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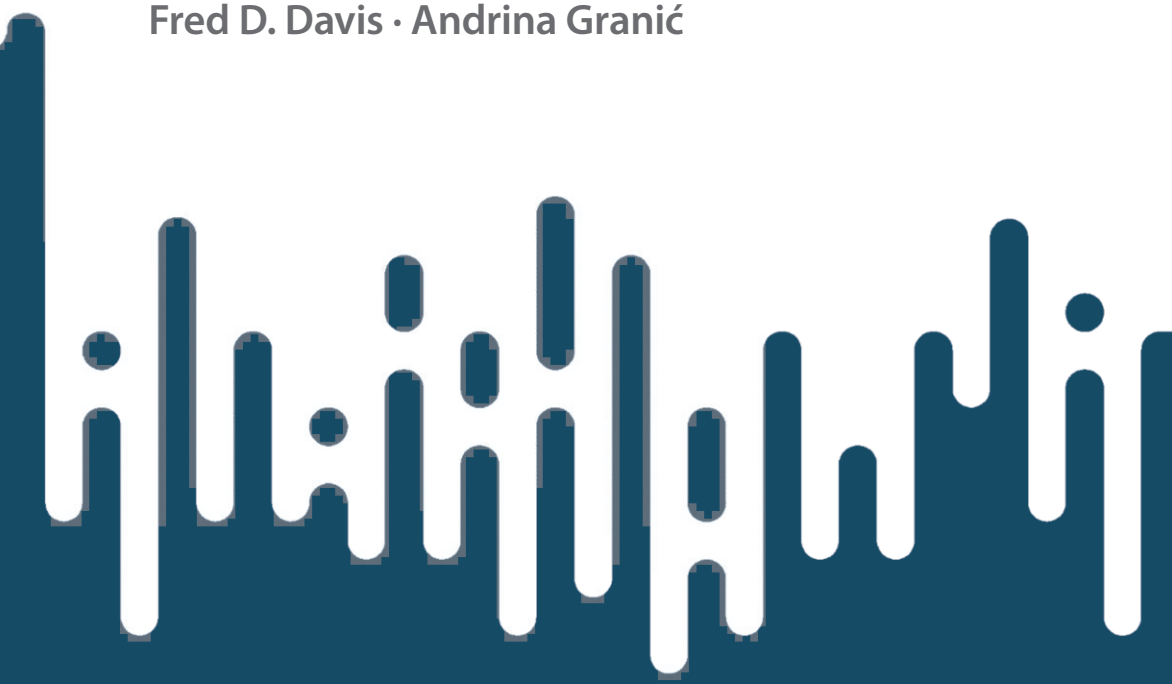

The Technology Acceptance Model

30 Years of TAM

Springer

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30 Years of TAM

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To my daughters, Ana and Dora,
your love lights up my life. (Andrina)

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Chapter 1
Introduction: "Once Upon a TAM"

Abstract The chapter delves into Fred's retrospective account of developing the Technology Acceptance Model (TAM), shedding light on the model's conceptualization process. In the 1980s, the prevalent challenge of high rejection rates for new systems led to the belief that predicting user acceptance might be an unsolvable problem. TAM challenged this notion, asserting that consistent prediction, explanation and improvement of user acceptance are indeed achievable. The model's success was attributed to advancements in theory and measurement. To enhance contemporary attitude theory, the centralization of attitude toward using a target system was crucial. Attitude, causally connected to intention and behaviour, played a key role in predicting usage. However, for the model to explain why individuals develop positive or negative attitudes toward system use, identifying pertinent beliefs or perceptions was necessary. TAM identified two key overlooked drivers of user acceptance – perceived usefulness and perceived ease of use. These beliefs act as determinants of attitude, creating links in the causal chain connecting system design features to user acceptance. They form the core of the original model and remain at its heart. The resulting TAM model proved remarkably effective, initiating extensive subsequent research supporting its predictive and explanatory capabilities. TAM stands as the leading model for predicting and explaining user acceptance.

Keywords User acceptance crystal ball · Technology Acceptance Model · TAM · Origins · Conceptualization · Development · Specification · Leading model

1.1 Opening Remarks

Wouldn't it be great if we had a crystal ball that could predict user acceptance of new information systems? This question motivated Fred Davis's 1986 Massachusetts Institute of Technology (MIT) Ph.D. dissertation "A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results" (Davis, 1986). Such a crystal ball could cut losses from doomed systems, guide changes needed to rescue trouble systems under development and prioritize resource

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allocation toward the most promising system concepts. It wouldn't need to be perfect to have value. Predicting better than chance could have benefits. For example, if the crystal ball could provide reliable directional advice about which of two system ideas has a better chance of success that would be helpful. In short, a user acceptance crystal ball could help cut the incidence of new systems failing to become embraced by target users.

The notion of trying to create a "user acceptance crystal ball" must have seemed foolhardy to many information systems practitioners and academics in the 1970s and 1980s. The high rejection rate for new systems was a lamentable fact of life. It was widely believed that predicting user acceptance was a problem that was not only unsolved, but might even be unsolvable. Numerous published articles had failed to identify predictors and create models to reliably predict successful system implementation. Many believed that user acceptance is inherently unpredictable, possibly driven by irrational factors such as political dynamics or general resistance to change.

The Technology Acceptance Model (TAM) introduced in Davis's dissertation (Davis, 1986) and two 1989 journal articles (Davis, 1989; Davis et al., 1989) challenged this received wisdom by proposing that it actually is possible to consistently predict, explain, and improve user acceptance. TAM's success was largely due to improved theory and improved measurement. Importantly, TAM (see Fig. 1.1) identified two key overlooked drivers of user acceptance: perceived usefulness and perceived ease of use. These are really the core of the original model and remain the core of TAM. The identification, development and measurement of these two constructs followed solid theoretical and psychometric principles. The resulting TAM model was surprisingly effective and triggered substantial follow-on research supporting its predictive and explanatory power. TAM remains the leading model for predicting and explaining user acceptance.

This book discusses the origins, emergence and evolution of TAM and should be of interest to system developers, project managers, user experience specialists, researchers, senior managers, teachers and policymakers. The rest of the chapter provides Fred's retrospective account of the origins of TAM.

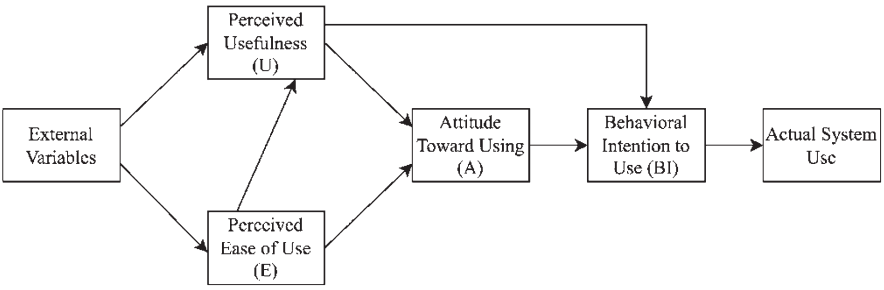

Fig. 1.1 Technology Acceptance Model, TAM. (Davis et al., 1989)