

Sakulrat Songnisai 2008: Using Capability Maturity Model to Assess the Effectiveness of ISO 9001:2000 Implementation: Case Study at Sanyo Semiconductor (Thailand) Co., Ltd. Master of Engineering (Engineering Management), Major Field: Engineering Management, Department of Industrial Engineering. Thesis Advisor: Associate Professor Kongkiti Phusavat, Ph.D. 100 pages.

This research illustrates the application of the System Engineering – Capability Maturity Model (SE-CMM) for maintaining and improving the Quality Management System (QMS) of ISO 9001:2000 implementation. This research takes place at Sanyo Semiconductor (Thailand) or the SSTH during June – December 2007 with extensive support and cooperation from its top management. The checklist, adapted from the SE-CMM and uniquely designed for the SSTH, is developed to evaluate the strength of ISO 9001:2000 implementation among the organization’s core functional units.

The results show that the Production functional unit exceeds the SE-CMM level 4. The overall findings are generally consistent with top management’s viewpoint. The research benefits include the ability to maintain and strengthen the organization’s QMS, to facilitate knowledge sharing in regard to ISO 9001:2000 implementation across core functional units. Furthermore, the SE-CMM framework helps prepare the organization for a future accreditation (on top of certification). In conclusion, the SE-CMM helps maintain and strengthen the SSTH’s QMS.

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Thesis Advisor’s signature

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