PROFILING ICT AVAILABILITY AND
DETERMINANTS OF TEACHERS' ICT
ACCEPTANCE IN JEMBER SCHOOLS, EAST JAVA,
INDONESIA.

BY

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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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APPROVAL PAGE

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ملخص البحث

يهدف هذا البحث إلى معرفة تؤفر تكنولوجيا المعلومات والاتصالات في ثلاث مدارس حكومية نموذجية بمنطقة جيمبر. كما يهدف هذا البحث إلى فحص العناصر المهمة التي تؤثر على قرار المعلمين في استخدام تكنولوجيا المعلومات والاتصالات في عملية التعليم والتعلم في المدرسة. قام الباحث باقتراح نموذج جديد المعدل من نظرية قبول تكنولوجيا (TAM) بإضافة عنصرين؛ الفاعلية الذاتية، ودعم المدرسة لمتطلبات التكنولوجيا. يختبر هذا النموذج معرفة مدى تأثيره على قرار المعلمين باستخدام تكنولوجيا المعلومات والاتصالات في عملية التعليم والتعلم. وقد استخدم الباحث نوعين من التحليلات الإحصائية للوصول إلى النتائج؛ التحليل الوصفي، والتحليل الإحصائي (SEM). واشتملت عينية هذا البحث على ١١٣٧ معلماً وتم اختيارهم عشوائياً من ٦٥ مدرسة حكومية بمنطقة جيمبر. ونتيجة هذه الدراسة أشارت إلى أن وسائل التكنولوجيا في ثلاث مدارس يختلف توفرها من مدرسة إلى أخرى، كما أنه ليس على المستوى المرغوب، لاسيما أجهزة الكمبيوتر. كما أشارت نتيجة التحليل الإحصائي على أن النموذج المقترح مناسب لعينية البحث لاستيفاء كافة المعايير الموصى بها. وكما أظهر التحليل أن العنصرين المقترحين في النموذج والعناصير الأخرى لها آثار كبيرة في اتخاذ قرار المعلمين في استخدام وسائل التكنولوجيا في عملية التعليم والتعلم. وكذلك النموذج المقترح يختلف بالنسبة لكل من المعلمين والمعلمات في التحليل الإحصائي. بمعنى أن الجنس يؤثر في اتخاد القرار على الاستفادفة بأجهزة التكنولوجيا. وكل العوامل في النموذج تؤثر إيجابياً بنسبة ٦٣% على اتخاذ قرار المعلمين باستخدام تكنولوجيا المعلومات والإتصالات في عملية التعليم والتعلم. هذا النموذج مهم ومفيد جداً للقائمين على العملية التعلمية وواضعى السياسات الذين يحفزون استخدام تكنولوجيا المعلومات والاتصالات بين المعلمين في عملية التعليم والتعلم في المدارس.

ABSTRACT

This study on ICT acceptance was conducted with two major purposes: (i) to profile ICT availability in three (3) categories of national standard schools (SMP, SMA and SMK) in the district of Jember, Indonesia, and (ii) to test an extended Technology Acceptance Model that hypothesized the relationships among computer self-efficacy (CSE), organizational support (OS), perceived ease of use (PEU) and perceived usefulness (PU) as determinants of Jember teachers' intention to use (INT) ICT in teaching and learning. A total of 1,137 teachers from 65 schools participated in the Two types of statistical analysis were employed to analyze the data: (i) descriptive analysis was used to describe ICT availability in the three schools, and (ii) Structural Equation Modeling (SEM) was used to assess the direct and indirect effects of CSE and OS on Jember teachers' intention to use ICT. The analysis revealed that ICT availability across the three school types varied from one school to another and was not consistent. Basic ICT facilities, especially computer sets, were found to be lacking in each school type. The SEM results revealed that all four hypothesized factors - CSE, OS, PU and PEU - significantly and positively influenced Jember teachers' intention to use ICT, accounting for approximately 63% of the variance explained. The structural model also produced a statistically significant change in the chi-square value when tested across gender, indicating that gender moderated the structural model. The findings have important implications for stakeholders and policy makers, particularly with respect to their efforts to galvanize greater ICT utilization among teachers in Jember schools.

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