

ABSTRACT
IMPROVEMENT RECOMMENDATION TO INCREASE
PRODUCT QUALITY USING SIX SIGMA METHOD AT
PT. SEPATU MAS IDAMAN

by

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PT. Sepatu Mas Idaman (PT. Semasi) is a shoes manufacturing company. It products various shoes from a famous brand in the world, such as Rockport, Lacoste, Hush Puppies, Kickers, Sperry Top Sider, MBT, Sledgers, Johnston and Murph, etc. PT. Semasi creates products based on job order, which the costumers could order by online. Quality and customer satisfaction is an important factor in running the company. This can be seen from one of it mission, that is to products the best quality of Brown shoes and have a competitive prices to give satisfactions to the customer. The data from the company shows that the defects of each workstation is still exceed Semasi's target, which is 1%. To get customer satisfaction and company efficiency, PT. Semasi try to control and improve the products quality.

According to the problem above, PT. Semasi solve the defects that occur with one of the methods of Six Sigma quality control. The main principle of Six Sigma is to achieve perfection (3,4 DPMO) by controlling the processes that occur. As for the stages in the implementation of Six Sigma is *Define, Measure, Analyze, Improve, Control* (DMAIC). But the research is done only for improve stage. The define stage is to select the target object, CTQ identification and mapping process stage I. Measure stage are to carry out CTQ characteristic identification, mapping process phase II and performance production measurement. While the analyze stage are about performance production analysis and root cause analyze. Based on measurement which carried out the data quality of Speery Top Sider shoe product during May to July 2010, we can see that the CTQ potential is the hygiene, the form, colour, size and the tidiness of products. The existing performance shoe production process Speery Top Sider at the output level are 9189.77309 DPMO and 3,857 sigma level. PT. Semasi have to continuously improve the process to achieve six sigma. There are the factors that cause defects, such as humans (less thorough, hurried, tired, etc.), materials (different skin types), machine (size lasting pliers), environment (hot temperatures, lack of space) and methods (there is no standard process for getok garang and the absence of standard time in the garang machine).

Keywords : Six Sigma, DPMO, level sigma, CTQ (*Critical to quality*)