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A STUDY OF TECHNOLOGY ACCEPTANCE MODEL (TAM) TOWARDS CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

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A Study of Technology Acceptance Model (TAM) towards Continuous Professional Development (CPD)

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Abstract: The purpose of this project was to determine the technology acceptance using Technology Acceptance Model (TAM) towards Continuous Professional Development (CPD) system among University A academic staffs. The dependency of System Usage of CPD system as the dependent variable was cross check with four independent variables namely, Perceived Usefulness, Perceived Ease of Use, Management Support, and System Quality. A total of fifty five correspondents replied the questionnaires and the data obtained were analyzed using Statistical Package for the Social Science (SPSS) version 13. A conclusion was drawn that Perceived Usefulness, Perceived Ease of Use, and System Quality have positive relationships with System Usage of CPD while management support has negative relationships with CPD.

Keywords: Technology Acceptance Model (TAM), Continuous Professional Development (CPD), Perceived Usefulness (PU), Perceived Ease of Use (PEU), Management Support (MS), System Quality (SQ).

Introduction

Globalization and rapid changes in technology result a decrease in employer's commitment to retain employees in the workplace. Also from this perspective, there has been a shift in responsibility for learning from organizations to individuals (McCauley and Hezlett, 2001). In lieu with the rapid development of education system in this new millennium, University A has bold initiative in implementing Continuous Professional Development (CPD) system specifically for its staffs. CPD is defined as a program designed to improve knowledge and increase the professional skills throughout the career of staffs besides saving it operational costs through in-house training. The objective of CPD system is chosen in line with the government wish to a reduction in the reliance on examinations and courses to measure the competence of a staff. This means the Competency Level Assessment or usually known as 'Penilaian Tahap Kecekapan (PTK)' is now revised and being added with the needs to collect the required CPD points according to each staff scheme grading format before entering the PTK. However, introducing any new technology such as Continuous Professional Development (CPD) system could be observed by some staffs as a distraction that takes away from the quality of work or just creates a time consuming effort that adds no value to the work process. Thus it would be valuable to identify the acceptance level of technology among University A academic staffs. In order to identify the acceptance level of technology among staffs, Technology Acceptance Model (TAM) which is often used in previous research is used as the research model for this study.

This paper is organized a follows. Methodology discusses on the research model and the hypotheses on the study, Results and Discussions present the findings and analysis of results found on questionnaires and lastly in Conclusion the author concludes the paper.

Methodology

In this study, the research design used is based on Technology Acceptance Model (TAM) designed by Davis et al. (1989). TAM versus its four external variables, Perceived Usefulness (PU), Perceived Ease of Use (PEU), Management supports (MS), and System Quality (SQ) are used to examine the CPD system. Figure 1 shows the research model used in the study.

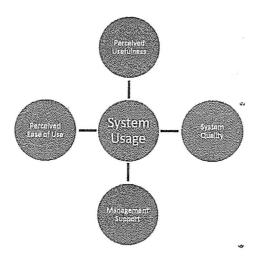


Figure 1: Research Model

In this study, multiple regression analysis will be used to determine the relationships between TAM and its independent and moderating variables. Based on the research model, four hypotheses were derived from research questions. Simple random sampling was chosen as the sampling design for this study. Questionnaires are generated and were used as the instrument. The scales used in the research called the Likert Scale. The questionnaires were created using Google Form application and sent through email to participants. The data collected from the questionnaires were analyzed using Statistical Package of Social Science (SPSS) version 13. At the end of the analysis, decision is made whether each hypothesis is rejected or accepted.

Results & Discussions

Null hypothesis (H0) stated that the Perceived Usefulness of CPD system has negative relationships with system usage. The regression coefficient, β for the perceived usefulness is 0.337. Thus the regression result indicates that H0 is rejected. Alternative Hypothesis (HA) stated that the Perceived Usefulness of CPD system has positive relationships with system usage. The regression coefficient, β for the perceived usefulness is 0.337. Thus the regression result indicates that H0 is failed to reject. Null hypothesis (H0) stated that the Perceived Ease of Use has negative relationships with system usage. The regression

coefficient, β for the perceived ease of use is 0.333. Thus the regression result indicates that H0 is rejected. Alternative Hypothesis (HA) stated that the Perceived Ease of Use has positive relationships with system usage. The regression coefficient, β for the perceived ease of use is 0.333. Thus the regression result indicates that H0 is failed to reject. Null hypothesis (H0) stated that management support has negative relationships with system usage. As indicated in table 4.11, the regression coefficient, β for the management support is -0.002. Thus the regression result indicates that H0 is failed to reject. Alternative Hypothesis (HA) stated that the management support has positive relationships with system usage. As indicated in table 4.11, the regression coefficient, β for management support is -0.002. Thus the regression result indicates that H0 is rejected. H0 stated that system quality has negative relationships with system usage. As indicated in table 4.11, the regression coefficient, β for system quality is 0.280. Thus the regression results indicated that H0 is rejected. H0 stated that the system quality has positive relationships with system usage. As indicated in table 4.11, the regression coefficient, β for the system quality is 0.280. Thus the regression results indicated that H0 is failed to reject.

Conclusion

The main objective of the present study is to explore the relationships among the studied independent variables namely Perceived Usefulness (PU), Perceived Ease of Use (PEU), Management Support (MS) and System Quality (SQ) towards the System Usage (SU) of Continuous Professional Development (CPD) system in University A. The study initially predicted positive relationships between PU, PEU, MS and SQ towards SU. However after multiple regression analysis is done to the variables, the researcher found out that PU, PEU, and SQ have positive relationship towards SU but not MS. MS has been detected has a negative relationships towards SU based on negative coefficient regression β and exceeded value of significant above the threshold limit. Due to the top down communication from top management to employees to accept CPD system, the result revealed that few of the staffs are not convinced enough with CPD system. Management should review the implementation process and provides sufficient training and help support to all staffs continuously. Computer Centre Department in University A must play big role in continuously improving the current CPD system that has few week elements. From the study, the researcher found out that the current system is not user friendly. For example, no online claim form is available at the moment and it has to be done manually by human. This result in slow CPD point updating and could results an error while key in the data. Last but not least, staff awareness is the most important thing and they have to realize the importance of CPD system in saving the organization cost and achieving organization objectives. In researcher opinion, the responsibility should not comes from management only and employee should be more proactive in adapting and getting use to CPD system quickly in order to make sure the objectives of organization is achieve.

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