



Biases and power: Understanding of the experiences and perceptions of workplace EDI amongst digital leaders in higher education

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ABSTRACT

The professional experiences and identities of staff working in IT roles in higher education is currently an under researched area leading to a gap in understanding of how these staff experience and contribute to diversity in their institutions. Digital leadership is an emerging area of leadership studies with increasing importance where academic and professional teams work together as allies in addressing structural inequalities embedded in systems of learning, teaching, promotion and support. This article draws upon data gathered through semi-structured interviews with digital leaders in universities in Scotland. Data were analysed using an interpretative feminist framework to surface themes of workplace diversity, equity and inclusion which challenge stereotypes around the professional roles and identities of people who work in digital. The article highlights the importance of insight into the context in which digital leaders are providing expertise and evidence for decision-making at all levels in universities. Recommendations for senior management, academic staff and human resources professionals are offered, as are areas for further research and policy making.

Keywords: Professional staff, higher education, information technology, stereotypes, digital leadership, inclusion

Introduction

Digital leadership is an emerging area of leadership studies growing in popularity as organisations seek to ensure that their businesses are best positioned to thrive in an increasingly digital world. In considering gender equality within the work of our colleges and universities through a lens of #BreakTheBias it is useful to understand the experiences of digital leaders working in these institutions.

Digital leadership combines the knowledge domains of both technical understanding and organisational leadership. Digital leaders in higher education are a group of professional staff who lead specifically in areas of the organisation where the use of technology is key to the strategic delivery of higher education; such as IT, AV, learning technology, student systems, business systems data and IT infrastructure. For this study original data from digital leaders (Directors of IT) working in Scottish universities were gathered by an 'insider' researcher (Asselin, 2003; Sikes & Potts, 2008; Zsuzsanna, Attila, & Zsolt, 2018) to explore their personal experiences and perceptions of EDI leadership in their workplace Highton, 2021, pp. 40-61) The language of business competitiveness and diversity has become linked in recent years as the drivers for change in higher education institutions (HEI) (AdvanceHE, 2019, 2020). In the overlapping sectors of HE and the technology industry in Scotland, the national context is a factor in determining the scale of the endeavour. Organisations may be under external pressure to have a staff demographic which represents wider society, so the numbers of women or black and minority ethnic (BAME) workers in the region is relevant. The challenge for those organisations hoping to diversify their workforce is stark. In Scotland in 2017 almost 95.6 percent of the population identified as white. The universities in Scotland, while having international reputations still struggle to attract diversity in their staffing (UniversitiesUK, 2021). This brings with it diversity and inclusion management challenges. Industry context is also important, the numbers of women, individuals identifying as LGBT+ or people with disabilities working in a sector will be of interest to those concerned with inclusion as the context which shapes the culture of the organisations.

The national context

In both the HE and IT sectors there are national pressures from policy organisations to increase the numbers of women in senior and STEM (science, technology, engineering and mathematics) roles (Skills Development Scotland, 2017, 2018; The Scottish Government, 2017b). Highly qualified women are likely to be in high demand, so employers who offer visible support for inclusion will reap rewards in recruitment (Avery, McKay, & Volpone, 2013; Skills Development Scotland, 2017, 2018; The Scottish Government, 2017b). Professional IT staff in HEIs are not a well-studied group but have the potential to play significant roles in business success as digital leaders. Professional associations have provided some information but this leaves a lacuna in academic research. In the most part, previous research into information professionals in universities in the UK has focused primarily on those working in library-based roles, for example Hall and Raeside (2016). These populations are not entirely comparable; whereas

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women dominate the library professional workforce (Hall & Raeside, 2016), the digital and IT sector is dominated by men (Skills Development Scotland, 2017, 2018). This makes it important to study the experiences of these groups of professional staff separately in relation to equality diversity and inclusion (EDI) or structural inequality in the workplace. The context for workplace EDI is shaped by national politics and history and to ignore these risks divorcing them from an understanding of power relations between groups. Although Human Resources (HR) professionals may be able to draw upon international best practice ideas and attempt initiatives in broadly similar ways, generalising findings or finding objective proof of success is laden with difficulty for critical researchers.

A war for talent

The interest in diversity in the Scottish digital sector in recent years manifests in the appearance of industry awards and visible celebrations of women in STEM such as Ada Lovelace Day and International Women's Day. Targeted sector awards provide the opportunity for organisations to gain external acknowledgement and assessment of their organisational efforts and commitment to diversity (Glasgow Chamber of Commerce, 2018; Newlands, 2018). While such awards and celebrations may also be dismissed as window dressing the investment being made by some large tech industry employers is undeniable and the rhetoric of diversity advantage is being used uncritically and prominently in this Scottish context.

The Scottish landscape includes a number of non-profit organisations working directly alongside employers to promote the benefits of diversity in the workplace and high profile initiatives by the Scottish Government such as the establishment of an Advisory Council on Women and Girls in 2017 (The Scottish Government, 2017a). With specific emphasis on universities and colleges, the Scottish Funding Council for higher and further education include specific reference to intersectionality, recognising that social inequalities combine and interact, so people's identities and social positions are shaped by multiple factors in their equality initiatives (Scottish Funding Council, 2017). The Scottish Government has included digital technology as one of the six key sectors in which Scotland has a 'distinct competitive advantage'. With low numbers of women working and girls studying to be in the sector, this competitive advantage is at risk. In Scotland around 20% of employees in digital technologies are women (Equate Scotland, 2018; WomenInTechScotland, 2020).

Digital Leadership in Higher Education

The size and shape of IT departments in universities vary widely depending on the size of the university and the breadth of the services and projects which are being provided. EDUCAUSE report that despite an increase in recent years women continue to be underrepresented in the US higher education IT workforce (EDUCAUSE, 2018), and that the workforce is predominately white (Pomerantz, 2016.). In the UK the professional membership group for university IT departments and workers is the Universities and Colleges Information Services Association (UCISA). UCISA hold conferences and themed events and meetings to work across the sector and support their membership organisations in making the case to universities that investment in the staff who work in university IT is vital to business success. Digital leaders "*help the organization imagine the digital future, blur the internal and external boundaries in ways that assist the transformation, educate others, repurpose technical expertise, and use design thinking methods to foster innovation*" (Abatiello, Knight, Philpot, & Roy, 2017) and their skills are particularly needed in schools and universities (Sheninger, 2019). The importance of digital leadership is seen starkly when HEIs face crises such as the COVID-19 pandemic in 2020 when huge swathes of the business of education shifted to online and remote working (Gallagher, 2020; Moustafa, 2020).

"the capabilities required of us to keep pace with digital technology advances and the increasingly varied and complex interaction of information systems should not be underestimated. They are fundamental to the success of our universities and their students". (UCISA, 2018)

In 2018 an attempt was made from within UCISA to gather data about gender equality in university IT teams and to understand what focus there was on gender equality. While recognising the methodological challenges of the email survey study it serves to highlight the need for further research and practice to support equality and diversity in IT departments in higher education in the UK. The survey found that the majority of respondents were concerned about gender equality and diversity in the IT profession. Many of the respondents indicated that they did not think that their institution had in place policies to support gender equality and that in their workplace they could see that diversity was not widespread across teams, with project management and helpdesk teams having more women than other areas (Fraser-Krauss & Priestley, 2018). The UCISA survey, however informal, provided part of the inspiration for this research study because the researcher, as a digital leader working in a university IT department was one of those surveyed. In the UCISA study - 80% indicated 'definitely' or 'probably yes' they were concerned, 11% were 'not concerned'. Additionally 48% of respondents said their institution did not have any policies in place to support and 57% reported that their IT departments did not have specific policies in place to support equality.

Professional I T Managers as an identity group

Understanding of the experiences and perceptions of workplace EDI amongst digital leaders in HE requires attention to the issues of power and privilege which shape the experience of the participants. An intersectional approach is required to understand the

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diverse identity characteristics of digital leaders, recognising that people's identities and social positions at work are shaped by multiple and interconnected factors, and the significance of these factors for leadership. In looking to develop an understanding of managers in relation to leadership in their workplace it is useful to review managers' experiences as an identity group. Huy (2011) suggests that understanding managers' experiences can help to explore the various causes of their support or opposition for organisational strategy and it is important to recognise many different identities. Bossu et al. highlight that in their research with professional staff in higher education they found:

"a pervasive preoccupation with identity is in part reflective of the amorphous third space that [professional staff in higher education] identify with. It may also relate to employment insecurity and the perpetual out-group status of working in the academy, without being of the academe"(Bossu, Brown, & Warren, 2018, p. 458).

It will be a challenge for anyone leading a programme of organisational change to know which of these identities matters most to an individual at any given time or situation *"the identities that matter most are likely to be the ones that are associated with emotions, positive or negative"* (Huy, 2011). A distinction should be made between identity groups (e.g. age, gender, race, class, ethnicity) and organisational groups (job function or place within organisational hierarchy). Intergroup theory is relevant here because while digital leaders are an organisational group and as members of the management group may be perceived as representative of that group by their staff, their own membership of one or more identity group will also influence how they are perceived or behave (Linnehan & Konrad, 1999). Identity groups intersect with organisational groups and the socially constructed realities for individuals are shaped by both of these factors (Highton, 2021, p. 69). Diversity initiatives often aim to introduce or integrate members of different identity groups into organisational groups such as management, and IT management groups have traditionally been dominated by men. Men who are members of identity groups such as ethnic minority, LGBT+ or working class may find it hard to integrate into the most senior management groups if they have not historically been represented there before (Hearn, 2014; Hearn & Collinson, 2006). Women will particularly experience challenges in fitting in to senior management and the extent to which minority members are expected to assimilate or whether the organisation should change to integrate them is an area of ongoing study in leadership and management studies (Kossek & Buzzanell, 2018).

Digital leaders are part of a functional identity group – that of being leaders and managers (e.g. directors of IT departments or libraries) with power and resources – and also have their own identities which intersect with their membership of any other identity group, which makes them an interesting group to study from an intersectional point of view, particularly because of the shifts in power which initiatives bring. Dutton et al (2002) explore and describe the contextual factors which may influence the choices managers make when deciding whether or not to champion gender equality programmes in their own organisational context. They identify likelihood of success, image risk and political support as mediating factors in these choices. They warn that top management hoping to create a change in culture merely from their own personal openness will have a hard challenge as more structural and sustainable conditions are required (Dutton et al., 2002). The challenge for managers is to accurately make sense of the organisational culture around them and they find that organisational cues maybe ambiguous and managers may struggle to decipher meanings without clear signals from senior management. They note that newcomers must work even harder to interpret cultural cues as they have no access to shared history within the organization: *'It may not be clear to the newcomer just what constitutes a cue, let alone what the cues refer to, which cues require response, or how to interpret and select responses to them'* (Louis, 1980, p. 230). Newer managers may need additional support to understand the EDI programmes in their new organisation even if they have been involved in similar initiatives elsewhere in the past. This is an important consideration for studying professional IT staff in universities as many may join universities because of their professional expertise or experience in the tech sector rather than a background in the academy. Nearly half of the participants interviewed had been in their current organisation less than five years, of those most had joined from outside of higher education.

Understanding of the experiences of leaders

Universities are comprised of diverse set of organisations each with their own cultures and many sub cultures (Deem, 2007; Silver, 2003). Each university has both academic departments and functional support departments. It is rare for senior academic staff to become managers in professional service areas and vice versa, however the executive management teams of universities will comprise the most senior leadership from both. Managers in professional services work alongside academic peers in universities and may reflect on the seeming differences of the 'business' in which they are engaged. Academics as managers can be seen as a specific functional identity group, and there are some relevant studies of academics as managers and the changing context which shape and change their careers. Deem's small exploratory study focused on feminist academic managers. Her study included women from social sciences and humanities and but found that *'science and technical disciplines tend to contain relatively few women'* (Deem, 2002) which also serves to highlight the scarcity of research into women in senior management roles in IT and other technical disciplines.

In relation to the role that senior managers can play in signaling the level of importance and commitment at institutional level, de Vries argues that *"organizational gender scholarship is critical to understanding the gendered nature of championing"* and suggest that the ways in which ensuring that EDI interventions are well championed require men and women to play complementary roles in leading change (de Vries, 2015). Saunders and Sin (2014) explore middle managers' experience of policy implementation and mediation of Scottish Higher education enhancement themes describing how *"messages will undergo adaptation and be understood very differently according to the situated experience of each stake-holding group"*. Implementation of EDI initiatives are locally interpreted and the lived experience in one part of the organisation may be quite different to another.

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Digital leaders in this study were all head or director Level in Scottish HE IT organisations. In their roles the participants have line management responsibility for resources and autonomy in the choices they make about use of those resources. Participants were chosen and invited to be part of this study with a deliberate attempt to have a diverse a sample within the context. Although there is no current published data about the gender split of higher education IT managers, it might be assumed that there are more men than women in these roles. Since the data in this study include an equal number of men and women, women are probably overrepresented in relation to the sector norm. Attention was paid whether they additionally identify themselves as part of any ethnic, LGBT+, class or religious group. Participants were all broadly in the 40-60-year-old age group and have at least 10 years' experience in middle or senior management. All are white, one identified as gay. Several mentioned a religious upbringing or background. Half of those interviewed identified as coming from a working class background, none identified as upper-class. More than half identified as 'parents of daughters' (Highton, 2021, p. 75). Most of the digital leaders interviewed were 'multi-functional' IT managers, having a range of responsibilities across their own organisational units including responsibility for HR issues and financial management. All the participants offered pro-diversity beliefs at some level and although their attitudes vary, most showed positive attention to dissimilarities in the workplace. Several commented that the questions were making them think, and the data gathered shows reflection and engagement in ongoing critical sense making. Their responses are insight into their motivations and lived experiences. Lewis suggests that *"leaders need a personal story to relate to in order to be an effective diversity leader"* (Lewis & Surry, 2013) and the data included many personal stories.

Unlike the respondents in the 2018 UCISA survey (Fraser-Krauss & Priestley, 2018), all of the participants in this study were well aware that there were equality and diversity initiatives in their workplaces. HEI practitioners and researchers may note that what was missing from the data was any reference to the Athena SWAN programmes in universities (Ovseiko, Chapple, Edmunds, & Ziebland, 2017). This may reflect the fact that thus far the Athena SWAN reporting in institutions has made only passing reference to the demographics of professional staff focusing as it does, largely on academic colleagues. In many institutions there are more women than men in senior roles in the professional support services, but that may not be the case in IT which is a STEM profession.

Breaking the bias

Digital leaders have an important part to play in combining digital and diversity leadership in organisations. While it might be assumed that if there is a strong business drive for diversity in recruitment, it will be accepted and supported by the senior management who want to improve their business, but this may not be the case for digital leaders championing diversity activities within the organisation. If it is assumed that leaders will view equality and diversity programmes in the same way as any other business issues one must ignore the reality of how disruptive to existing power structures these initiatives may be.

While it might be appropriate to engage male leaders, as those who are most likely to have the power to implement change, in leading such work they are often the main beneficiaries of an unequal status quo and may choose to lend less support to these business cases (Bjørnholt, 2011; de Vries, 2015, p. 22). Several of the digital leaders in this study who are men described their very clear commitment to EDI activity and the role they have played in making things happen but highlighted areas of personal, professional and reputational risks to themselves. In some cases these risks were sufficient to discourage them, in others they recognised that standing up and championing diversity risked limiting their own social and cultural capital and that championing diversity can undermine your digital leadership (Highton, 2022). Understanding these perceived risks is essential for moving forwards in developing digital and diversity leadership within organisations. Colleagues and researchers who are interested in developing diversity leadership amongst men within organisations may find it interesting that the managers in this study spoke of their experience as working parents and their motivations to engage with EDI issues was strongly influenced by those experiences of childcare, flexible working and support structures (or lack thereof).

"the other thing which personally affects that is around being a parent and carer, so having gone through some personal experiences of some caring responsibilities and obviously just having kids and having the workplace recognise how that plays out has been important to me, so I guess what that does in terms of my role as a manager then is, as a leader in the organisation is then just promoting the understanding of what and why it is important and what we should do to support people. And that doing the same thing by everyone isn't equal" (Participant A)

In line with other research (Borrell-Porta, Costa-Font, & Philipp, 2019), the data gathered show that the experience of parents of daughters clearly plays an important part of what shapes attitudes and may offer a potential area for further work in engaging fathers in EDI issues in workplaces.

The data gathered show that class and gender are significant factors in shaping participants' motivations to champion equality and diversity in the workplace and their choices whether to take on that role as visible champion is mediated by their considerations of their own and organisational values, demographics of their senior management colleagues, and the time and effort they personally have to put towards the cause. It also shows that they have an interest in race and ethnicity in the workplace and see the overwhelming whiteness of their organisations as a failing. Despite having no formal responsibility for the delivery of strategic actions towards widening access in their universities several of the digital leaders in this study identified it clearly as an area of interest and motivation for them. This reflects their own identity and experience of coming from backgrounds which they felt were historically disadvantaged in relation to higher education.

"Coming from what I would consider is a working class background, I do think that can make a huge difference if you have influences at the right time or opportunities or experiences it can completely change or shape your life." (Participant B)

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Furthering an understanding of the backgrounds from which digital leaders come and their interest in widening access to education offers a new angle on further work in promoting diversity and inclusion in digital leadership. Attitudes around equality and diversity form over time and are often modified. This makes generalisations and replicability difficult. The same questions asked of a different group of people would not elicit the same replies. The changing context which is the direct experience of the participants may be influencing their ongoing thinking even in the time it took to complete this study. In the period since the interviews were conducted, both higher education and the tech sector (as part of wider society) have been changed by the Black Lives Matter movement and on-going debates about freedom of speech in universities and online (Bolumole, 2020; Finn, Watermeyer, Raaper, & Olssen, 2022).

The digital leaders interviewed spoke openly about the stereotypes and structural inequalities in the IT industry which have led to the current situation of it not being a particularly diverse industry and about the values, business and role in society of universities as well as the specific context and culture which comes with being an organisation which includes not only staff but also students.

All of the participants were quickly able to identify a range of risks, personal and professional. These risks were identified by male and female managers and while they were different in nature, they were nevertheless a serious consideration for each of these individuals. It is clear that even though they could identify clear business drivers for diversity, that did not entirely mitigate the perceived risks inherent in tackling the structural issues in the workplace. They are very aware of the discomfort which may be caused from some people by challenging existing structures and the status quo. While there may be an expectation that managers have power and responsibility to bring change in most areas of their business, equality and diversity still brings with it additional challenges to their own agency and impression management.

"I imagine some of it is sticking one's head above the parapet, if I was to move forward in this area, or tackle issues that we are not tackling or that we are not particularly good at and sometimes it means that being the person who is holding a mirror up to the organisation does not necessarily do you any favours. So there may be risks." (Participant C)

This data shows that senior managers who have 'day jobs' to do, know that championing change can make it harder for them to do those jobs and undermine their credibility.

"There are things that colleagues, maybe are branded or identified with that may or not be advantageous for them. I don't know whether if we said you are an equality and diversity champion whether that would be seen positively or neutrally or negatively. And if I don't know that then it's probably not positively" (Participant D).

This represents a risk for the sector in that we may put effort into diversity recruitment, and winning external awards for that activity, but do not work to create motivational rewards or the inclusive environments needed for happy workplaces and valuing diversity. Digital leaders have limited time and attention to give to strategic change initiatives such as EDI and failure to spend time supporting them in the social and emotional aspects of these challenges risks making change a hard task. Participants identify strongly with their role as leaders and understand the leadership role in championing EDI in the workplace, and that they consider a wide range of personal and contextual factors in deciding how prominently to champion these issues. Their decisions are mitigated by their perception of risk. There are risks, and it is these risks which are weighed up by managers before they make the choice to explicitly champion issues. It is clear that while many agree that support *from* leaders is needed to ensure that diversity initiatives are successful, support *for* leaders is also essential if they themselves run the risk of backlash and defensive routines by colleagues.

Recommendations for supporting diversity in digital leadership

To move forwards in supporting diversity and inclusion activities promoting diversity in digital leadership in higher education it is important that universities recognise that:

- Digital leaders represent a distinct identity group as distinct from other professional service areas and academic leaders.
- Digital leaders joining universities struggle to find clear direction with regard to EDI values in their organisations to which they can relate.
- Recruitment and retention to the IT department is a highly competitive area with structural and contextual issues shaped by industry beyond higher education.

Practical steps can be taken to address the needs of digital leaders by:

- Ensuring that IT staff are highlighted as a distinct group in organisational data reporting so that diversity can be tracked, evaluated and researched.
- Including in diversity leadership programmes explicit understanding of the overlapping sectoral contexts of higher education and the tech sector.
- Gaining a nuanced understanding of the career trajectories and personal identity backgrounds of digital leaders as a group who play an increasingly important role in organisational success.

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Organisational development and HR professionals can support digital leaders by:

- Engaging directly with the structural and power inequalities manifesting in the tech sector.
- Recognising that even where they may be a clear management business case accepted for EDI, the reality for digital leaders delivering it carries inherent personal and professional risk.

Conclusions

The experiences of professional staff in universities is a growing area of interest to researchers as evidenced by several recent publications, but there are still few studies looking at the IT professional groups and even fewer looking at diversity in universities' digital leadership. The value of these recommendations will be seen if the findings can be directly applied and used in practice. Research done to understand the experiences of professional staff working at the intersections of the overlapping sectors of HE and the technology industry in Scotland has potential to transform the lived experiences of these staff and an improved workplace in the organisations of which they are part.

Biography

Dr Melissa Highton is Assistant Principal for Online and Open Learning at the University of Edinburgh and Director of Learning, Teaching and Web Services responsible for the technology platforms and services which deliver learning, teaching and international reach. She has significant experience as a digital leader in higher education and understands the context for strategic decision making at senior levels in institutions.

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