Predicting the Acceptance of Healthcare Information Technology : the case of Morocco

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What is the problem?

The resistance to Information technology (IT) usage by healthcare professionals* is a well-known matter.

* Physicians, Nurses and Administrative staff

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Why did we decide to study ?

Morocco initiated a national healthcare Information System (HIS) project in order:

➔ To support healthcare professionals

➔ To improve the quality and efficiency of the promulgated care services

But healthcare professionals resisted using this HIS...

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Why did we decide to study ?

➔ **To identify significant factors predicting the acceptance of HIS by these professionals**

➔ **To conceive and propose a robust model that considers the Moroccan cultural context**

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What is the research question ?

which model could predict the acceptance of Healthcare information Technology/Healthcare Information System by healthcare professionals in Morocco?

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How did we study the problem?

The literature Review...

→ **Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003).**

→ **Researches based on UTAUT model to study IT acceptation in healthcare context (Hennington and Janz, 2007; Wills et al., 2008; Kijsanayotin et al. 2009; Venkatesh et al. 2011);**

→ **Etc.**

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How did we study the problem?

The hypotheses related to Technology context and to Implementation one...

H1: Performance expectancy (PE) influences positively the Moroccan healthcare professionals' intention to use IT

H2: Effort expectancy (EE) influences positively the Moroccan healthcare professionals' intention to use IT.

H3: Social influence (SI) impacts positively the Moroccan healthcare professionals' intention to use IT

H4: Facilitating conditions (FC) influences positively the Moroccan healthcare professionals' intention to use IT

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How did we study the problem?

→ **Data were collected from ten public healthcare centers and one regional hospital**

→ **The concerned population 469 individuals and involved**
   - **99 physicians,**
   - **332 nurses,**
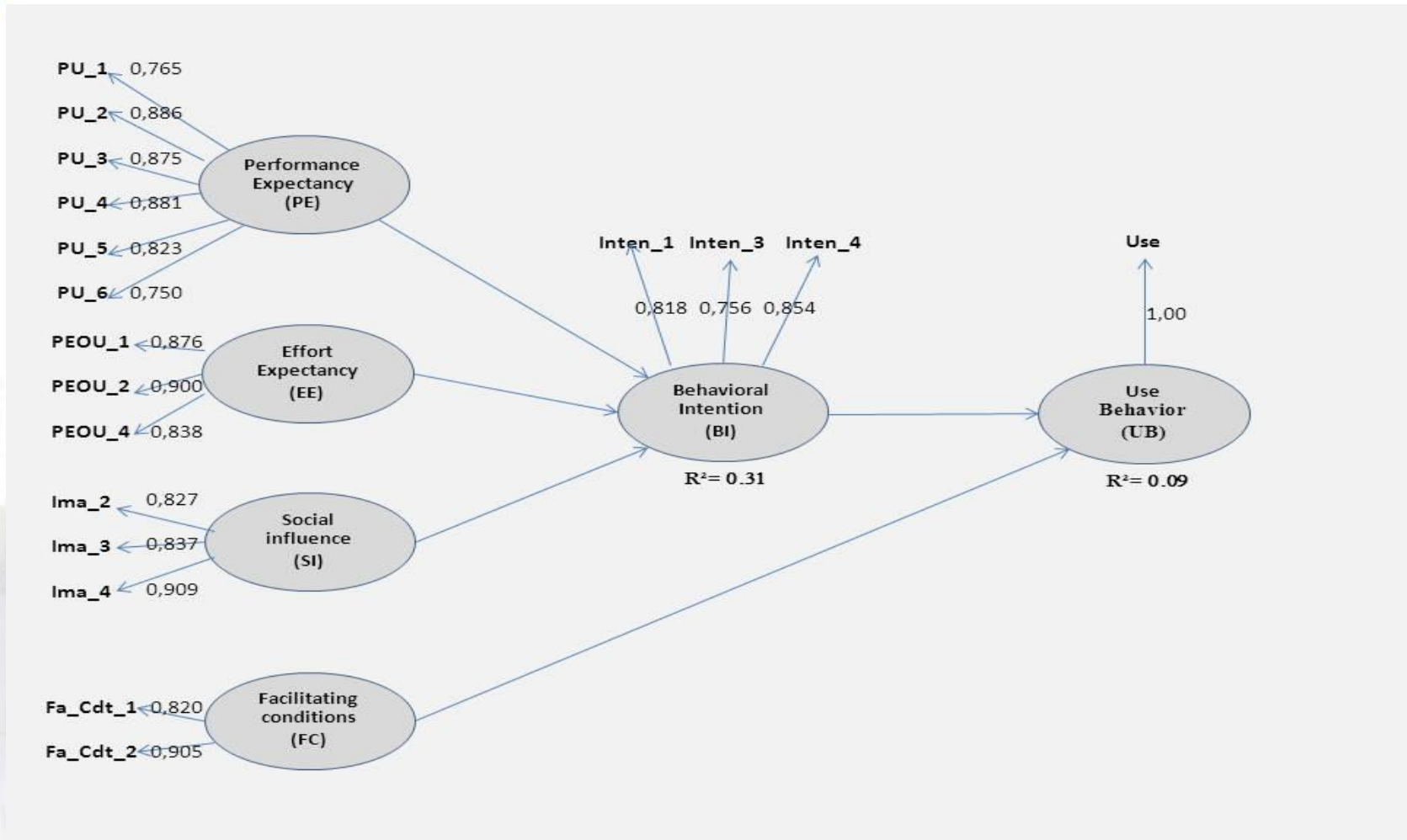   - **38 administrative staff.**

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How did we study the problem?

		Ten urban health public centers		Regional hospital Hassan II	
		Frequency	%	Frequency	%
Gender	Man	39	35	96	68
	Women	72	65	45	32
Age	Under 25 years	13	12	6	4
	Between 25 and 40	47	42	62	44
	Over 40 years	51	46	73	52
Healthcare professionals	Physicians	30	27	21	15
	Nurses	81	73	94	67
	Administrative staff	N/A	N/A	26	18
	Total	**111**	**100**	**141**	**100**

Table 5 : Summary of the respondents sample used for data analysis (N=252).

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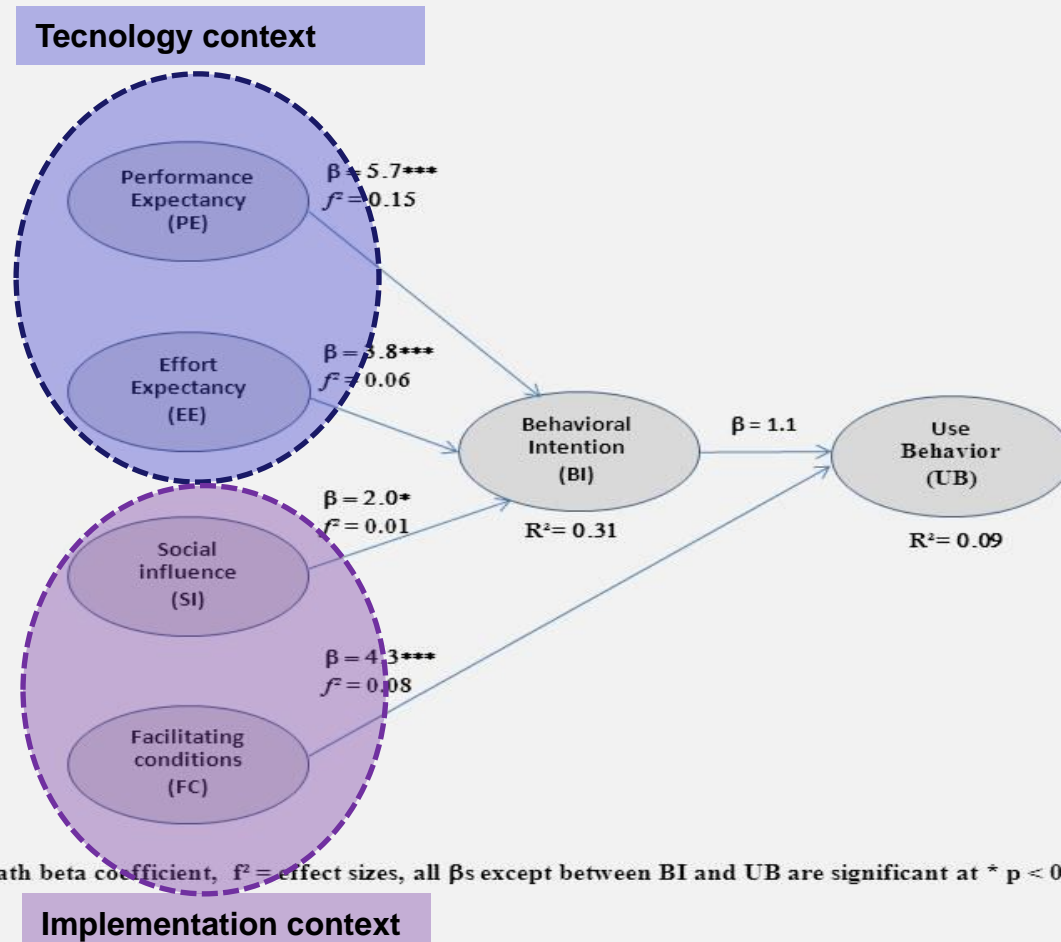# What did we find after data analysis ?

Figure 2   Measurement model.

What did we find after data analysis ?

Figure 3 Structural model

Tecnology context

$\beta = 5.7***$
$f^2 = 0.15$

Performance Expectancy (PE)

$\beta = 3.8***$
$f^2 = 0.06$

Effort Expectancy (EE)

$\beta = 2.0*$
$f^2 = 0.01$

Social influence (SI)

$\beta = 4.3***$
$f^2 = 0.08$

Facilitating conditions (FC)

Behavioral Intention (BI)

$R^2 = 0.31$

$\beta = 1.1$

Use Behavior (UB)

$R^2 = 0.09$

β = path beta coefficient, f^2 = effect sizes, all βs except between BI and UB are significant at * $p < 0.05$ and *** $p < 0.001$.

Implementation context

How our findings are useful to peers and/or practitioners ?

- **They provide...**

  - **Additional knowledge to researchers in the area of HIT acceptance**

  - **A tool (model) to decision makers and managers in healthcare hospitals to understand the most influencing factors for HIT acceptance**

  - **Valuable information to CIO and Information System Managers to consider while conceiving and developing HIS**

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Conclusion

➔ **This work contributes significantly to both, healthcare IT and UTAUT applied research to develop knowledge concerning developing countries such as Morocco.**

➔ **It can help health information technology producers and health information systems designers to produce acceptable systems in these countries.**

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