Instrument for Integrated Information System Assessment in Higher Learning Institutions

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The need for an instrument to comprehensively assess Integrated Information System (IIS) is crucial in order to provide complete status on IIS effectiveness to the organisation. The instrument is considered comprehensive when it includes all the three main domains of Information System integration namely organisational, technical and strategic domain. This paper discusses on the design and development of IIS assessment instrument, including the testing of the instrument to check on its reliability. The process of constructing assessment statements, the formulation involved in the assessment, and interpreting the results from the assessment are discussed. The proposed instrument is successfully tested and has been proven reliable.

Keywords: Theorem Integrated Information System; IIS Assessment; Assessment Instrument.

1. INTRODUCTION

Integrated Information System is a result of requirements by organisation to improve their IT capability in order to support the organisation’s business process. With the high investment put forth by organisation in the integration exercise, the management want to know the status on how successful the system in term of its effectiveness in supporting organisation’s business process and provide other benefits. Several studies have been made in finding the success measures to be used in the assessment of IIS in organisation, especially on large integrated systems such as Enterprise Resource Planning (ERP) system and Enterprise System. A review on all these studies has been made by the researcher and a proposal of comprehensive measures has been produced and tested on its reliability. These measures for IIS assessment are based on IIS success factors and criteria, which covers the three main domains of IS integration suggested by [20].

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An IIS assessment instrument is then constructed using the proposed measures. It is argued that this instrument can comprehensively assess the IIS in organisation.

This paper discusses on the design and the process of developing the instrument that will be used to comprehensively assess the success of IIS in organisation. The design of the instrument consists of defining the overall concept of IIS assessment instrument and what should be included in the instrument. The development of this instrument covers creating statements representing success factors and criteria, and formulating a rating scale. The pilot test on the instrument and the result from the pilot test are discussed, which then is followed by the analysis of the result. This paper ends with the discussion on the reliability of the instrument and future works.