Challenges of IT standardization: Understanding the personal acceptance of IT standards

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Motivation
Standardizing the IT environment has become an established approach for organizations to manage and maintain control of their IT landscape. Owing to the increasing utilization of IT in almost every department in large organizations, IT complexity and costs have steadily increased. Surveys indicate that a well-standardized IT landscape can decrease IT infrastructure costs by 15% and the overall IT costs by 33%. However, many standardization efforts fail and do not provide their intended benefits, because they are highly complex and often do not consider the role of the affected employees and the impact on them. Employees tend to create workarounds for problems, which means that the deployed IT standards do not meet their needs.

Objectives
The aim of our research is to derive an overview of all potential influences on individuals’ acceptance of corporate IT standards, as identified in past research. The overview is designed to highlight relevant influences and their interrelations. By identifying the factors that should be tackled, the results can guide the IT standardization endeavor of IT organization managers when they try to improve their corporate IT standards’ acceptance.

Method
We analyzed the current literature on human behavior and technology acceptance to obtain a comprehensive overview of existing insights, which we then used to synthesize a first version of our model. To ensure its applicability and relevance for practice, we conducted several interviews with IT managers and experts, who...
provided valuable input that allowed us to refine our model.

Results

Our final model comprises the following perspectives, which help provide an understanding of how individuals accept corporate IT standards:

Perceived Behavioral Control: This perspective represents an individual’s perceived capabilities to understand and apply a particular IT standard. Research has found that the perception of control is of greater importance for an IT standard’s acceptance than the actual control. The underlying assumption is therefore that people are more likely to successfully apply a certain IT standard if they believe they can cope with it. Conversely, if people believe their coping capabilities are insufficient, they are very likely to avoid or reject the particular IT standard.

Benefits: If the application of an IT standard has an additional benefit for individual employees, or even for the whole organization, they are more likely to accept and use a new IT standard. This benefit can be performance improvement, increased transparency, or improved quality.

Social Influence: Employees have a clear motivation to conform to their social environment (peers and supervisors). With this social compliance in mind, the fear of being isolated drives employees to adjust their acceptance to that of the social trend.

Habit: Habit refers to an automatic and thoughtless decision process, and embodies the result of former recurrent behavior. Habit is part of employees’ way of acting and of determining their attitude towards IT standards. If an IT standard requires a certain adaptation behavior that does not match their former behavior, habit will have a distinct negative influence on an IT standard’s acceptance.

Age: Older employees with a long career tend to reject change when their familiar behavior patterns (habits) are disturbed, and therefore tend not to accept a corporate IT standard if the difference between their expectations and the requested requirements is too big.

Perceived Enjoyment: Another valuable approach for determining an individual’s acceptance of IT standardization is to take the perceived enjoyment into consideration. This describes the extent to which using an IT standard is perceived as enjoyable, regardless of any performance consequences. The application of an IT standard perceived as enjoyable creates a positive effect, which can increase its
acceptance.

**Personality traits:** Personality traits describe the characteristics of an individual's personality and are worth considering when determining how individuals will accept IT standards. Research has identified three personality traits that are particularly relevant: openness, agreeableness, and conscientiousness. Openness describes an individual's personal interest in learning about and adapting to new innovations. Agreeableness refers to an individual's ability to comply with others and to understand their points of view. Conscientiousness determines an employee’s reliability and accuracy. These three personality traits tend to have a rather indirect influence on an IT standard's acceptance, since they can have a strengthening or weakening impact on other the factors, such as habit, perceived enjoyment, and social influence, and on how an individual demonstrates these.

**Experience:** Experience represents the accumulated knowledge that individuals have gathered through their past actions. Research has found that experience is an important influencing factor that employees unconsciously take into consideration when deciding whether to accept IT standardization. Experience tends to make people think more rationally when assessing the potential benefits of a particular IT standard, because they compare these benefits with their past experience. This may lessen the effect of social influences on them.

**Level of command:** An individual's hierarchical position within an organization determines this person's point of view towards certain objectives. Research has also found that this position influences individuals' acceptance of corporate IT standards. IT executives with a certain level of command are responsible for the successful application and support of a certain behavior and should therefore set an example.

**Conclusion**

Understanding and explaining individuals' acceptance of corporate IT standards is a challenging task that requires a multi-faceted analysis and needs particular attention when standardizing IT. During an IT standardization initiative, managers should consider the implications of the changes for their employees, especially in the light of the previously identified perspectives. They should therefore design their change initiatives accordingly. By using our model, managers will gain
a better understand of the drivers of IT standards’ acceptance and rejection. This understanding can help them design effective change management programs and user influence tactics to target specific user groups.

Has this initial information piqued your interest? If so, we would be happy to answer further questions and share experiences.

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