

# Adoption of Twitter in higher education – a pilot study

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# Outline

- Introduction
- Background
- The proposed model
- Study design
- Study results
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- Conclusion and future work

# Micro-blogging (Twitter)

- A kind of Weblog that is restricted to 140 characters per post
- Normally posted by one person and is in reverse chronological order
- Can be accessed and written by any Web interface and mobile phone via SMS or IM
- **Twitter** started in 2006 and is considered the fastest growing Web 2.0 technology ([CrunchBase, 2011](#)), over 200 million user accounts worldwide.

## ...continue (Twitter)

- Mostly used for information sharing, information seeking and friendship wide relationships ([Java et al., 2007](#))
- Also considered as a highly social tool, ([Humber et al, 2008](#)) and ([Krishnamurthy et al, 2008](#))
- The link between Web 2.0 tools, **social interaction** and **enjoyment** within the higher education has been widely documented ([Hsu and Lin, 2008](#))
- Similar inherent features are also seen in Twitter ([Wigand, 2010](#))

# Motivation

- Despite its world wide adoption, Twitter's potential has **yet** to be harnessed ([Faculty-Focus, 2010](#)).
- **Previous attempts**: Twitter adoption in Government organisations ([Wigand, 2010](#)); mass convergence and emergency events ([Hughes and Palen, 2009](#)); and the enterprise ([Gunther et al., 2009](#))
- But **no** empirical study on Twitter adoption in higher education
- Significant **predictors** of Twitter usage...?

# Theory of technology adoption /acceptance

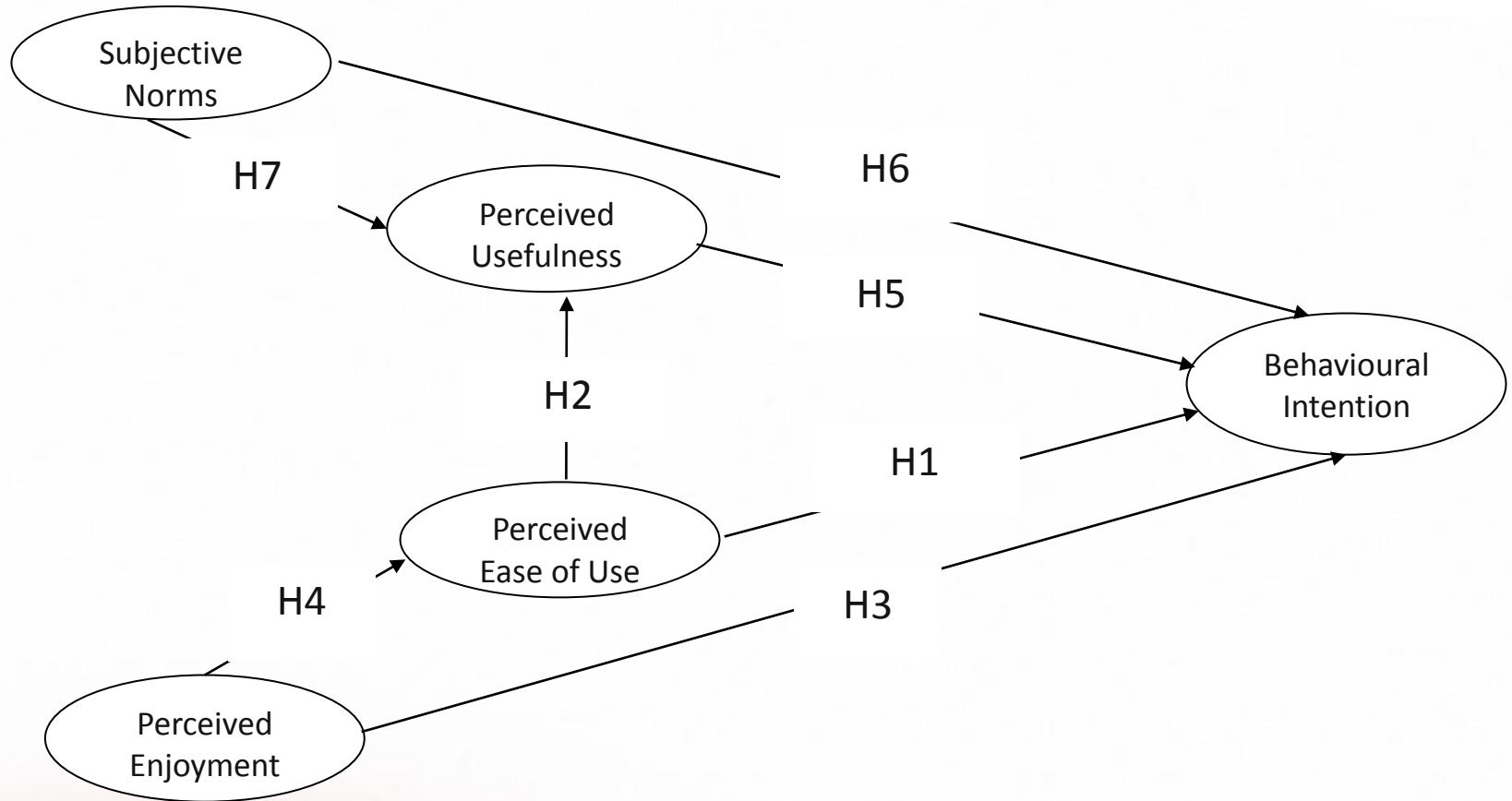
- In IS research, **several models** attempted to measure adoption of new technology.
  - Theory of Planned Behaviour (TPB).
  - Technology Acceptance Model (TAM).
  - Theory of Reasoned Action (TRA).
  - Self-Efficacy Theory (SET).
  - Innovation Diffusion Theory (IDT).
- **TAM** is the most researched one.



# Technology Acceptance Model (TAM)

- TAM posits that “*user perceptions of **usefulness** and **ease-of-use** determine **attitudes** towards using a technology. Users’ attitudes drive their **intentions** to use technology which then leads to **actual usage**”.*
- In the follow-up studies, the attitude component was dropped and perceived technology characteristics directly influenced the individual’s intention to use the technology. **Subjective norms** were also included in the follow-up model (*Venkatesh & Davis, 2000*).
- **Validated** for a variety of technologies including Web 2.0.

# The proposed model for Twitter adoption





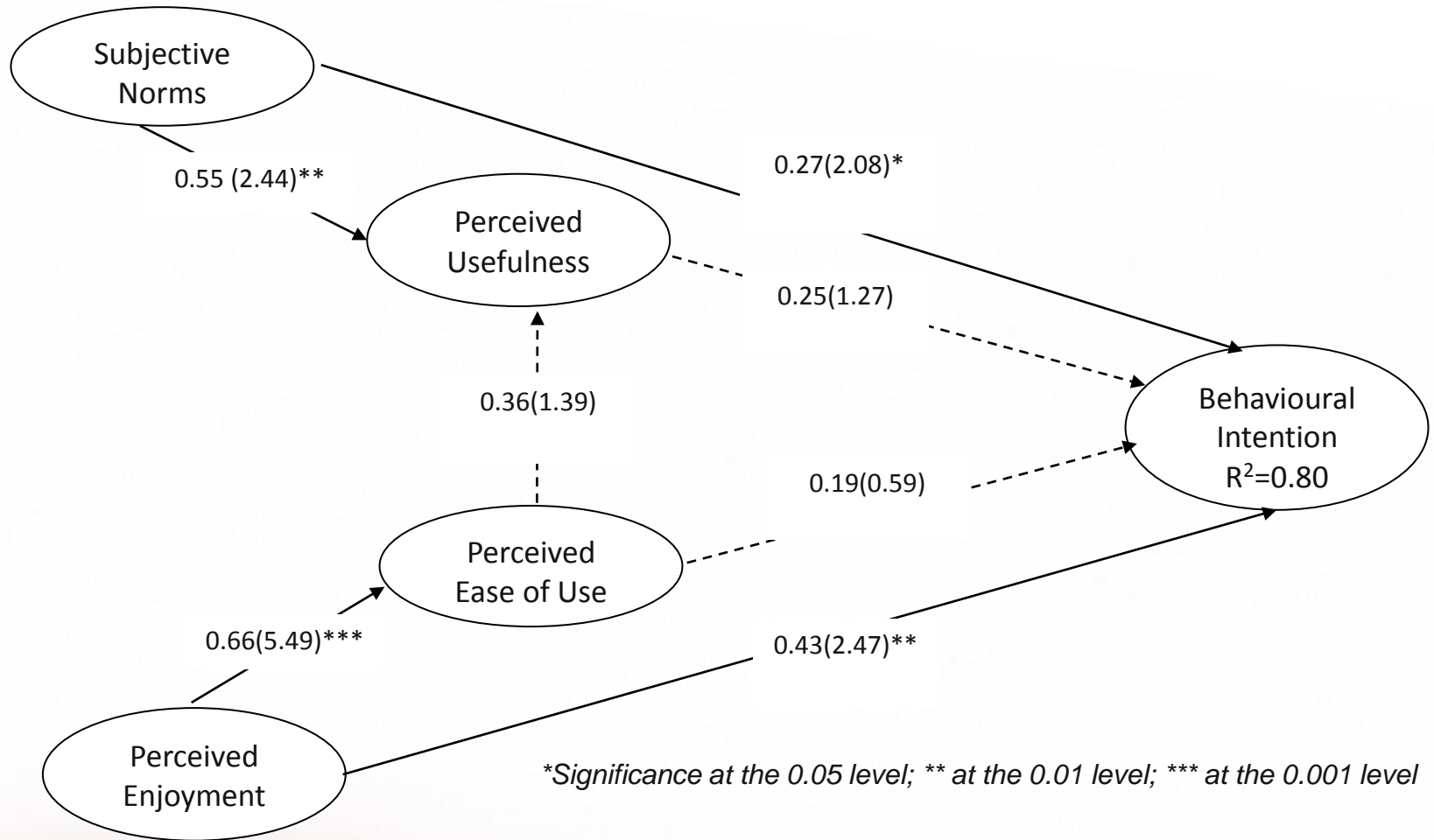
# Study design

- Second year **undergrad** students studying an e-Commerce unit at SUT.
- Students used Twitter as part of their weekly **tutorials** by discussing their work with the peers through Tweets.
- Tweets **uploaded** to Blackboard
- **Tweetdeck** used for tweet management
- Twitter usage was **not** assessed

# Study results

- 27 out of 45 students responded to the survey.
- All constructs passed the **convergent validity**, **internal consistency** and **discriminant validity** tests.
- Surprisingly, all **TAM hypotheses** appeared insignificant.
- **Perceived enjoyment** emerged as the strongest predictor of Twitter adoption followed by subjective norms.
- The proposed model explained **80%** of students' intentions to use Twitter – highly significant.

# PLS analysis



# Implications and limitations

- It is important to consider **enjoyment** and **social influence** while designing educational activities around Twitter or Web 2.0 in general
- **More** research is needed to validate TAM's behaviour towards Web 2.0 adoption
- **Limitations**
  - Small sample size
  - Voluntary use of Twitter

# Conclusion and future work

- A **useful initiative** to understand key predictors of Twitter adoption in HE
- Strong impact of **enjoyment** and **social influence** behaviours
- **Inability** of TAM to explain Twitter adoption
- Future studies with **bigger** sample size
- A **collaborative study** is in progress with Southern California Polytechnic University.

# Thank You

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