma talk. A total of 86 participants from various industries attended the talk. They consisted of both corporate members and graduate members of IEM. At the end of the talk, Mr. Selveentharan received a certificate of attendance and a memento from Ir. Noor Iziddin Abdullah bin Haji Ghazali, who currently serves as a Committee Member of PMTD. Feedback from the talk participants was encouraging with some indicating their intention to go for Six-Sigma Green Belt and Black Belt certification. It is hoped that more engineers will participate in this talk to enhance their professional knowledge as well as professional career. First Admiral (Rtd) Dato’ Ir. Ahmad Murad bin Hj. Omar, who currently serves as the Advisor of PMTD, chaired the talk’s opening while Ir. Noor Iziddin Abdullah bin Hj. Ghazali chaired the closing talk. ■