Information Technology Acceptance in Organisations

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QUO VADIS, TAM

Izak Benbasat
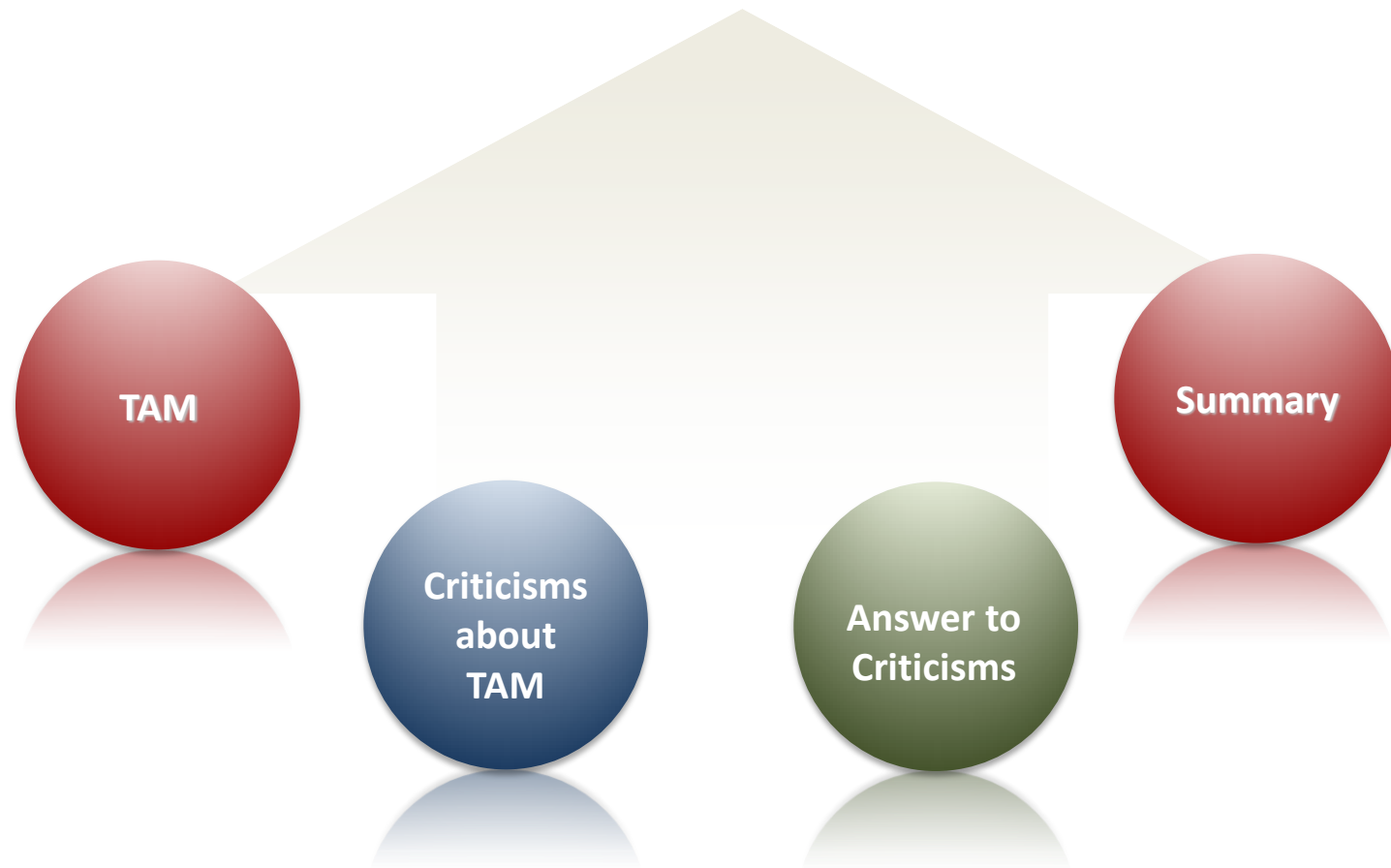Henri Barki

April 2007

COMMENT ON "QUO VADIS TAM" ARTICLE

Dale L. Goodhue

April 2007

Outline

- TAM
- Criticisms about TAM
- Answer to Criticisms
- Summary

IT Acceptance Research Models

Theory of Reasoned Action (TRA)
Technology Acceptance Model (TAM)
Motivational Model (MM)
Theory of Planned Behavior (TPB)
Combined Technology Acceptance and Planned Behavior Model (C-TAM-TPB)
Model of PC Utilization (TMCU)
Innovation Diffusion Theory (IDT)
Social Cognitive Theory (SCT)

Main Claim

Draw researchers' attention to the necessity of **reorienting IT adoption** and acceptance research toward potentially **more fruitful avenues.**

Away from "TAM++ research" that **adds little knowledge** to TAM or its many different versions.

TAM's Disfunctional Outcomes

1. The diversion of researchers' **attention away from** important phenomena.

2. TAM-based research has led to the creation of an **illusion of progress** in knowledge accumulation,

3. The inability of TAM as a theory to provide a systematic means of **expanding and adapting its core model has limited** its usefulness in the constantly evolving IT adoption context,

4. The efforts to "**patch-up" TAM in evolving** IT contexts have not been based on solid and commonly accepted foundations, resulting in a state of **theoretical confusion and chaos.**

TAM's Disfunctional Outcomes

TAM can be viewed as the "putting of blinders" on IS researchers <u>diverting</u> their main focus from:

- Investigating and understanding both the design- and implementation based antecedents.

- Getting behavior- and performance-based consequences of IT adoption and acceptance.

- A key IS research objective.

> Antecedents are trialability, visibility, image, relevance, etc., are characteristics of an IT, they still reflect individuals' beliefs.

TAM can be viewed as the "putting of blinders" on IS researchers.

Accept Davis et al studies

Accept the studies importance of PU

«What actually makes a system useful» is not clear

TAM's Disfunctional Outcomes

Researchers focus on TAM rather than on using TAM to study other factors:

– According to Benbasat and Harki the reason can be defined as follows:

- While theorizing the **relationship between the TAM constructs** is **easy**, theorizing the **effect of system characteristics on TAM factors** is definitely **harder**.

TAM's Disfunctional Outcomes

TAM additional studies bring us back full circle to TAM's origins.

TAM Additional Contruct

TAM Initial Construct

PU and PEOU

$\approx$

trust, cognitive absorption, self-efficacy, job relevance, image, result demonstrability, disconfirmation, information satisfaction, top management commitment, personal innovativeness, information quality, system quality, computer anxiety, computer   playfulness, and perceptions of external control

TAM's Disfunctional Outcomes

- **TAM has been the intensive focus on the prediction or explanation of a single behavior conceptualized in a narrow manner.**

TAM Additional Contruct

trust, cognitive absorption, self-efficacy, job relevance, image, result demonstrability, disconfirmation, information satisfaction, top management commitment, personal innovativeness, information quality, system quality, computer anxiety, computer   playfulness, and perceptions of external control

$\neq$

TAM Missing Construct

users' **reinvention** and **learning behaviors** that can be used for explaining the amount of system usage

TAM's Disfunctional Outcomes

Most Importantly:

- There are methodological vacuum and theoretical confusion,

- There is no commonly accepted adoption model in IS,

- Theoriginal TAM has outlived its usefulness,

- IS researchers are at a loss to decide on which adoption model to base their new work.

Proposed Solution

Authors make five recommendations to take the IT adoption literature beyond TAM:

1. Going back to the original theory, TRA, or preferably its more comprehensive version TPB.

2. Include a broader perspective of what users actually do in and around the notion of system use.

3. Longitudinal, multi-stage models are needed to better capture the influence of important idea variables on system use at different stages of an implementation.

Proposed Solution

Authors make five recommendations to take the IT adoption
literature beyond TAM:

4. Identify the antecedents of the beliefs contained in adoption models
   in order to benefit practice (i.e. IT design practice).

5. Consider the perceptual belief-based focus approach the IT adoption
   models have followed to date.

Comment on Benbasat and Barki's "Quo Vadis TAM"

Dale L. Goodhue

Comment on "Quo Vadis TAM"

AGREE

1. it is time for the IS field to look in other directions.

2. TAM have been overworked.

Comment on "Quo Vadis TAM"

DISAGREE

TAM was valuable because:

1. it drew on a body of research that had been refined over time to a quite elegant and compelling formulation.

2. It is applied to a particularly difficult problem in the IS field.

Comment on "Quo Vadis TAM"

DIFFERENCES

Benbasat & Barki	Goodhue
TAM can be viewed as the "putting of blinders" on IS researchers. TAM only asks a limited question . Ask "What causes users to utilize a technology?") instead of "By what means do technologies affect performance?"	TAM is like any good theory in that it is a lens that lets us focus on one view of reality and see important relationships. This limited question is is ultimately more important. More utilization of a technology increases performance.

Comment on "Quo Vadis TAM"

Goodhue stated that more use is not always better.

- Whenever a technology is a poor fit for the intended tasks, more use will not improve performance, and will probably reduce it.

- Users may make choices about that are inconsistent with the actual fit of the technology to the task. Therefore, decision makers may choose not to use a technology use system even though it is demonstrably a good fit to their tasks or choose to use a system even though it is demonstrably a poor fit to their task.

- TAM model (which only goes as far as utilization) is quite incomplete if our goal is to understand how technologies can affect performance. A simple addition to the model must positively affect performance, it must be a good fit to the task.

Comment on "Quo Vadis TAM"

DIFFERENCES

Benbasat & Barki	Goodhue
More attention needs to be focused on the design of the IT artifact.	IT artifact is almost always a part of TAM. Fit of the IT artifact is the number one determinant of usefulness. Task-technology fit is a critical construct in TAM that affect perceived usefulness.

Comment on "Quo Vadis TAM"

- **Goodhue** TAM model in itself does not encourage users to think about IS in larger contexts.

    - Designing (and redesigning) information systems:
        - Task
        - Technology
        - Participants
        - Work practices
        - ...

Comment on "Quo Vadis TAM"

DIFFERENCES

Benbasat & Barki	Goodhue
Researcher to go beyond the powerful conceptualization provided by TAM is **both risky and difficult**.	Criticizes the doctoral education programs, he claims that «theory–based» could not be understood by doctoral students.

- **Two different views about the effectiveness of the TAM are examined:**

  - TAM have been overworked and "TAM++ research" that adds little knowledge to the literature.

  Vs.

  - TAM was valuable theory applied to a particularly difficult problem in the IS field.