

**WHAT HAPPENS AFTER ERP IMPLEMENTATION:
UNDERSTANDING THE IMPACT OF IS SOPHISTICATION,
INTERDEPENDENCE AND DIFFERENTIATION
ON PLANT-LEVEL OUTCOMES**

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Interdependence and Differentiation
On Plant-Level Outcomes**

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DECLARATION

I hereby declare that the work has been done by myself and no portion of the work contained in this thesis has been submitted in support of any other application for any degree or qualification of this or any other university or institute of learning.

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ABSTRACT

This research explores the determinants of a successfully Enterprise Resource Planning (ERP) implementation at the post implementation view in Malaysia. This research presents a model of the organizational and technological impacts of ERP systems. The Organizational Information Processing Theory (OIPT) and IS Sophistication Theory was used as a lens to understand the factors that impact on the ERP intermediate benefit at the subunit level. Interdependence and Differentiation are the two important elements in the OIPT theory. The theory suggests that ERP will be a relatively better fit when interdependence is high and differentiation is low. IS Sophistication is conceptualized in three dimensions: extent of use, intensity of use and IS integration. Customization and the amount of time since ERP implementation were also included in this model. Survey-based research was carried out to test these theories. All data were obtained from 131 manufacturing plants in Malaysia. SPSS and PLS were used for testing the measurement and structural models respectively. Result shows that there is a significant relationship between IS sophistication and subunit differentiation towards overall ERP benefits. These findings indicate the importance of a moderating effect of the control variable customization, towards differentiation.

Keywords: ERP, Post Implementation, Organizational Information Processing Theory (OIPT), Interdependence, Differentiation, IT sophistication.

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