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THE CONTENT AND CONTEXT OF IDENTITY IN A DIGITAL SOCIETY

Michelle Carter

Washington State University, michelle.carter@wsu.edu

Deborah Compeau

Washington State University, deborah.compeau@wsu.edu

Michael Ian Lawrence Kennedy

Washington State University, michael.i.kennedy@wsu.edu

Marc Schmalz

University of Washington, mschmalz@uw.edu

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Research in Progress

Carter, Michelle, Washington State University, Pullman, WA, USA,
michelle.carter@wsu.edu

Compeau, Deborah, Washington State University, Pullman, WA, USA,
deborah.compeau@wsu.edu

Kennedy, Michael Ian Lawrence, Washington State University, Pullman, WA, USA
michael.i.kennedy@wsu.edu

Schmalz, Marc, University of Washington, Seattle, USA, mschmalz@uw.edu

Abstract

Our team has undertaken a study designed to explore the context and content of IT identity in a digital society. The work involves conducting semi-structured, reflective interviews—based on the results of a 20 Statements exercise—and analysis based on grounded theory. Our initial findings indicate that our participants have complex relationships with a range of IT that has become embedded in their daily lives, and provide evidence in support of IT’s role as a medium, determinant, and consequent of identity. Further, we see the emergence of weak and strong IT identities and the emergence of a weak anti-IT identity. By iterating on our processes and reflecting on our results, we have been able to tune our methods and inform future recruitment goals. Moving forward, we expect that expanding the diversity in our group of participants will reveal greater insights into the ways that participation in a digital society influences the formation and expression of one’s role, group, personal, and IT (or anti-IT) identities.

Keywords: IT Identity, Grounded Theory

1 Introduction

Most research on individual adoption and use of technology takes a cognitive approach, focusing on individuals’ instrumental beliefs about the benefits and challenges of using information technology (IT) (Venkatesh et al. 2016). As IT plays an increasingly central role in the work and personal lives of people, new perspectives are needed to better understand the implications of IT in so-called “digital societies,” characterized by pervasive mobile computing. In such societies, mobile devices, wireless data plans, cloud-based services, and social media have given rise to new shared expectations for how social relations are maintained (Turkle 2011), which individuals internalize as identities (Floridi 2010). Identities, in turn, influence the ways that people perceive and interact with the world around them (Carter & Grover 2015; Floridi 2010). Thus, illuminating the intertwinement of IT and identity is important for understanding individuals’ behaviour in the roles they occupy and in the groups with which they affiliate. Our aim is to extend the literature by conducting a qualitative exploration of IT’s role (the *context*) in the construction of individuals’ sense of who they are (and are not), as well as the meanings and expectations (the *content*) that individuals ascribe to themselves in relation to IT.

We build on prior research in information systems (IS), which articulated the concept of IT identity as *the extent to which an individual views use of an IT as integral to his or her sense of self* (Carter &

Grover, 2015). This work showed that identification and identity are relevant to domains of technology, but did not provide a conceptualization of the context and content of IT identity itself. In this sense, current understanding of IT identity is akin to seeing ripples in a pond but not the object that made them. The proposed research seeks to reveal the IT identity entity, enabling its theoretical influence to be investigated.

In this research-in-progress paper, we provide an overview of structural symbolic interactionist theories of identity, their application to IS research, and preliminary findings of a study designed to surface the context and content of IT identity in a digital society. Given the interconnected and embedded nature of IT in today's world, we believe that findings from this research will be of interest to IS scholars, as well as designers, developers, and practitioners engaged in IT deployment.

2 Literature Review: Key Concepts

Extensive research interest across the social sciences has resulted in numerous perspectives on the nature and influence of identity as constituted by society (Stryker & Burke 2000). In this study, we draw on structural symbolic interactionist theories of identity in the sociological domain, henceforth referred to as *identity theories*. From this perspective, an identity is an answer to the question, "Who am I?" (Vignoles et al., 2011) or, more specifically: "the set of meanings that define who one is when one is an occupant of a particular role in society, a member of a particular group, or claims particular characteristics that identify him or her as a unique person" (Burke & Stets 2009, p.3).

Identities are important tools for maintaining self-continuity and enhancing self-esteem. Identities protect self-continuity by providing a means for individuals to organize information about themselves and for understanding and responding to the world around them. The need for self-continuity is so strong that people actively engage in activities to reinforce their identities: e.g., choosing to interact with those who see them as they see themselves, or displaying identity cues through the clothes they wear (Swann et al. 2005). This process, referred to as *identity verification*, means that individuals strive to behave in ways that maintain congruency between how they are coming across to others (and themselves) in situations and the meanings they hold about themselves in an identity (Burke & Stets 2009). When congruency is achieved, the identity is reinforced, self-continuity is maintained, and self-esteem is enhanced (Stets & Burke 2005). These outcomes encourage further attempts at identity verification (Burke & Stets 1999; Cast & Burke 2002).

Identity theories explain how the social structures that individuals are embedded in influence their views of themselves and, subsequently, their behaviours relative to others. The two major variants can be described as follows: *identity theory* focuses on how social structures influence the role identities that individuals assign to themselves and how these identities subsequently affect thinking and behaviour (Stryker 1980); *identity control theory* emphasizes how behaviour is influenced by attempts at identity verification (Burke & Reitzes 1991). Each perspective provides a context for the other—i.e. social structures define expectations tied to social positions, while identity verification gives rise to and maintains the social structures in which individuals are embedded (Stryker & Burke 2000).

As individuals interact with the world around them, they develop many identities through a process of situating themselves relative to other social objects (groups, roles, characteristics, etc.) based on their goals, their perceptions of how others respond to them, and their self-evaluations (Stets & Burke 2005). The totality of meanings that people hold about themselves, including their identities, goals, and feelings of self-esteem, are contained within an individual's overall self-concept. As such, individuals may offer multiple simultaneous answers to the question, "Who are you?". Understanding individuals' many identities, and the interplay between them, helps us to understand individuals' behaviours relative to social institutions (e.g., organizations, society) and others, since these are guided by how people see themselves in the roles and relationships (social structures) they inhabit (e.g., the response of a child to a mother is different than the response of a client to a consultant).

Given their emphasis on social networks, identity theorists often ignore the role of material objects in defining identities (Clayton 2003). Still, as social interactions have become intertwined with the information technologies that people use, IS researchers have directed increasing attention to identity issues. Reviews of IS literature on identity indicate that IS researchers usually adopt one of three perspectives: (1) IT as a medium or resource; (2) IT as a determinant, or (3) IT as a consequent (Boudreau et al. 2014; Carter & Grover 2015; Whitley et al. 2013.). IT's role as a medium or resource has been demonstrated in research investigating IT as a means of promoting trust, supporting social interactions, and projecting identities to others (e.g., Panteli et al. 2011; Robert Jr., et al. 2009). Research investigating IT's role as a determinant on identity focuses on IT's impact on the nature of the roles people perform, which often challenges their feelings of competency or belonging (e.g., Alvarez, 2008; Mishra et al 2012). Finally, research that explores IT use as a consequent of identity finds that people are more willing to accept information technologies when their use provides self-confirmatory feedback (e.g., Hillmer, 2009; Liu & Chan, 2010). Taken together, these works demonstrate the importance of considering identity in the IS domain. Nevertheless, by treating IT and identity as distinct entities, this literature maintains theoretical continuity with identity theories that overlook material objects as part of identity (Carter & Grover 2015).

In recent years, researchers have proposed that identities tied to material objects (e.g., the natural environment, personal possessions, and places) are important to many people and that these "material identities" are constructed and maintained through the same identity processes (Carter & Grover 2015; Clayton 2003; Vignoles et al. 2011). From this perspective, reinforcing the discreteness of IT and identity overlooks an essential component of a digital society: that IT has become an integral part of how individuals understand themselves and act (Carter & Grover 2015). To address these concerns, Carter and Grover (2015) developed the concept of *IT identity* as a new form of identity (and a fourth perspective) in the IS domain. IT identity, which refers to *the extent to which an individual views use of an IT as integral to his or her sense of self*, is an outcome of situating oneself together (self-identification) or apart (dis-identification) from the IT that one interacts with (Carter & Grover 2015). In essence, self-identification and dis-identification are the identity processes through which IT identities are constructed. Carter and Grover acknowledged, but left open to future theorising, a potential fifth perspective: situating oneself in opposition to IT – a so-called "anti-IT identity."

The IT identity research stream provides theoretical justification and preliminary empirical evidence in support of the IT identity construct (Carter et al. 2012; Carter 2013; Carter & Grover 2015). In an initial study, exploring young adults' relationships with mobile phones, self-identification and dis-identification were manifest in participants' affective responses (i.e. emotional attachment, reliance, and connectedness) to thinking of themselves in relation to the devices (Carter et al. 2012). A second study utilized measures of individuals' affective responses, along with multi-trait, multi-method (MTMM) analysis, to investigate how self-identification with smartphones influenced ongoing use (Carter 2013). These findings are promising. However, it is important to recognize that measuring manifestations of identity processes is not equivalent to uncovering the context and content (or meaning) of IT identity itself. The proposed research will extend the prior research on IT identity by investigating the meanings and expectations for behaviour that individuals ascribe to themselves in relation to IT and how these relate to various aspects of their current self-concepts (e.g., other identities, goals, self-esteem). Our specific research questions are:

1. What are the aspects of a person's self-concept that define who s/he is in relation to IT? What is an IT identity? What is an anti-IT identity?
2. When (or under what conditions) is IT (a) a resource for role or social identity verification; (b) a means of IT identity verification, or (c) both at the same time?

In answering these questions, we hope to shine a light on the content and context of identity in a digital society, making it possible to compare and differentiate between multiple IT identities, anti-IT identities, and other (social, role, and personal) identities.

3 Research Methodology

The research team is following a grounded theory approach (Corbin & Strauss 2014, Urquhart et al. 2010) to answering our research questions. Grounded theory has a long-established tradition in the field of IS (Urquhart et al. 2010). It is especially appropriate here because grounded theory “derives its theoretical underpinnings from [...] symbolic interactionism” (Corbin & Strauss 1990 p. 5), and identity theories are rooted in symbolic interactionism, as detailed above. Grounded theory provides an approach that enables the research to explore the substance and boundaries of the context and content of IT identity, which are not yet clearly defined or understood.

Grounded theory uses theoretical sampling, “a method of data collection based on concepts derived from data. The purpose of theoretical sampling is to collect data from places, people, and events that will maximize opportunities to develop concepts in terms of their properties and dimensions, uncover variations, and identify relationships between concepts” (Corbin & Strauss 2015, p. 134). We are in the process of conducting semi-structured interviews to explore the use of IT at work and beyond, to identify the symbolic meaning that IT holds for our participants, and to develop a theoretical model of how identities are constructed around technology.

3.1. Participants

We chose to begin our data collection by focusing on individuals working in social enterprises, i.e., organisations focused on addressing social needs. We focused on this type of individual for several reasons. First, as a preliminary sampling strategy, we wanted to have some points of consistency within our participants’ role identities so as to focus attention on other aspects of identity. Second, this choice allows us to investigate our research questions in a context that we believe is under-represented within IS research and represents an area of growing concern, as for-profit organizations look for ways to incorporate socially valuable activities into mainstream business practices. Third, individuals that work in social enterprises engage in activities aimed at solving social problems and/or creating social change, and yet they may be doing so in ways that strongly involve IT or in other ways that do not. Hence, we believe that our sampling strategy will provide sufficient variation to explore what the phenomenon of interest is and what it is not. We continue to identify participants through purposive sampling methods, including direct contact via email and posters placed in the offices of social enterprises.

3.2. Data Collection

Data are being collected through semi-structured interviews. The first part of the interview focuses on identifying participants’ salient identities. To facilitate this, we asked participants to complete an activity, the “20 Statements Test” (Kuhn & McPartland 1954), in which participants provide twenty different answers to the question “Who Am I?” We used this activity as the basis for structuring the first part of our discussion, with each participant asked to elaborate on most, if not all, of their statements, as well as their overall reaction to the task. The subset of identities chosen is deliberate and aims to include a range of role, group, personal and material identities as well as any identities that seem most related to technology. Beginning the process by focusing on the identity hierarchy of the individual allows us to situate our discussion of technology within the context of who they see themselves to be.

The second section of the interview focuses more specifically on technology, with questions about typical daily technology uses, periods where access to technology was not available, and perceptions of how technology either helps or hinders the expression of their identities. Interview audio is recorded if permission is given, and notes are taken by a second researcher. Audio of the interviews, handwritten notes, and each participant’s 20 Statements are transcribed for thematic analysis.

As a preliminary test of our method, all research team members independently performed the 20 Statements Test to estimate the difficulty and amount of time required to complete it. Additionally,

one member performed two test interviews, and all members reviewed the recorded audio in order to discuss and revise our interview script. No data from these tests are being used in the final work.

We have conducted two interviews at the time of this report; we expect to conduct 15–30 over the course of the project. Our initial participants were alike in many ways: between ages 45 and 55, residents of the same greater metropolitan area, past or present IT professionals, partners in committed relationships, cooking enthusiasts, and dedicated not-for-profit volunteers. Despite their many similarities, they expressed their relationship with IT in very different ways. As the research unfolds the sampling framework will seek to capture a diversity of participants.

3.3. Analysis

Our long-term plan for analysis is consistent with the suggested methodology of Corbin & Strauss (2014) and Urquhart et al (2010). Our inductive analysis will be iterative and reflective, including regular meetings to debrief, share notes, and consider revisions to the interview protocols. Analysis involves parallel open coding of transcripts, 20 Statement worksheets, and other documents, iteratively compared, sorted, and grouped to identify emerging concepts and, eventually, refined to theory. This process should allow us to identify core concepts as they exist for our participants, which is essential as we aim to uncover the content of identity and its relationship to the context of the digital society.

One team member transcribed the audio from our interviews and hand-written worksheets within 24 hours of each interview. All team members listened to the recordings and reviewed the transcripts, checking for accuracy of transcription. Listening to the audio recording is important to understand the pacing of the interview, points where participants took time to reflect on the questions, and the subtler meanings that could be discerned from vocal cues. These sorts of pauses and inflections were noted in the transcript for future analysis.

Each team member attempted to identify the extent to which a participant claimed one or more IT identities, and the ways in which IT supported or conflicted with their other identities. We compared our analyses in a series of email exchanges, leading to very tentative conclusions about each respondent as well as questions that we would seek to resolve in future interviews.

Analysis of the first interview was conducted within 48 hours and the findings informed our interview process for the second interview. As we analysed the second interview, we also compared and contrasted it to the initial interview. This constant comparative, iterative process of looking for similarities and differences in the emergent theoretical categories is essential to the grounded theory process.

4 Preliminary Findings & Discussion

Both initial participants (identified by pseudonyms) were rather intense IT users, meaning that IT use permeates much of their normal daily functions from dawn to dusk and regularly throughout the day.

“Yesterday I woke up about 4:30. I picked up my iPad and looked at the weather” –Alex

“I spend all day every day on Google talk with my best friend and on Slack with my co-workers”

–Rachel

“Stopped at my iPad, checked for email that needed action before I went to bed” –Alex

As detailed above, identity research in IS suggests multiple potential roles for IT in the identity process: as a medium, determinant, or consequent of already-formed identities, as an IT identity, or as an anti-IT identity. After only two interviews, we see evidence of each of these in our data.

While speculating on the role of IT in relation to who he is, Alex focuses on how IT helps him express important aspects of his self-concept, and insists he would remain unchanged if IT were unavailable.

“In some ways [IT] plays a significant role [in who I am]. In other ways I think it is simply one medium and there could have been others. [...] It seems like there are lots of ways that that commitment or inspiration to helping people could be expressed. IT is just the way I do it. [...] What comes to the fore is, ‘OK, how can I do it anyway?’” –Alex

As a determinant, the literature suggests that, as a major part of people’s day to day lives, IT can support or interrupt verification of individuals’ many identities. For example, Alex’s iPad supports verification of his “cook” identity by affording greater access to recipes and other culinary information. Still, when asked how he would react as a cook if he didn’t have access to his IT, Alex responded:

“It wouldn’t change how I express myself through cooking. I would still put the same kind of energy and care and love into the cooking. It would simply narrow the range of recipes or information that I had at my beck and call.” –Alex

As a determinant, IT can also interrupt identity verification. Rachel talked about how, following the recent U.S. Presidential election, she had been spending less time on Facebook (protecting her “woman” identity in the process):

“I was getting worked up and it was not a good use of my time and it was not productive energy [...] but I realized there are some things where people are contacting me through Facebook messaging, so I installed Messenger. That is an hilarious thing. I am using Facebook less so I installed one more piece of their software. [laughs]” –Rachel

In the act of installing Messenger, Rachel highlights the interconnected and embedded nature of IT use. Here, the decision to use of Messenger is motivated by her “family member” and “friend” identities. Rachel also described IT use as an consequent of being “efficient.”

“It’s not that I’m a believer in technology, necessarily, it’s that I am a believer in efficiency. [...] Because I’m a believer in efficiency, usually it’s tech that’ll get you there.” –Rachel

Another anecdote that Rachel shared was planning for a family vacation in Europe. She began using technology to research the locations they would be visiting, and to book flights and hotels. These uses of technology are increasingly common for travelers. Yet Rachel went further in her engagement with IT. Having done all of the research, she also identified several locally relevant applications (e.g., Paris metro, train schedules, etc.), which she installed on her smart phone. Then, because she is a “hub and a family member and a mom,” she made a list of the apps that she thought her family members would need and emailed the list to them. Rachel’s desire to bring efficiency through IT transcends her work life and pervades all aspects of her life, including her interactions with others.

From the interviews to date we see the emergence of an IT identity as a separate identity that people hold. This lends support to the view that IT and identity are not always discrete. In Rachel’s case, her calendar application is a critical part of many of her 20 Statements identities. She accepts interruptions and reminders from it in ways that she wouldn’t accept from other IT, and reacts differently to “bossing” from her calendar app because it’s really her bossing herself.

“I am my calendar. [...] In the olden days I had a beeper [...] and when the site went down they called me... so that’s annoying, and being beholden to the beeper. Even though the calendar is my brain, I still mostly feel like I am the boss of the calendar I guess I would say. The calendar bosses me after I’ve told it what I want to tell me what to do, whereas something like a Fitbit [is] just bossing me. [laughter].” –Rachel

Nevertheless, use of an IT does not, in itself, imply that a person has an IT identity (Carter & Grover 2015) and our interview with Alex reinforced this point. Alex can detail his use of IT from the moment he wakes up to the time he goes to bed; yet, he believes that his sense of self would endure without IT. When asked to imagine the loss of IT, Alex envisaged feelings of frustration and annoyance but he expressed confidence that who he is, would exist and thrive without IT in this life:

“It would have increased my level of frustration in a couple of spots. I would have either randomly missed or otherwise have been stuck in traffic. I would have felt less well-informed, I would have felt less well-entertained, but in most of the ways I consider meaningful, I don’t know that it would have had that huge impact. [...]” –Alex

“So, your caring, your commitment, your cooking, and some of the other things [...] that are very important fundamentally to who you are would endure?” –Interviewer

“Yes. To varying degrees of apocalypse. If we could lose the higher end digital IT functions and not lose access to electricity, I’m there. I can outlast that one for years.” –Alex

Finally, while this is preliminary we should note that we see some evidence of the emergence of other identities held by individuals that are not necessarily distinct from IT but may not be “IT identities,” such as “Geek” and “Hub.” Further interviews are needed to disentangle these concepts.

Our interviews also raised the question of how much the age at which someone is exposed to certain IT shapes their identities. For example, in discussing her identity as a “dinner party thrower,” Rachel remarked:

“I use email. I only Evite for really big parties. I prefer not to use Facebook invitations. I feel like people see those as spam. Whereas Evite is on purpose. But that could be old people thinking. [laughter...] I don’t think my daughter would think to use Evite, I think she would only use a Facebook invitation. But I feel like Evite was big but then Facebook took over and if you are old enough to already have been an Evite user you will continue to be an Evite user.” –Rachel

In our pre-test interviews and in our current interviews we also see the presence of anti-IT identities, in which an individual identifies him- or her- self in *opposition* to an IT. In describing the various IT around her home, Rachel mentioned distinctly that “we are not an Apple House.” It was important to her to separate herself (and her family) from the Apple identity (which she described in some detail). Additionally, a participant (Elsa) in one of our pre-test interviews romanticized a life without IT: Elsa felt that her quality of life would be better if she—and her husband and children—did not have access to iPads, iPhones and the like.

IT identities (and anti-IT identities) may also be expressed at different levels of granularity, from specific features of apps to full product families. Rachel believes that her choice of computing platform is an expression of certain personal values and she wants others to know how she feels:

“Oh yeah... I am one of those... [laughs]. In the Holy Wars, yeah. [...]”

“I have feelings about what iPhones signify. [laughter]. I feel like they are somewhat exclusionary and it is symbol of a higher economic level and status level and appreciation for design, or prioritization for designing over utility. [...] I also have bad feelings for what Google does, even though I am a Gmail user, [...] with your information and how [...] if something is free that means that you are the product. [...] I feel like the Android makes me nervous. [...]”

“I will probably get an iPhone [for work purposes] but I will be embarrassed to have it. [...] Once I get one I am going to be apologetic and self-deprecating for the first three months... ‘I finally caved... bleah.’” –Rachel

As direct quotations from our participants indicate, findings from our initial interviews have encompassed a range of embeddedness of IT and interviewees have reflected on many ways in which IT is a medium, a determinant, and consequent of identity. Further, we have seen expressions of both weak and strong forms of IT identity and anti-IT Identity. While we are extremely pleased with the results of our initial interviews, we are hopeful that additional interviews in the coming months will provide deeper insights into those aspects of a person’s self-concept that define who s/he is in relation to IT and that illuminate the conditions under which IT acts as a resource vs. a means of identity verification, or is both at the same time.

The role of grounded theory in this work provides an environment where we can begin to explore the initial findings of the interview process. Our debriefing process has already suggested ways in which we can enrich our data gathering. Both participants have thanked the team for allowing them a chance for reflection regarding their relationships with IT. Rachel also used many “I am...” statements during the course of the interview that did not appear in her initial 20, and changed the wording of one during the interview (as she decided she really was “a techie” and not just “tech-ish”). The team speculates that follow-up interviews may be particularly productive, after giving participants a period of time to ruminate on the experience of the first interview.

Statements made by both interviewees have reinforced the team’s desire to conduct interviews with a diverse set of participants. For example, our initial participants were older and early tech adopters. Older people know and can reflect on a period in their lives when IT was not ubiquitous, and therefore may be better equipped to imagine themselves without access to IT. Those who are approaching or have reached middle-age (30’s and 40’s) have had IT as a part of their lives longer than not. While this is speculative, this group may perceive IT as both an asset and a liability. As an asset, IT may provide a means to excel at work, balance family life, keep family safe, and to entertain. However, IT may also occupy more of life than those in their 30’s and 40’s would like it too.

For younger people, we can speculate that IT identity becomes more pronounced and the seamless merging of identity and IT takes place. Many Gen Xers and early Millennials have lived their whole lives in a world with ubiquitous IT. We expect to find some who can’t imagine life without it, and others who romanticise the idea of a life without IT. We venture that we may find an anti-IT Identity among members of these groups. “Unplugging”, “being technology free” are common phrases that the Gen X and Millennials use to untether themselves from the hegemonic presence of IT in their life.

5 Conclusion

Though data gathering has only recently begun, our initial work has been very productive. By basing our interviews off a 20 Statements activity, we are helping our introspective participants discover and share how IT affects the formation and expression of their identities. As our group of participants grows and diversifies, we expect further analysis to bring new insights into the ways that participation in a digital society influences the formation and expression of one’s role, group, personal, and material identities. These insights will help designers, developers, practitioners, and scholars better understand the role of IT in our interconnected, embedded world.

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