## AN INTEGRATED MODEL TO EVALUATE THE EFFECTS OF CLOUD COMPUTING SERVICES ON SMEs PERFORMANCE



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# ITEX'188





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#### PRODUCT BACKGROUND

In Malaysia 97.3% business establishments, 65.5% total employment and 36.3% GDP are SMEs. SMEs that adopt Cloud Computing Services (CCS) can receive value over time if they continue to use the CCS solution after implementation. The assessment of the factors that affect SMEs to continuous use CCS, not a simple task due to lack of adequate methods and tools for such task. The model designed to help organizations maximize the value of CCS by increasing knowledge about the extent to which various factors affect the continuous use of CCS. The developed model will help CCS providers to increase their competitive edge and will help SMEs to increase their financial and non-financial performance.

### PATENT / COPYRIGHT

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#### **BENEFITS/USEFULNESS**

#### For SMEs:

- Help decision-makers by focusing on important factors.
- Improve the chances of making intelligent decisions aligned with business objectives.
- Maximize the value of the CCS to increase their performance.

#### For CCS Providers:

- Guide in understanding the influencing factors affecting continued use of CCS in SMEs so that they can successfully manage customers' concerns in this highly competitive market.
- Increasing knowledge of factors affecting CCS adoption and use.
- Help to drive improvements to products and marketing strategies which can increase the competitiveness in the market place.

#### MARKETABILITY

A model that is useful for cloud computing providers and SMEs in continuing use of cloud services



Microsoft Azure

#### ACHIEVEMENTS

- Gold Medal, Creation, Innovation, Technology & Research Exposition (CITREX 2018), UMP
- 2. Best Paper Award COMSCET 2016 Conference, UTM Kuala Lumpur.
- 3. Best Paper Award 1st Runner UP, NCON-PGR2016, UMP

### CLOUD SERVICES INFLUENCING FACTORS TO ORGANIZATIONAL PERFORMANCE

#### H2=0.563\*\*\* Confirmation (CNF) H1=0.141\*\* = 0.200 CSES H4=0.229\*\* Satisfaction (STS) Relative Advantage (RLA) 115=0.113 = 0.537 $R^2 = 0.406$ $Q^2 = 0.524$ Complexity (CMX) H6=0.162\* H7=0.160\* Compatibility (CMP) H3=0.089 H8=-0.027 Security and Privacy (SCP) $R^2 = 0.211$ $Q^2 = 0.421$ Fop Management Support H9=0.114 Organizational Performance Continuous Use of (TMS) H15=0.460 (OGP) Financial Performan Cloud Computing H10=0.191\* ance (FOP) Cost Saving (CTS) Adoption (CUCC) n-Financial Perfor ce (NOP) H11=-0.046 $R^2 = 0.431$ $Q^2 = 0.496$ IT Readiness (ITR) H12=-0.093 Trust (TRS) H13=-0.06 p < 0.05, p < 0.01, p < 0.01H14=0.257 Dotted lines denote insignificant impac Competitive Pressure (CPP) Government Support (GVS)

#### THE GREEN COMPUTING INITIATIVE

CCS technology initiative minimize the use of paper; and optimize the information process in organization. The result of using the model to evaluate organizational performance helps in minimizing excess and wastage in technology usage.

#### NOVELTY

A new model developed to determine the factors influencing SMEs to use CCS and measure its effect on their financial and non-financial performance.

#### THE PRODUCT

Continuous Use of Cloud Computing, Confirmation and Satisfaction E	valuation	0	4	
		Hours	Minutes	Seconds
ou have started the evaluation on 12 Apr, 2018 [1536:55]. Time duration for this evaluation is 5 Mins Your evaluation will be submitted automatically 12 ar, 2018 [1541:55].		Continuous Use of Cloud Computing		
Question No. 1 [20 Score ] Continuous Use of Cloud Computing Section				
We recommend the use of Cloud Computing services to peers.		1	2	3 4
O 1: Strongly Disagree		6	SUBMIT EVALUATION	
O 2: Disagree				
O 3: Neutral		Legend		
O 4: Agree				
O 5: Strongly Agree		Curro	at Oues	Not Visited

