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A Design Framework for Information Systems in the Workplace Accommodation Process from a Social Model Perspective: A Research Plan

Emergent Research Forum (ERF)

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Abstract

Accommodations are often necessary to equitably include employees with disabilities in the workplace. However, many companies struggle with effectively providing support employees need. Information systems (IS) have been shown to facilitate business processes and effect positive organizational change. Yet traditional IS cannot provide a comprehensive solution to challenges companies are facing in the accommodation process, especially social challenges such as conflicting interests among stakeholders. Drawing from the extant management and disability studies, this article identifies the major issues in the accommodation process. To address these multifaceted issues, this article justifies the necessity of designing a novel IS in the process. The goal of this research is to create a design framework for IS in the accommodation process from a social model perspective.

Keywords

Information systems, design science research, accommodation process, people with disabilities, social inclusion.

Introduction

Around 15 percent of the world's population, or roughly one billion people, live with a disability (International Labour Organization 2020). About 80 percent are of working age. People with disabilities, however, face enormous barriers to equal employment opportunities (International Labour Organization 2020). This research focuses on accommodations, which are often necessary to include people with disabilities into the workplace. According to the Equal Employment Opportunity Commission (EEOC) and Title I of the Americans with Disabilities Act (ADA), accommodations need to be requested, negotiated, implemented, and monitored (Job Accommodation Network 2018; Kofi Charles 2004). This process involves multiple internal (e.g., supervisors) and external stakeholders (e.g., clinicians) (Shaw and Feuerstein 2004). Yet there is a lack of effective accommodation processes in many companies. The challenges of the process include little understanding of the process by organizations, supervisors, and employees, varying perspectives of accommodations by internal and external stakeholders, as well as slow information flows among stakeholders in the process (USBLN 2017).

This begs the question, how can these challenges in the accommodation process be addressed? Information Systems (IS) have been shown to facilitate business processes and effect positive organizational change (Strong and Volkoff 2010). Some companies have used third-party accommodation management software in an ad hoc manner. This research aims to explore how IS might facilitate the accommodation process. To

do this, however, it is necessary to expand the focus of our literature review beyond the confines of the IS literature. Much of the research into disability and accommodations has occurred in management and disability journals. Management scholars have focused on the accommodation-related issues among internal stakeholders (Baldrige and Swift 2013). Disability studies offer detailed examination of accommodation process-related issues and look at the relationship between internal and external stakeholders to an organization (Corbière, Brouwers, Lanctôt, and van Weeghel 2014). A comparison between the medical model and social model of disability and accommodations have emerged from the existing literature. The major issues in the accommodation process arisen from the existing literature are categorized as operational issues, social issues, and legal issues.

The research in progress then presents the methodology to conduct further research. In order to address the issues of the accommodation process, there is a need to design an IS that involves moral or social components. Using a design science approach, the goal of this research is to develop a design framework for IS in the accommodation process from a social model perspective.

Literature Review

A literature review was conducted following the steps described in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Liberati, Altman, Tetzlaff, Mulrow, Gøtzsche, and Ioannidis et al. 2009). Due to the page limit, we briefly report the findings from this review. In this section, an overview of the management and disability literature related to the accommodation process is presented. Moreover, a comparison between the medical model and social model of disability and accommodations is analyzed. Additionally, the major issues in the accommodation process that arose from the extant literature are categorized.

Focus of Management and Disability Research on Accommodations

Management research focused on internal stakeholders whereas disability research involved external stakeholders in the accommodation process. Management studies primarily examined internal stakeholders' perceptions and behaviors in the accommodation process. These include employees' disability identity (Follmer and Jones 2018) and request likelihood (Baldrige and Swift 2013), supervisors' intentions and decisions to comply (Carpenter and Paetzold 2013), and coworkers' reactions (Colella, Paetzold, and Belliveau 2004).

Disability research included external clinicians, job coaches, nurse case managers in the accommodation process (Corbière et al. 2014). The conflicts between internal and external stakeholders were often raised as an issue in the process. For example, the literature revealed conflict between supervisors and clinicians (Shaw and Feuerstein 2004; Williams-Whitt, Kristman, Shaw, Soklaridis, and Reguly 2016). In terms of the development of accommodations, supervisors focus on job tasks, while clinicians focus on symptom reduction. On the one hand, supervisors often receive insufficient or inaccurate medical information, which was challenging for them to assign appropriate duties to employees (Williams-Whitt et al. 2016). Clinicians, on the other hand, often lack adequate data about job demands and worksite factors to specify a more detailed guideline (Shaw and Feuerstein 2004). To address this issue, a study suggested that self-report and checklist measures of physical job demands and workplace exposures provided to nurse case managers (work with clinicians, consult with employees with disabilities and their supervisors) may fill this gap and facilitate the accommodation process (Shaw and Feuerstein 2004). However, the results found that this approach led to the development of more accommodations, but 25% of those accommodations were never implemented (Shaw and Feuerstein 2004). Thus, significant hurdles remain for supervisors to provide adequate accommodations. The need for new tools, which facilitate employee's ability to suggest and negotiate accommodations more efficiently and effectively is clearly needed (Shaw and Feuerstein 2004).

Management research lacked a holistic perspective of the entire accommodation process whereas disability research looked at each step in the process. Most of management studies focused on disability disclosure and accommodation request (Follmer and Jones 2018). In spite of the limited attention paid to the entire accommodation process in management research, disability articles looked at different steps in the process. For example, one study looked into a formal accommodation process and examined difficulties faced by employees requesting accommodations and employers processing the requests (Gold, Oire, Fabian, and Wewiorski 2012). The most challenging part in the

accommodation process was identified to be negotiating accommodations and the subsequent implementation of them (Gold et al. 2012). Another study delved into supervisor iterative decision-making during the accommodation process and emphasized the necessity of ongoing support due to the complexity of accommodations and the dynamics of job scenario (Williams-Whitt et al. 2016).

Medical Model versus Social Model

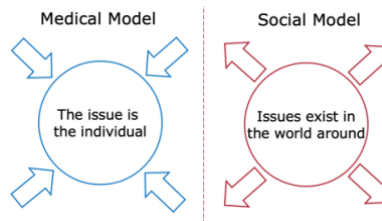


Figure 1. Medical Model Versus Social Model

The *medical model* views a disability as a problem that needs to be “fixed” (see Figure 1). It defines accommodation as assistance to an employee or changes to a workplace based on the employee’s impairment (Girdhar, Mital, Kephart, and Young 2001). The *social model*, however, views that disability is caused by the way society is organized and thus the issues exist in the world around (Loiacono and Ren 2018) (see Figure 1). It points out that accommodations are to remove barriers that restrict work choices for an employee through a collaborative process among involved stakeholders (Lederer, Loisel, Rivard, and Champagne 2014). The *social model* perspective puts accommodation in a broader context and engages more stakeholders to deal with relevant issues, while the *medical model* cannot sufficiently address the challenges related to accommodation. Through a more holistic approach, the *social model* improves the quality of accommodations and work ability as well as enhances the overall capability to manage employees with differing abilities (Wåhlin, Ekberg, Persson, Bernfort, and Öberg 2013). Therefore, this research takes a *social model* perspective of disability and accommodations. The proposed definition of accommodation process from a *social model* perspective is a systematic and collaborative process to help an employee be more productive, taking into account individual well-being and work group morale as well as organizational policies and procedures.

Major Issues in the Accommodation Process

The major issues that emerged at each step of the accommodation process and from different stakeholder’s perspective were also analyzed. They are categorized as (1) *operational issues*, (2) *social issues*, and (3) *legal issues*. *Operational issues* are caused by ways of the accommodation process operates, which may lead to inefficiency or ineffectiveness (Strong and Volkoff 2010). *Operational issues* include inaccurate or insufficient communication and information exchange between supervisors and external stakeholders, as well as a lack of accommodation-related knowledge and resources by employees with disabilities, supervisors, senior management, and external stakeholders.

Social issues are caused by conflicting interests among stakeholders, which contravenes stakeholders’ values and may result in injustice (Baldrige and Veiga 2001). For instance, employees with disabilities need accommodations to fulfill their tasks and become more productive. However, their coworkers may be worried about extra work due to accommodations; their supervisors may have negative attitudes toward accommodations (Friedman 1993). Moreover, the organizational environment may not recognize accommodation needs, which could impact supervisors and coworkers’ reactions to accommodations. These could also affect employees’ decisions to request accommodations. They may be reluctant to communicate about accommodations and could not get their needs met.

Legal issues are caused by decision making that gives primary to avoid perceived litigation risks (Roehling and Wright 2006). *Legal issues* include fear of legal liability and potential litigation, meeting minimum requirements of laws and regulations. This research does not get into the details about *legal issues* because they are bigger and different topics rather than this research aims at. However, *legal issues* are critical pieces and solutions to them need to be embedded in technology. So, we take *legal issues* into consideration when we design an IS in the accommodation process.

Methodology

To address the issues in the accommodation process, we adopt a design science research approach to create a novel IS in the process. Traditional IS has been used as a successful tool of process optimization and knowledge sharing (Saraf, Liang, Xue, and Hu 2013), however, it cannot provide a comprehensive solution to address all the challenges companies are facing in the accommodation process, especially social challenges such as conflicting interests among stakeholders. So, there is a need to design a new IS in the process. A potential IS in the process needs to specifically address moral or social inclusion issues among stakeholders (e.g., individual, organizational, or societal negative attitudes and non-recognition towards disability and accommodations). The goal is to create a design framework for IS in the accommodation process from a social model perspective.

The design framework consists of kernel theories, meta-requirements, meta-design, and testable hypotheses (Walls, Widmeyer, and El Sawy 1992). In this research, the kernel theories are social science theories governing design requirements and system design. The meta-requirements describe an applicable class of goals of the design. The meta-design includes design principles, meta-features, use cases, process model, and data model. The testable hypotheses are used to evaluate meta-design against meta-requirements and test the utility of meta-design.

The design framework will be developed using two case studies. The method of case study is applied here because the accommodation process is an unexplored phenomenon and we need to gather requirements and feedback of IS design from stakeholders in the process (Yin 2003). We select two cases based on a purposive sampling strategy that represents leading businesses that use IS at a level equivalent to accommodation management software (Yin 2003). Since accommodation processes may vary in different companies, we plan to follow the design process in one company first and create a design framework; then we replicate the design process in the other company and revise the design framework. Through this approach, we can gain more insights of accommodation processes and develop a more generalizable design framework for IS.

During the design process, firstly, in order to gather the requirements of IS, we will conduct semi-structured interviews among supervisors and coworkers to employees with disabilities, disability or accessibility specialists, information technology (IT) workers, HR, and external stakeholders. Since it might be challenging to interview employees with disabilities and other stakeholders in a same company, we will reach out to disability organizations to recruit employees with disabilities for interviews. To gain data triangulation, we will also collect documentation and observe a supervisor or HR to receive and process an accommodation request. Secondly, we will hold a design meeting in the middle of the design process to engage stakeholders in the design and get their feedback. We plan to involve one or two vendor companies in the design process as well. Lastly, we will conduct focused group interviews among stakeholders to evaluate the design.

Conclusion

Accommodations are often necessary to equitably include employees with disabilities in the workplace. However, companies struggle with effectively providing support employees need. IS can be a key element in facilitating business processes and effecting positive organizational change. Yet traditional IS cannot provide a comprehensive solution to challenges companies are facing in the accommodation process, especially social challenges such as conflicting interests among stakeholders. Drawing from the extant management and disability studies, this article identified the major issues in the accommodation process. To address these multifaceted issues, this article justified the necessity of designing a novel IS in the process from a social model perspective. The potential contributions of this research are (1) applying a critical social inclusion lens to design science research, (2) creating an innovative use of an IS that addresses the issues of the accommodation process from a social model perspective.

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