

ENAM SIGMA DALAM PENGURUSAN MAKMAL KOMPUTER DI IPT: SUATU CADANGAN

(Six Sigma in Managing Computer Laboratories at HLI: A Proposal)

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ABSTRAK

Pendekatan Enam Sigma yang digunakan secara meluas dalam industri pembuatan telah membawa kepada perubahan ketara dalam pengurangan jumlah kecacatan yang dihasilkan. Kejayaan ini telah menarik minat banyak pihak termasuk dari industri perkhidmatan untuk menerapkan strategi ini dalam operasi mereka. Kajian ini bertujuan untuk menyediakan perancangan bagi pelaksanaan Enam Sigma dalam pengurusan makmal komputer di Institusi Pengajian Tinggi (IPT). Pendekatan ini dipilih bagi menambah baik perkhidmatan dan meningkatkan kecekapan pengurusan makmal komputer terutamanya dalam menyelesaikan masalah kritikal yang dihadapi. Cabaran besar yang dihadapi oleh pengurusan makmal komputer meliputi serangan virus komputer yang sentiasa bertali arus, gangguan rangkaian, pemanasan berlebihan, dan penyelenggaraan perkakasan dan perisian. Kajian ini melibatkan pengurusan makmal komputer bagi dua kes, iaitu di Fakulti Teknologi dan Sains Maklumat (FTSM), Universiti Kebangsaan Malaysia dan Fakulti Rekabentuk dan Senibina (FRSB), Universiti Putra Malaysia. Strategi pelaksanaan Enam Sigma yang dikemukakan boleh dijadikan panduan kepada pihak pentadbiran makmal komputer untuk menggunakannya dalam operasi mereka.

Kata kunci: Enam Sigma; pengurusan makmal komputer; Institusi Pengajian Tinggi

ABSTRACT

The Six Sigma approach which has been widely applied in the manufacturing sector has contributed to significant changes in reducing the number of defects. As a result, it has attracted many practitioners including those from the service industry to implement the strategy in their operations. This study aims at providing a prospect for implementing Six Sigma in computer laboratory management at Higher Learning Institution (HLI). Six Sigma approach has been selected not only to improve the service but also to handle critical problems in the process. Among the main challenges faced by the computer lab management team include continuous virus infection, network interruption, overheating, and hardware and software maintenance. The study considers the management of computer laboratory for two cases, i.e. the in Faculty of Information Sciences and Technology (FTSM) in UKM, and the Faculty of Design and Architecture (FRSB) in UPM. The proposed strategy for implementation of Six Sigma would serve as a guideline for the management team to apply the tool in their operations.

Keywords: Six Sigma; computer laboratory management; Higher Learning Institution

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