A Look on the Generational Differences in IT Self-Service Engagement

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Abstract

Organizations are not only changing their IT service delivery model (e.g., Apple Genius Bar) but also are on the rise in adopting IT self-service portals solutions (e.g., IBM). As a byproduct of IT consumerization, individuals are becoming more and more tech-savvy and self-sufficient in making their own decisions about their choice of technology and how to solve any IT problem they might face. Engagement in IT self-service is a behavior where individuals try to resolve their technological issues without seeking the help of the organizations’ IT department personnel.

Following an exploratory approach and applying the guidelines of grounded theory, this study aims to address the age-related divide in the workplace regarding IT self-service engagement behavior.

Keywords

IT self-service, grounded theory, age, generational differences, digital divide.

Introduction

Organizations are changing the way they deliver IT service, and IT service portals are on the increase providing individuals with access to IT solutions and self-help anywhere, anytime (e.g., IBM). In addition, users of IT service are changing due to IT consumerization (Niehaves et al. 2012; Harris et al. 2012). These users are becoming more and more self-sufficient in deciding what IT to choose and how to go about solving their IT issues (Cousins and Robey 2015). IT self-service is a trend in organizations and is defined as the behavior in which individuals try to solve their own technological problems without interacting with IT personnel (Zaza and Junglas 2016). With a promise to free up IT resources and influence innovation in the workplace, IT self-service research place individuals at the heart of the service delivery process to consider users as co-producers of the service delivery.

While bringing many benefits, engaging in IT self-service might not be welcomed by all individuals. There remains a notable divide between younger and older workers regarding technology, referred to as the “gray divide”. Older adults report less confidence in their ability to acquire new skills particularly in terms of technology (Touron and Hertzog 2004). In addition, older workers often have less desire to acquire new information and skills than their younger counterparts (e.g., Colquitt et al. 2000).
This study aims to explore IT self-service consumers and identify their characteristics that might be used to help organizations 1) design IT self-service guidelines in the workplace, and 2) anticipate service desk volume in order to decide on the IT personnel needed. We seek IT professionals’ input in regard to the characteristics of the users of their support services and what they have witnessed in their own organizations regarding IT self-service. Specifically, we are interested in exploring the following research question:

Is there an age-related divide among individuals in the workplace regarding IT self-service engagement behavior?

Following an exploratory approach and applying the guidelines of grounded theory, this paper considers specifically the age/generational differences in terms of how to overcome a barrier (e.g., IT problem) that impedes them from using the technology and continuing their work.

The paper proceeds as follows: in the next section, we provide a brief review of the IT self-service and age-related technology use literatures. Next, we provide our method, results and discussion. Finally, we identify the next steps in the research process.

Literature Review

We use the term IT self-service engagement to reflect the behavior of an individual in solving an IT-related problem without IT personnel assistance. IT self-service engagement is not a new behavioral phenomenon. Yet, the notion has scarcely been used in the information systems (IS) discipline. Considering the benefits to individuals and organizations, detecting any adoption/use issues at an early stage will help organizations be prepared as to how to equip individuals with the techniques to overcome the barriers keeping them from engaging in this type of IT use.

IT Self-Service

While doing-it-yourself (DIY) or self-service has been studied extensively in the service marketing field, the notion of IT self-service has only recently begun to be explored in the IS discipline. With the growth of IT consumerization (Niehaves et al. 2012; Harris et al. 2012), individuals are becoming more self-sufficient (Cousins and Robey 2015). For instance, if an individual is faced with a problem with his or her printer, going through the process of figuring out how to solve it (e.g., maybe reboot the printer) without calling upon the help of IT personnel is an act of IT self-service.

Based on the results of their research, Zaza and Junglas (2016) showcased that regardless of whether the service rendered by the IT department is perceived as good or bad, individuals will engage in IT self-service because they feel empowered by their IT, and they feel social pressure to do so. More than 70% of their sample was 39 years old and younger, and the authors state, “we expect that even those employees that do not engage in IT self-service right now might be expected to do so eventually, constituting an expansion in job scope” (Zaza and Junglas 2016, p.13).

Generational Differences in IT

Previous research has told us much about the relationships between age, learning, and technology. For instance, people expect older workers to be unwilling to learn and resistant to change (Posthuma and Campion 2009). McCausland et al. (2015) found evidence of a negative relationship between trainees' chronological age and trainers' expectations for trainee success on technological tasks. In addition, empirical findings consistently reveal that relative to younger trainees, older trainees showed poorer performance in technological training (e.g., Gist et al. 1988; Hickman et al. 2007).

So far, researchers have addressed the elderly (65 years and older) and older individuals’ use of technology (e.g., Niehaves and Plattfaut 2014) but there is a lack of research that addresses IT self-service engagement in the workplace as it has the potential of creating an age-related digital divide within the organization. This divide could create a segregated workplace, and create challenges for employees (e.g., limited promotion opportunities) and management (e.g., discrimination cases). For example, Andrade and Doolin (2016) expressed their concern that what is really happening might not just be an age-related digital divide but a larger issue social inclusion.
Method

In this paper, we are exploring the impact on individuals' ability and willingness to engage in deeper use of technology by fixing their technological problems without seeking the help of the IT department. To that end, we are following the grounded theory approach (Strauss and Corbin 1990, 1998). Due to space limitations, the presentation of the grounded theory approach has been significantly abbreviated (details of the data collection and analysis are available from first author upon request).

**Participant Selection Data Collection Procedure**

We sought the perceptions of IT professionals who are in the IT support field as witnesses of the IT self-service behavior exhibited by their colleagues in the organizations they work for. An invitation to participate in this research was posted on an IT professional listserv which led to the initial interviews of eight IT professionals from five different organizations.

Interviews were conducted in person, via skype, or over the phone. So far, eight one-on-one semi-structured interviews have been conducted. We will continue interviewing until theoretical saturation is reached. Interviews have taken approximately 45 minutes, are audio-recorded, and transcribed for coding and analysis. To preserve confidentiality, the identities of the IT professionals and their respective organizations are not disclosed. Demographic details of the participants are provided in Table 1.

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<th>Participant</th>
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**Table 1. IT Professionals Participants Demographic Details**

We developed an interview guide (available from first author upon request) to capture IT professionals' insights on IT self-service. While part of a larger study, this research is focused around the question, "What prohibits employees from engaging in IT self-service?" We pilot tested the interview guide with two IT experts and modified the wording for some of the questions accordingly.

**Data Analysis and Coding Methods**

Following the grounded theory guidelines, we applied open, axial, and selective coding to our transcripts, sentence by sentence, as outlined by Strauss and Corbin (1998). After extracting the meaning and ideas in the open coding, we related these ideas and placed them into their categories during the axial coding where
we developed our coding scheme. These categories were places as pertaining to: IT self-service, its causal conditions, its context, its intervening conditions, its actions strategies, and its consequences. During selective coding, we will refine the emerging theory.

**Preliminary Results and Discussion**

We address the context of IT self-service, which is the focus of this work. The context of IT self-service is defined as the environment of the IT self-service event (location, time, duration), and the characteristics of the employees as well as the entity providing IT support. The location is an organizational setting where there is dedicated IT personnel (either in-house or outsourced) to address employee technical issues. Time and duration describe the temporal component of the event – how long does it take for a problem to come to the attention of the IT support personnel and how long does it take to solve the issue. The characteristics of the employees covers the demographics and individual differences of the users. The characteristics of the entity providing IT support encompasses their IT service quality and setting expectations for the level of IT self-service engagement from employees.

**Context of IT Self-Service**

Of the 371 overall codes, 81 pertained to the context of IT self-service. One of the emerging themes within the context of IT self-service is regarding age and generational differences (15% of the quotes).

As all of the employees referenced have access to the internet and more specifically Google, the IT professionals in this study noticed that accessibility is not the issue for older employees. The main issue is the fact that these older employees do not welcome engagement in IT self-service. For instance, participant 5 mentioned that

“It seems like the older members have embraced the technology but they have not embraced the desire to use self-help”

In addition, older employees’ may feel that they do not have the skillset to solve their own technological issues, which impedes them from doing so (i.e., lack of self-efficacy). For example, participant 4 stated

“So for a certain number of – you know, a certain percentage of people are definitely like that and tend to be the older generations. If they just are not – you know, if they think they’re not computer savvy, they’re not gonna want to learn these things and they’re not gonna want to do them on their own”

On the other hand, it’s perceived that the younger generation of workers have the know-how to troubleshoot, “decode” the solution and implement it. For instance, participant 1 stated

“We think digital natives are super comfortable around technology and they are in certain ways but they know how to troubleshoot better than the older generation does”

Participant 3 summed up the issue stating

“It depends on the user, their comfort level, how – and what you’ll see is the digital natives, the folks that have grown up with this, they don’t think twice. It’s part of their life. The folks that are my age, and the folks that have been doing this for 20 years, it’s a lot tougher on them”

In general, the term digital divide has been used to describe a gap in access to technology, use and adoption but, as we are noticing in this study, it may also apply to IT self-service. The know-how regarding the specific steps to solve technology-related issues that can impede individuals from using the technology is not perceived as consistent across younger and older workers. If this perception is accurate, and IT self-service becomes the norm in the workplace, what are the implications for organizations? How will organizations react to an age-related digital divide and ensure their older employees remain engaged and productive?

**Next Steps**

We will continue to conduct interviews until we reach theoretical saturation. We will also conduct interviews with older and younger workers within these organizations. Once the theory is sufficiently developed, we will empirically test it with a variety of individuals. The expected contribution of this research
Generational Differences in IT Self-Service Engagement

is to draw that attention of organizations to the potential gap in IT self-service engagement between sub-populations of employees. We believe the axiom, 'one size fits all' does not apply to IT self-service engagement, and anticipate developing recommendations to ensure that all employees, regardless of their age, have equal opportunity to thrive in this new business environment. Organizations are asking more and more of employees. We need to move beyond addressing adoption and use of IT within the workplace. We need to explore what comes next – employees being responsible for the maintenance, problem resolution, and enhancement of the technology. To do this, organizations need to provide training and support. Maybe not train individuals on how to use the technology, but tailor the training for older individuals to develop the confidence and desire to engage in IT self-service.

REFERENCES


