An Exploration of the Professional and Leader Identity of IT Professionals Transitioning to a Permanent Hybrid Role: A Longitudinal Investigation

Abstract

Purpose – The purpose of this study is to explore the role of professional and leader identity and the maintenance of identity, through identity work as IT professionals transitioned to a permanent hybrid role. This study therefore contributes to the under-researched area of permanent transition to a hybrid role in the context of IT, where there is a requirement to enact both the professional and leader roles together.

Design/ methodology/ approach – The study utilised a longitudinal design and two qualitative methods (interviews and reflective diaries) to gather data from 17 IT professionals transitioning to hybrid roles.

Findings – The study findings reveal that IT professionals engage in an ongoing process of reconciliation of professional and leader identity as they transition to a permanent hybrid role, and they construct hybrid professional-leader identities while continuing to value their professional identity. They experience professional-leader identity conflict resulting from reluctance to reconcile both professional and leader identities. They used both integration and differentiation identity work tactics to ameliorate these tensions

Originality/value – The longitudinal study design, the qualitative approaches used and the unique context of the participants provides a dynamic and deep understanding of the challenges involved in performing hybrid roles in the context of IT.

Keywords – Leader and professional identity. Hybrid roles. Identity work.

Paper type - Research paper

INTRODUCTION

Information technology (IT) roles are now ubiquitous in modern organisations (Stein, Galliers & Markus, 2013) resulting in significant growth in research in this area (McGee, 2018; Collin, et al. 2018). It is a sector employing a variety of knowledge workers and professionals including experts such as developers and coders (Caniëls et al. 2014) who carry out a variety of tasks that involve knowledge processing, problem solving and project management. Researchers increasingly focus on the working practices of IT professionals and, to date, have investigated issues related to professional identity enactment (Stein et al. 2013), emerging roles such as the chief digital officer (Tumbas, Berente & vom Brocke, 2018), the careers of females within the IT profession (Armstrong, Riemenschneider & Giddens, 2018; Kenny & Donnelly, 2019) and the role of leadership and agency in the IT sector (Collin, et al. 2018). While these studies provide important insights on the professional IT role in organisations they do not explicitly address the issues of identity work in the context of transition to a permanent IT hybrid role, where the IT professional is required to perform both professional and leadership roles concurrently.

We define a hybrid role as one that requires the performance of leadership roles in addition to information technology tasks. The leadership role is defined as the performance of influencing, people management, team management and strategy tasks in organisations (Garavan et al. 2010). Hybrid roles therefore involve, in addition to professional IT responsibilities, the requirement to assume leadership responsibilities. Organisations increasingly make use of hybrid roles in an IT context. This occurs because of the dual requirement to ensure that the organisation has access to IT expertise, in addition to the need to manage IT human resources to achieve organisational goals (Peppard et al., 2011; Spyridonidis et al. 2014). There is evidence that professionals in other sectors find such roles challenging and difficult to execute (Hotho, 2008) due to the co-existence of a professional and leadership identity, and the requirement and expectation to enact both roles effectively. Professionals may willingly or reluctantly take on hybrid roles, then seek to balance or blend the professional with the leadership identity dimensions (McGivern et al., 2015). Wakefield, Leidner & Garrison (2008) recognised that hybrid role holders experience conflicts relating to technical versus nontechnical work (for example people management) and strategic versus operational activity. Further tensions relate to demonstrating the behaviours of an individual contributor versus leader. As such, how organisations develop and support hybrid role holders will impact on

individuals, and ultimately upon those organisations. This may be a particular challenge for IT professionals, who have a strong professional identity developed through education, training, socialisation and technical work experience. Their professional development places an emphasis on technical skills, deep IT expertise and professional status whereby technical roles merge both work and life experiences into a professional identity, a "coherent image of self" (Cascio & Gasker, 2001; 299).

Theoretically, our research which is informed by identity theory, builds on research undertaken on hybrid roles in other professional contexts but with a major differentiating factor that the transition under examination is a permanent rather than a temporary one. Literature to date has focused, in the main, on the investigation of professional-managerial hybrid identities. However, we give particular prominence to hybrid professional-leader identity (Bernardi et al 2019). These two hybrid identity combinations differ in their emphasis. For example, the management dimension gives emphasis to managerial and operational tasks such as problemsolving and decision making, whereas the leader dimension gives emphasis to vision, communication, networking and influencing (Garavan et al 2009). Our longitudinal research design allows us to reveal the mingling of professional and leader identity, and to surface the types of identity work that IT professionals utilise as they make a permanent transition to a hybrid role. Identity theory is an important theoretical lens to inform dynamic relationships between professional and leader identity in the context of hybrid roles, and how these identities are reconciled if at all (Stets & Serpe, 2013). We are not aware of any study that has investigated these identity dilemmas in the context of permanent hybrid IT roles in organisations.

Our study also sheds light on the ongoing salience of professional identity in the context of performing a hybrid professional-leader role in an IT context. The enactment of a hybrid role involving both IT and leadership elements is complex. First, where IT professionals assume these roles there will be a requirement to develop a broad set of leadership skills to effectively perform the leader dimension. Second, the research highlights that the process of leader identity formation is both complex and time consuming. Third, the process of leader identity development takes place concurrently as the IT professional continues to perform specialist IT duties. Research with other professionals highlights the complexity of reconciling both identities. For example, both Croft et al. (2015) and Koskiniemi et al. (2018) investigated leader identity development in the context of healthcare professionals and highlighted the

challenges in reconciling professional identity with leader identity. However, generalisation across professional groups is challenging since the context and nature of professional work differs so widely. Therefore, there is a need to understand these issues within the IT context.

From a practical perspective, important work and personal implications arise where IT professionals experience difficulty in reconciling both identities, and there is a possibility that the performance of one dimension may suffer. For example, identity conflict may lead to job dissatisfaction, de-skilling, poor performance, work exhaustion and career exit (Choi &Sung, 2014). There may also be day-to-day problems related to the morale of the team that the IT professional is expected to lead. There is empirical evidence highlighting that IT professionals experienced multiple conflicts when required to take on leadership roles and the requirement to develop strategic and leadership competencies (Westerman & Weill, 2004). Both Thomas & Linstead (2002) and Holmes (2016) found that IT professionals preferred to focus on the technical dimensions of the role, suggesting that performance of the leadership role will suffer. At a more general level, the mixing of IT skills with leadership responsibilities is considered the exception rather than the rule (Krotov, 2015).

Our study is therefore guided by the following research questions: (1) What are the identity conflicts that IT professionals encounter when making a transition to a permanent hybrid role to reconcile both professional and leader identity? (2) What types of identity work do transitioning IT professionals use to reconcile both professional and leader identity? The work investigates these questions in the specific context of an IT professional study programme where participants had the opportunities to develop both leadership and technical capabilities. However, our focus is on the identity rather than the skills dimensions of leadership in the context of hybrid roles. We build on a narrative conception of professional and leader identities where IT professionals create and recreate both identities over time.

The rest of this paper is structured as follows. We first define and discuss the core concepts underpinning the research. This is followed by a discussion of the methods used to gather, analyse and interpret the empirical data. We then present our study findings and finally discuss the implications of our findings for theory and practice.

IT HYBRID ROLES, LEADER, PROFESSIONAL IDENTITY AND IDENTITY WORK

The Context of IT Professionals' Work and Hybrid Roles

The social and professional context in which IT professionals undertake their work is important in understanding the operation of hybrid roles and issues of professional identity. IT functions in organisations consist of highly educated, skilled and expertise-focused individuals (for example, Kärreman 2010; Skills Panorama 2016). The professional and cultural context in IT differs considerably from other professions where the issue of leader identity has been investigated. For example, it is generally less regulated than other professions (Fincham, 2006) and the focus is on the development of skills, and compliance with employer goals and standards rather than those of a professional body (Zikic & Richardson, 2016). Reed (1996) suggests that the knowledge base is entrepreneurial and there is less concern with occupational credentialism, while significantly more emphasis is placed on the development of specialised cognitive and technical skills required by employers. IT professionals are more likely to define themselves in terms of their skills in the use of technology and the value of their knowledge and skills. The technical and organisational challenges of leading IT professionals suggest a need for leaders who appreciate the culture of expertise, and value both technical knowledge and the complexity of technical development. In these contexts, organisations frequently ask IT professionals to assume roles that require the leadership of teams in addition to continuation of their technically-focused work.

For the purposes of this study the concept of hybrid professionalism focuses on the processes through which IT professionals manage IT experts but continue to be professionals themselves (Noordegraf, 2015). Loogma at al. (2004) suggested five hybrid roles of which two are of relevance: the *translator* who typically has a project management role and liaises between the IT experts and the client; and the *transgressor* who has largely moved away from detailed technical concerns into leadership. The reactions of IT professionals to the requirement to take on a hybrid role are embedded in their professional identity, and the requirement to change that identity may lead to instability, tension, struggle and contradictions (Denis et al. 2015). Knowing more about these identity issues in the context of IT professionals who take on hybrid roles is important since the requirement to take on hybrid roles is increasingly something

that is permanent rather than temporary in nature (Turner, Lourenco and Allen, 2016). IT professionals may be leaders of some projects and followers in other project contexts. These potential switches in roles can lead to tensions and prove difficult when it comes to finding an appropriate mix of leader and IT technical skills, with the flexibility to switch between them as required (Cram et al., 2016).

Leader and Professional Identities: New Hybrid Identities

The theoretical foundation of this study is identity theory (Stets & Serpe, 2013) which argues that the meanings attached to various identities are negotiated and managed in interactions with others. Identities are defined as the various meanings that are attached to a person and which define that person (Maurer & London, 2018). Identity theory is specifically concerned with how identities are related to one another and how identities relate to role performance (Burke & Stets, 2009). Leader identity can be defined as an individual's self-perception as a leader related to a particular social role (Stryker & Burke, 2000). Koskiniemi et al. (2018) highlight some of its dimensions including: personal and relational dimensions; the experience of being a leader; the idea that followers believe that the leader is a leader for them; and, clear understanding of the difference between being a leader and a follower. A person may however believe that he/she is a leader without having a specific role, having what Snelgrove and Hughes (2000) describe as the *feeling* of being a leader.

Research in particular highlights the importance of leader identity for effective performance of a leader role (Kragt & Guenter, 2018) and that the development of leadership competencies and skills are supported by deeper mental structures such as leader identity (Day et al. 2009). Miscenko et al (2017) for example emphasised that the development of leadership skills is inherently linked to the development of leader identity, and that leaders will draw inferences about their leader identity from their behaviour. They found that over time the development of leader identity was closely linked with the development of leadership skills, thus highlighting the important role of leader identity to leadership skills development. Research has also highlighted the importance of leader identity processes impacting on the effectiveness of training and development interventions, to enhance behavioural competencies for leadership (Andersson, 2012). Lord & Hall (2005) argued that leadership skills are consolidated through the emergence of a leader identity process where IT professionals evolve from novice to expert through skills development, enactment and identity work.

Professional identity is conceptualised as a relatively stable and enduring collection of values, motives and beliefs that define a person in a professional role (Ibarra, 1999). It is "an individual's self-definition as a member of a profession and is associated with the enactment of a professional role" (Chreim et al, 2007 p1515) and is a self-concept concerned with professional autonomy and a commitment to professional values (Barbour & Lammers, 2015). Scholars, such as Rao et al. (2003), have highlighted that professional identity is not simply an individual-level construct but is connected or linked to a collective identity at the level of the professional field. Professional identities are responsive to external pressures for change and the need to take on a leader identity (Korica & Molloy, 2010). There are, however, differences of viewpoint concerning the extent to which this is possible. For example, Baldry & Barnes, (2012) and Thursfied, (2012) writing from a sociological perspective, argued that professional identity may operate as a barrier to taking on a leader identity. In contrast, Nugus et al. (2010) and Waring and Currie (2009), writing from an organisational studies perspective, proposed that professionals will seek to retain credibility among their professional peer group, but also embrace the leadership aspects of the hybrid role.

Professional identity is relevant to IT professionals, with Brooks et al. (2011) arguing that IT professional identity is based on individual perceptions of the worth of IT professionals as a group, and perceptions of similarity to prototypical members of the profession. They found that IT professionals identify with the profession based on need, in the face of organisational imperatives for IT expertise or ongoing strategic IT projects. Marks & Scholarios (2007) found that self-interest was a key component of a strong IT professional identity, where IT professionals enjoyed an external image as a highly respected occupation. IT professional identity is therefore anchored in issues related to unique skills and expertise, the development of tacit knowledge through implementation of IT projects, and the need to meet the needs of customers or clients. In contrast, leader identity in the context of an IT professional is focused on mobilising IT people resources to contribute to strategic organisational goals, and the development of a strategic insight and perspective on IT in organisations. Both, however, share a concern for meeting the needs of clients. In terms of the IT sector, Karahanna & Watson (2006) found evidence of an expectation that IT leaders (CIOs) should remain technically proficient, to keep up to date technically, but also take on strategic roles where required.

Identity Work

The requirement to transition permanently to a hybrid role, triggers identity work leading to the reconstruction and re-evaluation of self. The concept of identity work or individuals' "active construction of identity in social contexts" (Pratt et al. 2006, p237) is important in the context of transition to hybrid roles. Brown (2015) proposed that individuals will use identity work to make sense of different co-existing identities and they will draw upon a range of strategies and resources to do so. Identity work becomes particularly important in the context of making a permanent transition to a hybrid role where both leader and professional identities will co-exist when taking on the hybrid role, because it helps an individual to reconcile identities in this new context. Without identity work, IT professionals will encounter difficulties in enacting hybrid roles in organisations (Lifshitz-Assaf, 2017).

Identity work emphasises how professionals form, maintain, strengthen or revise constructions of their professional selves (Sveningsson and Alvesson, 2003). Ibarra and Petriglieri (2010) suggested that identity work involves compliance with role requirements and the internal manifestations of leader identity. The need for identity work becomes particularly salient where there are significant tensions and differences between the professional and leadership role, and the requirements for both to co-exist. Clarke et al. (2009) suggested that professionals engage in identity work to achieve coherence between two competing identities and develop multiple and fluid identity constructions. Therefore, identity work involves a combination of responses including defending, revising or altering professional identities (Sveningsson and Alvesson, 2003), with the purpose of maintaining the continuity of a skills-based, individual contributor professional identity (Petriglieri, 2011). Kreiner et al. (2006) make an important distinction between differentiation, integration and neutral (or dual function) identity work. Differentiation identity work includes setting limits, separating the role from identity, creating an identity hierarchy and 'flipping' the metaphorical off/on switch. Integration identity work tactics include merging the role with professional identity and infusing the professional into the hybrid role in order to frame oneself as a symbol of the profession. Neutral or dual function identity work focuses on involving other people, tapping resources and seeking refinement.

As identity work is a form of recalibration, it makes use of social processes such as role models and social networks. Singh et al. (2006) found role models to be an important element of identity work and central to the process of identity transition through modelling new behaviours. Sealey and Singh (2010) suggested that role models help with the enactment of

hybrid roles. In a study of professionals transitioning to new roles, Ibarra (1999) found individuals conveying images and behaviours consistent with role models displaying prototypical characteristics, using these observations to model possible selves, or versions of themselves in the new role. Likewise, developmental networks have been found to be an important factor in identity work (Sweitzer, 2009). Dobrow et al. (2012) define developmental networks as those people and groups of people who take an active interest in an individual's career, offering opportunities to formulate and revise identity through interactions. Wright & Wright (1987) found that acceptance and confirmation of abilities as initiated by a mentor led to an improved self-image, suggesting that this was due to identity self-verification. Once individuals engage in identity work as a response to their new role requirements, they begin to question who they are in the context of the new role. However, none of these social process around identity work identified above are based upon empirical studies of those in hybrid roles in the IT sector. Indeed, while studies have been conducted on the hybrid role in other sectors, there is a limited body of work on professional identity and identity work within the IT context.

METHOD

Research Setting and Participants

The study was conducted with IT professionals undertaking an Executive Masters Programme on IT leadership in a UK university. The programme was undertaken part-time and included a significant work-based learning element including a strategic IT leadership project within their respective organisation. This developmental setting provided an appropriate context to explore our research questions because all programme participants had taken up hybrid roles in a variety of contexts, including the third sector, private sector, healthcare, regional and local government. The participants were mid-career professionals and their ages ranged from 30 to 55. Six were women and 11 were men (Table 1). IT professionals are a good example of institutionalised professionals given their expertise base and professional identity. The study was conducted over a period of two years with interviews conducted over three cohorts between 2014 and 2015. Study participants maintained reflective diaries over the course of their one-year work-based project. One participant dropped out of the course before being interviewed, all other participants completed the Masters course.

Table 1. Profile of Study Participants

Pseudonym	Occupation	Sector
John	Head of IT	Public sector
Lindsay	IT Team Leader	Public Sector
Hazel	Head of IT	Not-for-profit
Ian	IT Manager	Private Sector
Steven	IT Manager	Private Sector
Pete	IT Manager	Public Sector
Sean	IT Section Head	Public Sector
Andrew	IT Project Lead	Private sector
Adrian	IT Project Lead	Private Sector
James	IT Section Head	Public Sector
Graham	IT Manager	Public Sector
Ross	Executive	Public Sector
Michael	Section Head	Private Sector
Julie	IT Section Head	Public Sector
Margaret	IT Section Head	Not-for-profit
Susan	Head of Business Advisors	Public Sector
Rhona	IT Unit Lead	Not-for-profit

Study Design and Data Sources

The study utilised an inductive longitudinal research design that allowed for the use of different methods of data collection (Creswell, 1998). The study made use of both semi-structured interviews and reflective diaries. The use of both methods was informed by a life narrative approach (as expounded by Raggatt, 2006) to exploring identity construction and identity work. Following recommendations on interview approaches by Brinkmann (2014), the first author conducted 17 in-depth semi-structured interviews with study participants at their place of work between 2014 and 2016. Each one lasted between 45 minutes and 1.5 hours and they were taped and transcribed. Informed consent was obtained prior to conducting each interview. Each interview began with a standard set of questions to facilitate analysis across participants. We asked IT professionals to tell us about: (a) their route into and through the IT sector, (b) how they understood their professional identity, what it meant to them to be IT professionals, what they did as IT professionals, and how they viewed themselves compared to others in their organisations, and (c) their views regarding taking on a hybrid role, what this meant in terms of their professional role, and how they reconciled the professional and leadership dimensions

of the hybrid role. To pilot the interview protocol, the first author conducted two interviews initially and conducted a preliminary analysis of both transcripts to understand the key themes that emerged. The interview protocol was used unchanged for the remaining interviews and so the first two interviews formed part of the full data set of 156,000 words. Second, we made use of reflective diaries (Zimmerman & Wieder, 1977). During a briefing session, participants were asked to keep critically reflective diaries (48,000 words for the full set of participants of approximately 2800 words per study participant) that recorded their experiences in transitioning to the hybrid role and the challenges they encountered. We asked study participants to address specific topics in their diary entry thus ensuring that they reported on negative as well a positive feature of the hybrid role. These were the same issues as those addressed in the structured interviews, however participants were more guarded in their reflective diaries and so, unless explicitly mentioned, the data source is drawn from interview data.

Data Analysis

We adopted an open hierarchical coding framework approach to undertake the data analysis, as described by Sinkovics & Alfoldi (2012). We first familiarized ourselves with the data by highlighting key phrases, searched for themes that stood out, reviewed each theme and finally labelled the themes that we considered of particular relevance (Ryan & Bernard, 2003). The coding process involved "naming segments of data with a label" (Charmaz, 2006, p. 43) and arranging them in a hierarchical manner to establish relationships within and amongst the labels (Kreiner, Hollensbe & Sheep, 2006). We conducted the analysis manually and the process was highly iterative, with the researchers going back and forth between transcripts and reflective diaries. To understand the themes relevant to our research questions, we initially developed first-order themes, based on the statements of study participants (Gioia et al. 2013). During the first stage, we read the entire transcripts and diaries to get a "feel" for the data. We identified statements regarding study participants' views on their professional identity, how they talked about taking on the hybrid role and the conflicts and contradictions they experienced in developing a leader identity. We then consolidated the first order themes into second order categories (identification with a skilled technical self, leadership identity, identity work including role models, networks and struggle/risk narratives) and set out to answer the question "what is going on here?" (Gioia, et al. 2000, p20). In the final stage we developed aggregated dimensions from the second order categories. The three aggregated dimensions that emerged were: (a) salience of professional identity; (b) development of a leader identity; and (c) forms of identity work. The process of categorising our raw data and then linking it to themes helped to achieve greater levels of abstraction. Overall, the aggregated themes represent a "patterned response or meaning within the data set" (Braun & Clarke, 2006, p82).

Establishing the trustworthiness of data analysis

We were concerned with the issues of validity and trustworthiness of our data. Following Schwandt, Lincoln and Guba (2007) we first established credibility by representing the lived experiences of the participants and making sure that our interpretation broadly aligned with the way they had intended. We achieved this through a feedback loop to participants whereby we sought their verifications of our interpretations, asking specifically if the general themes accorded with their experiences. We then assessed transferability, defined as the applicability of the findings into a broader context, and comprehensively described the data. Third, we assessed dependability with the second author coding part of the data to ensure reliability. Finally, we addressed data confirmability, which refers to the extent to which the study can be replicated by other researchers, by accurately and transparently describing our methods and coding procedures.

FINDINGS

Dimension 1: The Salience of Professional Identity

The first aggregated dimension focused on the salience of professional identity to study participants. Our analysis revealed two themes related to salience of professional identity: the centrality of expertise to IT professionals and meeting the need of clients. Study participants emphasised the importance of their professional identity in relation to the expertise associated with the profession. For example, Hazel emphasized the technical side of things:

"The technical side of things I've never had any issue with and I always really enjoyed taking something and making it work." (Hazel).

In a similar vein Lindsay emphasized her IT expertise, "absolutely loved [setting up a new computer system] –being in at the beginning - it was just so exciting." ... "I was the only person that could do it." (Lindsay)

Study participants also highlighted their love of technology with phrases such as "new stuff would come out, you could play with it, you could try stuff out" and "the technical stuff – I do get a buzz out of that", and: "I loved getting the computer to do what I wanted it to". For example, Michael highlighted his career as a technical expert: "a small technical role that I suppose gave me experience.... I've always worked from a task point of view. I always find these things quite easy." (Michael)

The second theme that emerged related to professional identity and focused on meeting the needs of clients. Sean observed, "I like to use technology to try to implement systems to help people and help businesses or solve problems." Ross recognized that the technology was not an end in itself, "It's not about technology for technology's sake – it's about what is it that's missing and how can this [technology] get what it is you need" and "my strength I think was always in being able to translate complex technical terms and solutions into outcomes and results". Andrew had moved to a leadership role but he observed: 'I do sometimes wish I was back in a job where I was making a difference to the end user'.

These motivations were explicitly intrinsic in nature and focused on making an added value contribution to organisational success, the opportunities to integrate technology into the organisation's strategy and the potential for more complex problem solving and decision making.

Dimension 2: Salience of Leader Identity

The second aggregated dimension focused on the salience of leader identity to study participants Two themes emerged from the analysis concerning leader identity construction: where the hybrid role had been embraced including associated leader identity; and where tensions remained between professional and leader identities. The first theme highlighting the hybrid role and concomitant leader identity is illustrated in the responses of John, Margaret, Ian, Rhona and Julie. Each had invested significantly less time in technical skills development than other participants because of their route into the IT profession. Margaret for example emphasised the importance of leading towards organisational goals:

'...everyone was so aligned and the sense that everyone was pulling in the same direction. It felt good to be involved in an organisation where, at the most senior level, we were in agreement about the organisation's priorities.' (Margaret)

John recognised his team as the technical experts and highlighted the need to think

strategically:

'The guys, the team, all of them, they know that I'm not going to be in there solving some problem if the network's bouncing around in circles and it freezes or there's no way out to the internet.... but in terms of developing a strategy ..., my knowledge of that is good.... So I bring all that to the table. I'm quite happy about that.' (John)

Study participants who embraced the hybrid role and the importance of a leader identity focused on minimising the potential for conflict in identity, by seeing alignment between the professional and leader identities, for example through recognition of shared values with their organisations and of their own non-technical strengths and contributions. They emphasised the importance of loyalty to the organisation, its goals, and pride associated with service provision. The concept of service and meeting the needs of the end user helped respondents to merge both the professional and leader identities. Lindsay and Julie highlighted this:

'For me, it isn't about the computer... for me it is about the outcome. Lots of people can do lots of things with a computer; however, if it doesn't benefit the service user what's the point?' (Lindsay)

'We're very people centred... it's all about outcome for service users.' (Julie)

Similarly, Andrew recognized that: 'there was also that desire... to keep users happy, improve the business, and make things better.'

These study respondents presented themselves as passive agents but were concerned to defend their professional values in how they enacted their leader identity. They readily adapted to organisational realities and became part of organisational decision-making and emphasised the value they could bring to their organisations through the hybrid role, seeing opportunities to influence decision-making that might support the work of the IT unit. Study respondents Sean, Hazel and James:

'I feel I'm more business minded rather than technical and I guess ... I can look at the whole organisation ... being that sort of bridge between the business and business users in IT to develop systems or implement systems that would really benefit them.' (Sean)

'I think the job role is moving in that [managerial] direction and I don't have a choice, but thankfully I'm embracing it and I feel that if it is moving in the

direction I want it to go all the way. So I am not just going to be content sitting with IT.' (Hazel)

'I do like to learn new techniques and am an advocate of doing things right and finding the right tools... I'm getting better at managing things – I'm actually quite a chaotic person in terms of organisation. I'm now getting better at that and I'm looking at ways to keep myself and my team informed.' (James)

The second theme that emerged under this dimension concerned study respondents' emotional challenges faced when embracing the hybrid role. They emphasised the professional identity dimensions, while recognising the challenges of keeping technical skills up to date in the context of increasing leadership responsibility. However, at times this led to conflicts. Lindsay described it as a deficit, a loss of *cherished* skills:

'I don't want to walk so far away from my ICT... but I realise that I have to move away a wee bit because I've not got the same technical skills now.' (Lindsay)

Other study respondents highlighted tensions and anxiety. Julie described a dilemma at a time when she had to delegate previously valued technical work on a new project:

'And I'm now going into a place that is absolutely out of my comfort zone and I am kind of struggling a lot with it... I have to give [my technical task] to somebody else and that's just not me.' (Julie)

For some, there was a sense that leadership enactment was not entirely authentic.

'I got into all the [leadership] buzz words though I don't know that I necessarily fit in to that culture cos I've got a much more technical mind-set.' (Sean)

Indeed, emotional responses were conveyed through strong claims to continue to be considered technical experts. Such claims emphasised that they were members of an IT team rather than a member of the senior leadership team or by claiming their technical expertise. Michael's response is typical in terms of finding status as a technical expert:

'I am technically savvy.... I'm viewed as the sort of subject expert in terms of how we run and maintain a network.... I was the techie guy and my boss said just do what you need to do.' (Michael)

Sean highlighted the issue of competence as the reason for distancing from a leader identity.

'I think I was much more comfortable in my technical role because I knew that inside out...now I'm responsible for other people and the section and the budget of the section...I think I might struggle with some of those areas but there's no formal training.'(Sean)

Some study respondents continued to make technical identity claims, describing technology in positive terms, while recognising this was no longer required in their hybrid roles.

'I love playing with the technical side', but in the hybrid role, 'We've been busy looking at corporate objectives and pulling them together to see which could be a project in their own right.' (Hazel)

Study respondents who had not fully embraced a leadership identity in the hybrid role at times expressed the view that they did not always understand management processes and did not have enough time or motivation to engage with them. Therefore, they accorded significantly less salience to the leader identity even where they performed the hybrid role. Many presented narratives of struggle, for example struggling to get IT projects funded. Hazel uses battle terminology:

'I have a meeting in November with the Director of Finance to be challenged on the IT budget and with these tools behind me I feel well armed to defend my recommendations.' (Hazel, reflective diary)

They did not necessarily disengage but emphasised the need to look after team members rather than prioritise managerial imperatives. Lindsay for example, expressed this dimension in the following way:

'I had that one woman who nurtured me in the early days and I feel quite strongly that that's what I have to do.' (Lindsay)

Lindsay also said:

'I love the opportunity to encourage colleagues to take another step up.' (Lindsay, reflective diary)

For Graham:

'[My new role] has been challenging and it has been good but I'm really annoyed at the organisation because they didn't give us any resources, they didn't really offer us any resources.' (Graham)

Our findings revealed that study participants' experiences of the hybrid role differed

considerably. Where for example, previous study and work experience was entirely technical, participants faced emotional challenges in reconciling the dual aspects of the hybrid role. We also found however that other study participants were successful in aligning the professional and leader identity dimensions and articulated the importance of focusing their efforts on meeting organisational goals and offering an effective IT service to users.

Dimension 3: Forms of Identity Work undertaken by IT Professionals

The third aggregated dimension to emerge from the analysis concerned forms of identity work. Three specific forms of identity work emerged: *integrating*, *networking* and *differentiation*. The first form of identity work, which Kreiner et al. (2006) termed 'integrating', was undertaken by IT professionals who aimed to resolve conflicts between both identities through integrating specific parts of the IT role and infusing them into the hybrid role. Study respondents identified specific elements of the IT role and injected them into their role as hybrid leaders. Study respondents reported examples of where they framed the hybrid role in language associated with their IT professional identity. Hazel describes this integration as follows:

'I feel I fit in quite well... because I am a very people centred person, even though I work in IT which people find quite strange. IT is looked upon as a service.' (Hazel)

Likewise, for Ross:

'I'm just one of these people that really loves what I do and I think that the technology provided me with a platform to talk to people and make them happy and I think that it's a privilege and an opportunity.'(Ross)

Others reported that they carried the philosophy and values of an IT professional into the way they led their teams:

'When you're in management you've got to – well leadership – you've got to sort of step back ... You've got to stop yourself being an engineer all the time ... but you can still innovate through, you know, guiding your team in certain directions, if you want something investigated you've got to realise that you've got to delegate - more so. I've developed delegation skills more in the past few years I must admit.'(Adrian)

Study respondents also highlighted other dimensions of integration identity work such as over

time integrating the hybrid role with their professional identity whereby the professional and leader were seen as one and the same. The use of integration as a form of identity work took time to implement because peers perceived them to be IT specialists rather than leaders:

'[The course] offered a route towards transition, a route towards providing a bit of credibility that not only am I a competent IT professional but I understand the fluffy stuff too and can sell that to you.' (Michael)

'I was trying to manage my transition from [being] the IT guy...I never noticed it at all up until I became a director and then it changes ... and there's, you know, people look at you differently and there's the boss-watching thing — what will he do next and I think a lot of people were looking to see well will he just do the same job he was doing before...so I was very keen that actually I have to manage my exit from IT.' (Ross)

Integration was an ongoing process for some whereby study participants emphasized the continued salience of professional identity in performing the hybrid role. Julie describes it this way:

"For me it is the bit reminding myself why do I do this job and what's the outcome and that's the bit that you cannot lose, and I have seen so many people lose that part of themselves and forget why we're here. I'd never do that...... I go back every year to work [with users] and that's what I think every manager should do", (Julie)

Finally, integration could also involve strong identification with the IT professional identity but with a focus on accommodating a leader identity. For example:

"Now that I'm in a management role and a leadership role – is no reason why I take my hands away from development – I need to keep my skills up; I need to keep learning new technologies...because that encourages my staff to do the same.... I'm quite determined to keep my skills base high." (James)

A second form of identity work, which we termed 'networking', was undertaken by IT professionals to better understand the hybrid role and in particular the leadership dimension. Study participants highlighted the value of role models to help them implement integration identity work. Role models were used to help study respondents to reflect on and learn about effective leaders and managerial behaviours.

'My current boss, I like the way he defends his staff I quite like that you know. I quite...I aspire to be as strong as him.' (Pete)

However, we found less evidence of the use of prototypical role models which contrasts with that reported in other hybrid role studies. One example reinforces the lack of role models within their organisation, instead citing well known external leaders.

'So [tech leaders] they're kind of way up here [participant extends his arm above his head] and that's something that would be very difficult to aspire to but I think just that mind-set that they have is just the closest thing I have to a kind of role model.' (Sean)

Study participants generally reported to non-IT leaders and subsequently had fewer resources for role model-based identity work. Therefore, the respondents relied on less relevant role models outside of the organization such as family, friends and non-IT leaders.

'I always feel that I have one woman that nurtured me in my early days and I feel quite strongly that that's what we have to do with young folk.' (Lindsay)

Study participants also made use of their developmental network as part of the networking identity work strategy. Their networks were used to consolidate technical expertise and were frequently based around specific new products and technologies. Networks were used to mitigate against the risk of introducing new technology into organisations, for example, to hear about how new technology had been adopted elsewhere. Several study participants spoke of developmental networks (both close-knit and diverse) to help them understand the hybrid role, to seek reassurance and support or to learn about other parts of the organisation:

'.... Basically the managers in here are quite supportive.' (John, network of peers)

'I get to chat with [external networks] about things, talk over ideas.... you realise you're not the only one out there who's having that problem so I found that quite useful.' (Steven, diverse network)

The third form of identity work, which Kreiner et al. (2006) termed 'differentiation', was undertaken by study participants to highlight contributions and set limits on expectations within the organisation. These included emphasizing that IT professionals were problem solvers in the context of major organisational change, where they had effectively delivered a complex project or where they had struggled in the face of significant organisational barriers. These

situations typically involved lengthy 'battles' to get things done. These struggles were often used to differentiate the role of the IT function within the wider organisation.

'I've averted big problems.... a major changeover we made and I really really dug my heels in and it's been proved [right] cos we were successful with our project ... and that gets talked about a lot - that was the best thing - that I really dug my heels in.' (Lindsay)

'My boss was good and I learnt a lot. We worked well together though we had our disagreements — sometimes they were quite forceful disagreements. But I'm usually right and he usually sees that in the end.' (James)

Our findings on the role of identity work reveal that study participants utilised different strategies at different times. These ranged from the resolution of conflicts utilizing integration of self into both role dimensions, the productive use of participants networks including role models, and the use of differentiation where IT professionals' identity was at odds with organisational expectations.

Differences between study participants by Entry Route into IT

Table 2 summarises the differences in findings for the categorisation of study participants utilising categorisation based on entry routes to the IT profession (Bengtsson, 2016). We highlight three dimensions in Table 2. The first dimension focuses on the salience of professional identity; the second dimension emphasises the challenges encountered in developing a leader identity and the third dimension emphasises the types of identity work used. Through the development of our themes respondents' experiences were categorized as follows: *pioneers*, *traditionalists*, *drifters* and *evangelists*. We found that the route into the IT sector established broadly similar patterns of self-identification based on lived experiences and consequent IT professional identity attachment. Participants in these categories also reported broadly similar forms of identity work.

The term *evangelist* was designed to recognize agency influencing a move into computing as a positive destination (Sean, Andrew, Adrian, James, Graham, Susan, and Ross). These participants evangelized about what technology could do to improve their organizations and service user needs. The *drifters* had drifted into IT through non-IT routes, when the opportunity arose (John, Ian, Rhona, Margaret and Julie). The drifters brought self-identification as competent professionals from outside the IT sector. *Traditionalists* had come to computing

through some formal education in computing or IT (Steven, Pete and Michael). In each case the prospect of a well-paid job was the main motivating factor. Having a somewhat traditional route into IT was associated with technical capability combined with some anxiety related to responsibility within their organizations together with high expectations of delivery. The *pioneers* were early entrants to IT with a long career in the profession (Lindsay and Hazel). Both self-identified as competent problem solvers, with an ongoing interest in new technology, and how such technology might be deployed within their organizations.

Table 2. Matrix of Themes and Study Participant Types

Dimensions\ Group of participants	Evangelist (n=7)	Drifter (n=5)	Traditionalist (n=3)	Pioneer (n=2)
Dimension 1 Salience of professional identity	ICT skills-based identity and recognition of the value of IT within an organization.	Strong identification with organization and desire to serve users	IT skills based identity, a desire to continue to develop technical skills	Strong identification as technical problem solvers
Dimension 2 Challenges in developing a leader identity	Agency in progressing in leadership roles	Recognizing the contribution they can make in leadership role.	Somewhat torn about losing technical skills, application opportunities.	Accept leadership values but regret the loss of technical problem solving activity
Dimension 3 Forms of identity work	Integration of leader identity, for example enactment of leader identity to make it authentic.	Narratives of team's IT competence to solve organizational problems and highlight leadership capability, acting to integrate leader identity.	Differentiation & networking — emphasizing difference in roles — use of networking/ role models.	Using narratives of organizational imperatives to see value in leader identity in order to balance identities through differentiation and networking.

DISCUSSION

This research study addresses two interrelated questions. First, we explored the issues that IT professionals encountered when making the transition to a permanent hybrid role to reconcile both professional and leader identities. In other words, what were the complexities involved in reconciling both identities to meet the organisational expectation of the hybrid role? Second, we explored the identity work that IT professionals used to reconcile both identities where there was a requirement for both to co-exist. While existing research has examined hybrid roles, identity and identity work in other contexts (Croft et al 2015: Currie et al 2012), there is a paucity of such research in the IT context. It is important to understand the impact of context on IT hybrid role holders' identity conflict and identity work. As far back as Pratt et al. (2006) scholars have called for studies of professional identity with newer professions and others such as Currie et al. (2012) and Croft et al. (2015), have called for research that investigates the

requirement to develop a leader identity in the context of strongly held professional identities, and where they are required to perform hybrid roles. We now consider the theoretical contributions of the paper.

Theoretical Contributions

Our first theoretical contribution related to the development of insights concerning the reconciliation of both professional and personal identity over time in the context of transitioning to a hybrid role in IT. Our findings reveal that the transition was unique for each study participant and they were faced with the need to resolve tensions between the professional and the leader identity dimensions of the hybrid role and to a lesser extent to manage leader-follower tensions. However, we found that the transition was consistent with Dutton et al's. (2010) notion of adaptive identity construction where the IT professional adapts to changing contextual circumstances. Conroy & O'Leary-Kelly (2014) conceptualised the shift process as one involving progress through stages – separation – transition – reincorporation. The separation stage involves moving from the old identity to a process of transition where ambiguities between old and new identities are resolved, to reincorporation where the focus is on establishing a new self. Ashforth et al. (2008) proposed the idea of 'identicide' (p. 355) where an individual supresses or kills off one identity that will impede the emergence of another identity.

While there were many unique dimensions to each study participant's transition we found, consistent with previous research, that IT professional identity was particularly salient when performing the hybrid role. This was especially true for those who had entered the profession through traditional routes, having previously navigated technical study and work experience. As IT professionals transition to a hybrid role they have a 'hangover identity' from the professional IT role (Spehar, Frich & Kjekshus, 2015). We found, for example, that IT professionals (especially *traditionalists*) derived significant meaning and satisfaction from IT work projects where the focus was on competence, teamwork, support from colleagues and value to users or clients. Furthermore, their understanding and conceptualisation of the leader role and leader identity was closely intertwined with their professional identity. With the exception of the *drifters*, participants continually emphasised their professional competences and in some cases, distanced themselves from the hybrid role. Therefore, IT professionals come to the hybrid role with a hard-worked or default identity of leadership that is rooted in a professional mind-set and to which they will resort when they experience change, uncertainty

or challenge. This was particularly notable for *traditionalists* and *pioneers*, both characterised by agency in developing a career in the IT sector (Carroll & Levy, 2008). To use the term proposed by Gouldner (1957), IT professionals were oriented towards a cosmopolitan rather than a local managerial identity. Gouldner uses the term *cosmopolitan* to indicate more commitment towards professional skills, finding cosmopolitans having a stronger identification to professional values and skills. This commitment to professional skills is a continuing state of affairs and they continue to identify with professional values and skills. This is an important theoretical insight because it highlights that professional identity remains salient for IT professionals who take on permanent hybrid roles and they will fall back on this professional identity as an important resource to achieve their goals. For some, technology as a plaything or source of excitement emerged, however the impact of technology on users' lives was a more significant source of salience of their professional identity. Incorporating such value in the leadership role would be one way of easing the transition from IT professional to leader.

Leader identity construction was found to interact with professional identity over time. This presents important tensions that for some IT professionals may never be resolved effectively. This occurs because professional identity is focused on competency, expertise and autonomy, whereas leader identity is perceived as being bounded by hierarchical administrative tasks, leading change projects and being part of the organisational decision-making process. Petriglieri & Obodaru (2018), for example, proposed that the more clearly professionals construct a professional identity the more likely it will be invoked. Participants took steps to balance both identities, never quite achieving equilibrium. Using terminology suggested by Spyridonedis et al. (2012), the IT professional role leads perhaps to a *cross-calling* identity that extends beyond the organisation, whereas the leadership role leads to the construction of a nested identity in an organisation. Therefore, IT professionals may try on a leadership identity to see whether it fits. Identity affirmation through role modelling and networking can serve to consolidate the leadership identity.

Our second theoretical contribution points to the possibility that the leader role can be something of an anti-identity or *alterity* (Czarniawska 2002). In the context of our study, IT professionals were concerned not to lose credibility as technically skilled professionals. Indeed, the professional discourse that surrounds the IT role may result in them *not* striving for leadership positions. They were very much influenced by how other people thought about them: externally there was status attached to the leadership role, internally they were

continually challenged to retain expert status. The *drifters*, drifting into IT careers, were more assured of the transition in identity, having developed less commitment to technical skills. This suggests that professional identity is strongly relational (Barbour & Lammers, 2015) and these relational components were manifest in how participants described individual-individual relationships but also the cultural dynamic found in their organisation.

Our third theoretical contribution focuses on the role of identity work in the context of transitioning permanently to a hybrid role. Given our focus on how the professional and leader identity dimensions mingle or integrate in the context of hybrid roles in IT, it is perhaps not surprising that our findings differ somewhat from previous studies (Pratt et al. 2006; Kreiner et al. 2006; Petriglieri & Stein 2012).in particular studies have investigate professionals taking on temporary hybrid roles whereas our focus was on professionals taking on a permanent hybrid role. This therefore potentially explains the salience that was attached to the types of identity work strategies deployed. IT professionals emphasised challenges around the leader identity dimensions and utilised integration (merging aspects of the professional and the leader), networking (utilising developmental resources to understand the role); and differentiating (highlighting the distinctiveness of the IT contribution within the organisation). IT professionals utilised these forms of identity work with different intensities at different times, depending on their routes into the IT profession and subsequent career development. The focus on the use of integration as a form of identity work talks to what Kreiner et al. (2006) describe as the fusing of the "me" with the "we" so that the professional can achieve greater integration. Integration tactics focused on the leadership role impacting on service delivery or impact. Identity work in the form of networking served to reinforce the leader identity. Finally, differentiation drew on sources of conflict between the individual embedded in the IT function and their organisations. As such, these narratives worked against a productive sense of self as a leader. The analysis therefore surfaced differences within a homogeneous sample of study participants. Our findings in particular highlighted differences in the intensity of use of identity work in addition to the types of identity work, suggesting the value of utilising a research design that captures a more nuanced picture of the dynamics of the nature of identity work over time.

Practical Implications

From the perspective of organisational practice our study findings have a number of implications. An important priority for organisations is that the IT professional performs both dimensions of the hybrid role effectively, therefore it makes sense to utilise HR and

management practices that support and facilitate this transition. First, we suggest that organisations should pay attention to the design of hybrid roles so that they enable the job holder to combine the technical and the leader dimensions, with subsequent recognition of both aspects of the role. Second, we recommend that organisations should invest in leadership development programmes that specifically focus on helping IT professionals who have been individual contributors, to take on the leadership dimensions of the hybrid role. These leadership development activities should focus on both mind-set and skill-set dimensions of leadership (Garavan, et al. 2009). The mind-set dimension should be focused on identity issues, offering participants the opportunity to reframe their narratives of conflict, and the internalisation of the leader role. The skill-set dimension should be focused on developing the soft skills required for leadership, facilitating the social aspects of identity work, including the establishment or expansion of networks. Our findings suggest that leadership development should address identity issues that arise in the context of moving from an individual contributor to a leader role and what this means for behaviours. Garavan et al. (2016) for example found that organisations frequently gave primacy to the skill-set components and ignored the mindset dimensions. However, our findings highlight that it would be unwise to ignore issues related to mind-set in the context of IT professionals transitioning to hybrid professional-leader roles. Third, there is value in utilizing a variety of developmental supports such as coaching, mentoring and promoting access to networks. Coaching is of particular value in helping the hybrid role holder socialise identity claims and share conflicts that may arise in reconciling both identities. Mentoring is of value in helping the hybrid role holder to address career conflicts and issues that may arise. Individuals should be supported to develop networks, both internal and external to their organisations, productive of a sense of self in the leadership role. Consistent with research on the role of networks (Gubbins and Garavan 2015) there is value to IT professionals in broadening their networks to people outside of their immediate circle and engage with leaders from other areas of the business.

Limitations, Boundary Conditions and Future Research

We believe that this study makes an important contribution, however it also has limitations. First, it should be noted that it is a qualitative study and therefore we are aiming to contribute towards emerging theory rather than theory testing. As a result, the findings highlighted here should be tested using a much larger quantitative study to test their transferability and generalisability. Second, we conducted our study within an IT setting in which participants were relatively well-established in terms of their careers, therefore scholars could investigate

IT professionals at different career stages. For example, individuals may experience different issues when it comes to reconciling professional and leader identity and utilize different identity work at earlier career stages (Ibarra & Barbuleseu, 2010). Third, we studied IT professionals in multiple settings. Therefore, it may be useful to study a group of professionals in one organizational setting. This type of investigation should help scholars to achieve a deeper understanding of the impact of context on how IT professionals reconcile professional and leader identities to perform a hybrid role effectively, and their use of identity work. Fourth, we focused on IT professionals who took on hybrid roles, however it would be interesting to investigate other professional groups and to have deeper insights into those professions who cling on to their existing professional identity and resist the need to perform both the technical and leader requirements of the hybrid role. Fifth, it is not possible to ignore gender when considering the context for IT professionals. Women remain chronically under-represented in the IT profession (McGee 2018; Armstrong et al 2018). Kenny & Donnelly (2019) for example highlighted that women held only about 16% of IT jobs in the UK and that there was a distinct gender structure within the profession that shapes the careers of women IT professionals. The research on gender identity in the context of IT roles highlights that one specific type of masculinity (that of the technical expert) is more salient and highly valued in IT (Duerden, Comeau & Kemp, 2011). In addition, women find it more difficult to embody geek or nerdlike identities (Varma, 2007) and they have to continually defend and extend their space while not affronting male sensibilities (Babcock & Laschever, 2003). While there are females in our sample, the investigation of a gendered perspective was not at the heart of the research reported here. We therefore focused on the hybrid role dimensions of our study sample rather than their genders.

Finally, in terms of methodology, there is scope to use observation which would provide a valuable opportunity to observe possible discrepancies between self-reports and observed behaviours. Observation can be used to validate the accounts of study respondents, and there is value in utilizing a longitudinal approach by following the same individuals over several years to explore the dynamic interaction of professional and leader identities.

CONCLUSION

This article reports the findings of a longitudinal qualitative multi-method study exploring the roles of professional and leader identity and the use of identity work in the context of IT professionals permanently transitioning to a hybrid role in an organization. We found that IT professionals encounter challenges in reconciling both identities and that over time professional identity remains salient. Study participants varied in terms of the challenges of reconciling both identities, depending on their route into the IT career and there were nuances in their use of identity management strategies and the intensity of their use over time. Overall, our findings reveal that the transition to a permanent hybrid role in IT should be understood in a more dynamic and variegated way to generate a more complete picture of the process of reconciling professional and leader identity.

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