

# Assessing the attitude of healthcare professionals towards the use of a mandatory Hospital Information system: An empirical investigation

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## Abstract and Objective

*The Unified Theory of Acceptance and Use of Technology (UTAUT) as proposed by Venkatesh et al. was applied, together with other research works in order to empirically assess the acceptance of technology in one of the largest and technology-aware hospitals in Greece. Forty nine participants provided feedback regarding the mandatory information system. Data analysis was conducted using a structural equation model, specifically partial least squares. Results indicate the important effect of facilitating conditions to performance and effort expectancy along with the very strong effect of performance expectancy to attitude towards use of technology and behavioral intention.*

## Keywords:

Technology assessment, Evaluation, Hospital information system

## Introduction

The current work attempts to utilize the Unified Theory of Acceptance and Use of Technology (UTAUT) as formulated by Venkatesh et al. [1] in information technology in the health care sector. Related work in this field includes the wide adoption of UTAUT in a diversity of disciplines, including healthcare [2,3], as a framework to investigate behavioral intention of stakeholders towards a specific technology.

## Methods

The field study was conducted at one of the largest and newest university hospitals in Athens. The instrument creation involved a questionnaire, mainly based on Venkatesh et al. [1], and translated in Greek, while it was migrated into a Web based environment. A specific set of 9 hypotheses and a set of causal relationships were formulated. The participation to the actual study was anonymous. Data analysis was based on partial least squares, involving the assessment of the structural and the measurement model.

## Results

Forty nine (49) of the participants submitted the questionnaire, with responses according to a seven-point Likert scale from

“strongly disagree” to “strongly agree”. The mean age of the participants was 34.84, with 66% of the individuals being female and 34% male, 13.3% administrative, 22.2% medical and 60% nursing staff. 86.5 % of participants are highly educated. According to the findings of the structural model, facilitating conditions have a strong effect on both performance expectancy and effort expectancy. In addition, performance expectancy proved to be a very strong predictor of attitude towards use of technology and also a very strong predictor of behavioral intention. Furthermore, computer anxiety has a very strong significant relationship with effort expectancy. Also, attitude towards use of technology has a significant relationship with behavioral intention to use the actual information system in the context of the current study. On the contrary, social influence and effort expectancy did not prove to affect behavioral intention and self-efficacy did not have a significant effect on effort-expectancy.

## Conclusion

The current effort attempts to adopt UTAUT as a theoretical framework for assessing the acceptance and use of technology in the context of a mandatory information system deployed at a university general hospital. A set of hypotheses were formulated and evaluated. The current study possesses a series of limitations (e.g. mandatory information system, low sample size and low mean value of sample's age). The outcomes of the current research may further assist on formulating a set of factors that affect the acceptance of technology in healthcare organizations.

## References

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