

**Slack as a Virtual Office: Researching the relationships between employee communication
and engagement on internal social media platforms**

By

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Abstract

Purpose – The purpose of this research is to investigate how internal social media platforms impact employee engagement at remote work organisations.

Design/Methodology/Approach – This research is based on a case study of Shopify employees and their usage of Slack. Data regarding Slack usage and engagement was collected through a series of interviews and solicited diary entries.

Findings – At Shopify, Slack is used as both a communication and work tool to share knowledge, facilitate conversations, and collaborate virtually. For remote employees, this led to both positive and negative impacts on engagement.

Research limitations/implications – The findings of this research reveal many ways remote employees use Slack, extending upon existing employee communication research. However, the results regarding Slack's impact on engagement lacked specificity. The researchers' employment at Shopify and the small sample size further impacted data collection and analysis.

Practical implications – Remote work organisations need to consider the dual purpose of internal social media platforms when implementing such a tool.

Originality/Value – This research contributes to the growing phenomenon of remote work by providing a case study of how internal social media platforms contribute to employee engagement. The findings of this paper offer insight into how remote work organisations can implement similar tools.

Keywords – Remote Work, Internal Social Media, Slack, Employee Engagement, Employee Communication

Preface

This thesis is an original work by Charlotte Wray. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “Slack Engagement: Researching the potential for employee engagement through internal social media”, No. Pro00128847, May 12, 2023.

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Introduction

When governments worldwide introduced COVID-19 restrictions, public and private organisations scrambled to move their workforce online to remote work environments. Two years after those initial restrictions, many organisations have partially or fully embraced remote work. This large-scale change to the world of work has led to exciting research on employee well-being, job efficiency, and corporate profit. One key area of emerging research is in employee communication, as remote employees now rely on electronic communications for knowledge sharing and social interactions. To enhance employee engagement, some organisations have adopted internal social media platforms to complement video calls and in-person gatherings. Though research has studied the benefits of voluntary internal social media use, the specific context of its usage for remote employees has been missed. This research will focus on how internal social media can build employee engagement at remote work organisations.

Purpose of Study

Internal social media platforms have drastically increased in recent years. From built-in solutions for existing office tools such as Microsoft Teams to new tools from popular social media sites like Workplace by Meta. These platforms may similarly intend to provide internal communication tools for organisations, but their forms and features differ greatly. To understand the impact of internal social media, this research focuses on only one platform, Slack. Slack is primarily an instant messaging platform but has become a sophisticated productivity and internal communication tool. So how is Slack currently used at remote work organisations? This study seeks to understand how this internal social media tool is used to uncover its potential impact on

employee engagement. As remote workers lack traditional mechanisms for engagement, such as in-person meetings, can internal social media tools replace them as mechanisms for engagement? If so, how can remote organisations utilise these tools to boost employee engagement?

This research fills a void at the intersection of research on employee communication, engagement, and remote work. Three years since the start of the COVID-19 pandemic, more organisations are moving towards hybrid or remote work environments to attract greater talent. The findings of this study will provide insight into how organisations can successfully leverage and implement tools like Slack to ensure better communication with employees. Furthermore, current research on engagement highlights the relationship between communication and engagement. For remote workers, this poses a unique challenge due to geographic differences. However, if implemented correctly, internal social media may be a suitable solution to this challenge.

As each internal social media tool's features may impact this research's results, this study only investigates the use of one tool. Nor does this study compare tools, as the features and use cases of Slack are individual to each organisation. This study aims to understand in-depth how Slack is used and ensure the factors that influence engagement through Slack are isolated. Additionally, engagement will be studied as the sum of its parts rather than as individual components. In this research, engagement will be used as a measurement in itself so that the impact of Slack on engagement can be studied.

Preview of Literature

Research from multiple disciplines was sourced to find relevant research for this study. Research from business management and organisational psychology was found to better understand theories regarding employee engagement and remote work. In contrast, research from

communication studies provided insight into employee communication theories and best practices. To ensure the literature review was thorough, this research reviewed the literature on employee engagement, employee communication, internal social media, and employee communication at remote companies.

As research on engagement was diffuse, this study drew from two theories to both define and measure employee engagement. Firstly, Schaufeli et al.'s research on burnout and engagement and the corresponding definition of engagement are fundamental to this study. Secondly, this study utilises the Job Demand-Resource model of work engagement developed by Bakker and Demerouti as a means to determine the impact of Slack on engagement. Additionally, Welch's research on employee communication, its origins as a theory and its impact on engagement are important studies cited in this research. Most crucial is Welch's definition of employee communication as interactions and relationships shared between all employees. Finally, this study uses the term enterprise social media when referencing Slack. This terminology is derived from Leonardi, Huysman, and Steinfield's definition of enterprise social networking and how it differs from traditional communication technology, such as email or in-person meetings. The significance and implications of these studies are discussed at length in the Literature Review chapter.

Preview of Methodology

As this research focuses on using one enterprise social media tool, it logically led to the design of a single case study. Therefore, this study is designed around the use of Slack at the remote work organisation, Shopify Inc. While the choice to research a single tool isolated usage and factors that impacted engagement, the choice to study Shopify's use of Slack provided a unique opportunity to investigate communication and engagement for remote workers.

To gather verbal and written responses, this study implemented three stages of data collection. The bulk of the research data was collected through a form of observation conceptualised by Zimmerman and Wieder, the diary:diary-interview method. This method requires participants to first provide a series of prompted diary entries, then participate in an interview that reflects the contents of said diaries. A pre-interview was incorporated to orient participants to this study and gather preliminary information about Slack usage. As each stage collected slightly different information, participants were afforded multiple opportunities to provide insights and examples regarding Slack and subsequent engagement.

This multi-stage approach was chosen in lieu of a single interview to ensure participants had ample time to reflect on examples of Slack usage and its impact. Similarly, the diary entries were collected over ten business days, providing an extended reflection period and guaranteed sufficient responses. The diary:diary-interview method was chosen over a traditional engagement survey as participants needed to provide examples of using Slack that impacted their engagement at work. However, existing research on engagement and subsequent surveys only considered employee communication generally, whereas this research only focused on communication over internal social media.

As this data collection method resulted in large amounts of raw text, this study implemented a data analysis procedure that sequentially constructed a narrative through grouping exercises. The relevant text was chosen from interview transcripts and diary responses, then grouped into repeating ideas, themes, and theoretical constructs. This process also leveraged existing research to establish groupings and categorise novel findings.

Summary

This research aims to study the relationship between employee communication and engagement at remote work organisations. Due to the circumstances of remote work, employee communication has been isolated to communications sent over internal social media tools like Slack. Research on employee engagement, employee communication, internal social media, and employee communication at remote companies was sourced for the literature review to understand these phenomena. To isolate the factors that impacted engagement and communication, a case study was designed around employees at Shopify, while a diary:diary-interview method was implemented to collect detailed responses from participants. Ultimately, this report provides recommendations for remote organisations seeking to implement internal social media tools for work.

The following report will guide the reader through each stage of this research's design and findings. First, the existing research and established theories will be discussed at length in the Literature Review chapter. Second, the Research Design and Methodology chapter will provide details regarding the setting, participants, instruments used, data collection procedure, and analysis. Third, the Findings and Discussion chapter summarises research findings and dives into their implications. Finally, the Conclusion chapter summarises the report and contextualises the results of this research in relation to existing research.

Literature Review

Before this research can study the relationship between internal social media and engagement, a thorough review of relevant literature is required. The following chapter covers research from various disciplines to uncover the relationship between employee communication

and engagement. It further explains how communication and engagement at remote work organisations differ from in-person work environments. By offering this background knowledge, this chapter contextualises the goals of this research and its relevance to other research.

To explore the relationship between internal social media and engagement, this study draws on four concepts: employee engagement, employee communication, internal social media, and remote work. These topics have been researched across various disciplines, so the following review draws from Business Management, Organisational Psychology, and Communication studies. The following chapter will establish the parameters with which relevant research was sourced. Drawing from relevant sources, the literature review will be divided into four sections: Employee Engagement, Employee Communication, Internal Social Media, and Employee communication at remote companies. As engagement and communication are central to the proposed study, their definitions and impact will be first analysed. Next, research on internal social media and communication at remote companies are referenced for added context. To conclude, an analysis of the literature on these four concepts will paint the backdrop for the proposed study.

Overview of the Field of Study

To begin the literature review, research on employee engagement and communication was sourced, as these two research areas laid the building blocks for this research project. Initially, the search string (employee AND engagement AND communicat*) was used in the University of Alberta's online library search, which resulted in over 3,000 studies. This was further refined to ("employee engagement" AND "employee communicat*"), resulting in a more manageable fifty-five studies. To further narrow these studies, research on adjacent topics such as employee advocacy, employee voice, and employee organisational behaviour were excluded.

The resulting research provided insights into the relationship between employee communication and engagement and possible antecedents.

Next, research regarding internal social media was sourced to extend upon concepts of employee communication. Using the search string (“employee engagement” AND “social media”) resulted in 198 related studies. Only studies referencing internal social media used in a work context were considered, excluding personal social media use. This narrowed the available research considerably but provided relevant research on employee communication through internal social media platforms.

Finally, literature regarding employee communication in remote work environments was found. To find relevant studies, the search terms (“remote work” OR “work from home”) AND (“internal communication”) OR (“enterprise” AND “social media”) were used. However, since COVID-19, much of the research on remote work has focused on employee health, social isolation, and job efficiency. Unless there was an additional focus on employee communication, these studies were excluded. Furthermore, as internal social media and remote work topics have drastically changed due to COVID-19 restrictions, only literature from 2020 to 2023 was included, with the notable exception of seminal research cited multiple times in the literature.

Review of Literature

Employee Engagement

The concept of employee engagement has been researched by academics and practitioners for the last twenty years. Due to its relevance in multiple fields, employee engagement has been studied by researchers in Business Management, Organisational Psychology, and Communication studies. In an effort to unify varying definitions and interpretations, Welch mapped the evolution of employee engagement research into three waves

of theory. In the first wave (between 1990 - 1999), Kahn's research on personal engagement and disengagement at work laid the foundation; while the consultancy firm Gallup coined the term “employee engagement” (Welch, 2011, p.332). In the second wave (between 2000 - 2005), research on positive psychology influenced research on antecedents of engagement; research moved from defining employee engagement to measuring it. In the third wave (between 2006 - 2010), academic research delved into the dynamic nature of employee engagement and its antecedents. Moving past 2010, employee engagement is now widely accepted as a consequence of successful internal communication (Berger, 2008; Kang & Sung, 2017; Lee, 2023; Mbhele & de Beer, 2021; Stranzl et al., 2021; Welch, 2011).

Definitions

The first iteration of employee engagement is attributed to Kahn’s definition of personal engagement (Bailey et al., 2017; Welch, 2011; Men et al., 2020). Khan researched how individuals moved in and out of roles within organisations and identified this as personal engagement or disengagement. For Kahn, personal engagement was defined as “the harnessing of organisation members’ selves to their work roles,” characterised by physical, cognitive, and emotional engagement (1990, p. 694). Though his research on personal engagement was foundational to understanding employee engagement, it lacked specificity.

The next and most widely adopted definition of employee engagement arose from Schaufeli et al.’s research on the measurement of burnout and engagement (2002). In a narrative analysis of relevant research on employee engagement, Bailey et al. found that it was used by 86% of researchers studying employee engagement (2017, p.43). They defined it as “a positive, fulfilling, work-related state of mind characterised by vigour, dedication, and absorption” (Schaufeli et al., 2002, p.74).

These characteristics were chosen in opposition to characteristics of burnout: exhaustion, cynicism, and professional efficacy (Schaufeli et al., 2002, p.72). Vigour was defined as an employee's resilience and willingness to invest more energy; dedication was defined as "a sense of significance, enthusiasm, inspiration, pride, and challenge"; absorption was defined as "being fully concentrated and deeply engrossed in one's work, whereby time passes quickly" (Schaufeli et al., 2002, pp.74 - 75). According to Schaufeli et al. these three characteristics indicated an employee's engagement at work.

Building off Schaufeli et al.'s seminal definition, Saks dived into the dynamic nature of engagement by further dividing it between role and organisational engagement. Through investigating the antecedents and consequences of engagement, Saks found that employees can be engaged individually through their job characteristics (job engagement) and/or their role as a member of the organisation (organisation engagement) (2019, p.20). This alluded to the multidimensional nature of employee engagement and the myriad of ways to influence it.

To summarise these various definitions, employee engagement can be defined as an employee's physical, cognitive, and emotional engagement with their role or organisation; and is characterised by their vigour, dedication, and absorption to their role (Welch, 2011, p.335).

Importance of employee engagement

Research has determined that employee engagement affects job performance and employee health. Through their analysis of different engagement measurements, drivers, and consequences, Bakker and Demerouti found that engaged employees performed better at work (2008). This was due to four factors: engagement led to more positive emotions, better physical health, resourcefulness, and engagement crossover from other facets of work and life (Bakker & Demerouti, 2008, p.215). However, Bakker, Albrecht, and Leiter found no correlation between

physiological indicators of health and engagement (2011). Instead, they found a relationship between self-reported indicators of health and engagement (Bakker et al., 2011, p.19).

Conversely, Maslach et al. found that the outcomes of burnout were reduced job performance among employees and general lethargy, which led to reduced engagement (2001, p.406). These conflicting results are likely the consequence of non-standardised measurements and competing understandings of engagement (Welch, 2011). Though research is inconsistent in identifying the exact reason employee engagement is important, both academics and practitioners continue to study its various antecedents and consequences.

Enhancing employee engagement

Varying definitions and understandings of employee engagement have led to a range of recommendations for enhancement. One model that attempts to explain potential antecedents to employee engagement is the Job Demand-Resource model of work engagement (JD-R model) developed by Bakker and Demerouti (2008). The JD-R model posits that job and personal resources mitigate job demands, which impacts an employee's work engagement and, subsequently, their performance (see Figure 1). Building off previous research regarding employee burnout, Demerouti et al. defined job demands as those "physical, social, or organisational aspects of the job that require sustained physical or mental effort" (2001, p.501). Conversely, job and personal resources protect an employee's overall health (Demerouti et al., 2001, p.501). In particular, job resources are "physical, social, or organisational aspects of the job" that (1) reduce job demands, (2) act as extrinsic motivation by supporting an employee's work goals, (3) provide intrinsic motivation by creating opportunities for personal growth and development (Bakker & Demerouti, 2008, p.211). Employee engagement (defined by Bakker

and Demerouti as vigour, absorption, and dedication) will be enhanced by ensuring these job resources are available to mitigate the effects of job demands.

Figure 1.

Job Demand-Resource Model of Work Engagement

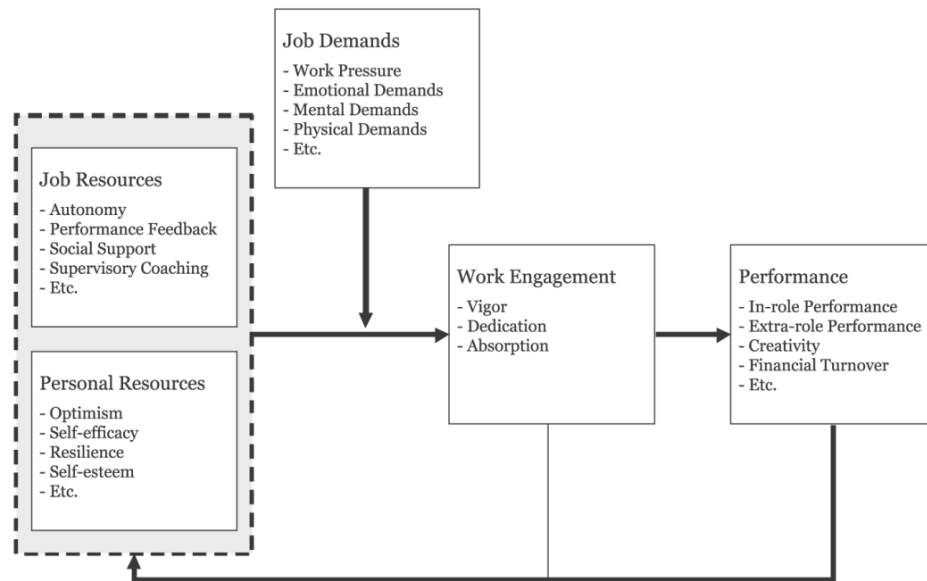


Figure 1.
The JD-R model of work engagement

Source: Based on Bakker & Demerouti (2007)

Employee Communication

Employee communication is a broad term used to describe communication that occurs within an organisation. Researchers have used a variety of terms for this concept, including internal communication, internal relations, internal public relations, employee communication, employee relations, corporate communication, and staff communication (Welch, 2007; Verčič et al., 2012). The multiplicity of terms hints at the disparate definitions, purposes, and measurement tools that have circulated throughout academic and practitioner literature. Though it is often attached to public relations, it should be considered its own discipline due to the nuances of its

audience (Welch, 2015). For the purposes of this study, the term employee communication will be used to describe communication activities that are directed toward and amongst employees.

Definitions

Definitions of employee communication can be grouped into two, those that define employee communication by its function and those that define it by its audience. In their study on the multidisciplinary nature of internal communication, Kalla used the term integral internal communication to define "all formal and informal communication taking place inside an organisation" (2005, p.302). Investigating the parameters of employee communication, Verčič et al. defined it as "the exchange of information among employees or members of an organisation to create understanding" (2012, p.225). In later research regarding communication satisfaction, Verčič and Spoljaric offer a more nuanced definition, that employee communication "represents transfer of ideas, information, attitudes, and emotions between people" (2022, p.3). In addition, Mbhele and de Beer consider communication more than an exchange but a "dialogical process between management and employees" (2021, p.156). This definition results from over 300 survey responses in their research on the relationship between employee communication and engagement.

These definitions clarify what constitutes employee communication but lack clarity on its overall purpose. Kalla identified four domains that differentiated internal communication functions, these include business communication, management communication, corporate communication, and organisational communication (2005). Though the boundary lines between these domains are slim, they further distinguish the function and the intended audience of communication activities. Business and management communication focus on the practical aspects of communicating with employees and managers. Corporate communications is a blanket

domain that covers all internal communication that projects the organisation's identity inward. In contrast, organisational communication is the symbolic and contextual understanding needed to decipher internal communications. What is lacking from these domains is the recognition of informal communication or peer-to-peer communication, which has an unseen impact on employee engagement.

Conversely, Welch defines employee communication "as the strategic management of interactions and relationships between stakeholders at all levels within organisations" (2007, p.183). Focusing on its audience, Welch qualifies their definition with a breakdown of the four stakeholder groups involved (2007, p.185). The first group is internal line manager communication, which includes communication with an individual employee. Next is Internal team peer communication, which includes all communication between a team of employees and their managers. Related is internal project peer communication, which encompasses all communication between peers working together. Finally, internal corporate communication, this broader group involves all "communication between an organisation's strategic managers and its internal stakeholders, designed to promote commitment to the organisation" (Welch, 2007, p. 186). Welch's definition and stakeholder groups more accurately represent the gambit of communication that can occur internally, as well as the level of formality.

Amidst the various definitions, there is a general agreement that employee communication encompasses knowledge transfer and relationship building, regardless of its purpose or audience. To ensure clarity throughout this study, employee communication will be defined "as the strategic management of interactions and relationships between stakeholders at all levels within organisations" both formal and informal (Welch, 2007, p.183).

Influence of Employee Communication

Previous research has found that employee communication positively impacts employee engagement (Berger, 2008; Kang & Sung, 2017; Lee, 2023; Mbhele & de Beer, 2021; Stranzl et al., 2021; Welch, 2011). In his writing on the evolution of employee communication, Berger defined it as "vital in socialisation, decision-making, problem-solving and change-management processes" (2008). An essential component of these processes is symmetrical communication, which provides upward and downward flows of communication between employees and management (Kang & Sung, 2017; Lee, 2020). Symmetrical communication is identified as employee communication that provides reciprocal flows of information, adequate information, and opportunities for feedback, negotiation, or disagreement (Grunig, 1992, p.558).

In their research on crisis communication, Lee found that an employee's relationship with the organisation and their perception of symmetrical communication increased their involvement level overall (2020). Kang and Sung studied the impact of symmetrical communication on employee engagement and found a positive correlation between them (2017, p.95). Researching from the perspective of managers, Robson and Tourish found that symmetrical employee communication supported managerial problem-solving (2005). Through a series of focus groups and interviews at a large healthcare organisation, they found that symmetrical communication was necessary for diagnosing and crafting effective solutions (Robson & Tourish, 2005, p.220).

Another perspective on the influence of employee communication is that it facilitates a positive emotional culture. Men and Yue define emotional culture as the "norms, artefacts, values, and assumptions" that are not reflected in the organisation's reality (2019, p.2). In their research on the effects of communication and emotional culture, Men and Yue focused on corporate-level symmetrical communication. They found that symmetrical communication was a

starting point for affecting an organisation's emotional culture (Men & Yue, 2019, p.3). Welch also argued that internal corporate communication is crucial for enhancing employee engagement, as it directly impacts employee identification (2011, p.339). In conjunction with previous studies, this suggests that by providing employees with the opportunity for symmetrical communication, employees are more engaged in their organisation.

Choosing a Medium

Moving from theory to practice, it is vital to consider the medium that is most impactful. In a growing world of Information Communication Technologies (ICT), practitioners are faced with the challenge of choosing the right medium that will reach the right audience at the right time without overloading employees with information (Stranzl et al., 2021; Vercic & Spoljaric, 2020). Berger recommends practitioners first decide on the formality of the message before choosing between print, electronic, or face-to-face communication (2008). Similarly, Verčič and Spoljaric recommend using media richness to determine the medium. Their research found that employee communication satisfaction was greater for employees who used "rich and moderate media" (Vercic & Spoljaric, 2020, p.6). With the advent of internal social media, communication practitioners are faced with different advantages and challenges, as employees can now create, consume, and participate in communication (Welch & Ruck, 2012, p.299).

Internal Social Media

Although internal social media platforms have a proven advantage over other forms of ICT, organisations continue to rely on existing communication channels. In 2022, Loom surveyed 3000 working adults in the USA and the UK and found that the top three communication tools used were email, phone calls, and instant messaging, respectively (2022). Lee's research on ICT use amongst remote employees similarly found that the most popular tools

were email, phone, instant messaging, and video conferencing (2023, p.2). Yet a decade ago, Cardon and Marshall verified practitioner predictions that internal social media would become the dominant communication channel for most organisations (2011). Their research took stock of existing social media use, and they determined the entry of Gen Y and X into the workforce would push for internal social media. The difference between Cardon and Marshall's predictions and Loom's survey results likely lies in contextual factors and changing definitions of internal social media.

Definitions

Social networking has existed on the internet since Web 1.0, in the form of personal blogs and online communities. In the last twenty years, networking has morphed into social media with the proliferation of User Generated Content. Kaplan and Haenlein define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (2010, p.61). They classified social media sites based on users' social presence and self-presentation. This resulted in six types of social media sites, including collaborative projects (e.g. Wikipedia), blogs, content communities (e.g. YouTube), social networking sites (e.g. Facebook), virtual game worlds (e.g. World of Warcraft), and virtual social worlds (e.g. Second Life) (Kaplan & Haenlein, 2010, p.62).

Usage

The usage and purpose of internal social media have expanded in the last few years. Growing from internal blogs and static resource pages to interactive forums, instant messaging, file sharing, and employee polls (Cardon & Marshall, 2015, p.276). As an interactive platform, internal social media has shifted the responsibility of internal communication away from

practitioners. This shift towards user-generated content on a publicly available platform differentiates internal social media from email or instant messaging (Cardon & Marshall, 2015). Men, O'Neil, and Ewing found that employees use internal social media in three ways, they either passively consume content, actively contribute to building content, or converse in individual or group discussions (2020, p.2). The capacity to consume, create, and engage in communication on one platform makes internal social media an attractive alternative to emails, phone calls, or instant messaging. One gap in the studies mentioned above is that internal social media is studied as an overarching concept without explicitly naming a platform. Since each internal social media platform offers distinct features, this creates an opportunity for research into specific features and functionalities.

Enhancing employee engagement through internal social media

Research findings suggest that internal social media, when implemented effectively, can enhance employee engagement. (Ewing et al., 2019; Feitosa et al., 2022; Haddud et al., 2016; Liang et al., 2021; Men et al., 2020; Nguyen & Aleš, 2018; Sievert & Scholz, 2017). This is attributed to its ability to build greater transparency, create space for conversations, and facilitate social networking. Sievert and Scholz conducted interviews with employees and found that respondents perceived the organisation to be more transparent in their decision-making process due to internal social media usage (2017, p.900). Similarly, Men, O'Neil, and Ewing conducted a survey with 1,150 employees and found that frequent upward communication with management (through internal social media) led to a greater perception of the organisation's transparency (2020, p.7). Going further, Sharma and Bhatnagar stated that internal social media platforms were beneficial for "overcoming hierarchical boundaries and power dynamics" in employee communications (2016, p.17).

Internal social media can also foster conversations between various levels within an organisation. Men, O'Neil, and Ewing summarised that the "two-way, interactive, and communal features" improve peer and management communication (2019, p.112). This was further substantiated by an analysis of twenty related studies, in which researchers found that internal social media facilitated symmetrical communication among employees (Nguyen & Aleš, 2018, p.182). Internal social media promotes more effective collaboration among teams (Cardon & Marshall, 2015, p.277), improves knowledge sharing (Feitosa et al., 2022, p.222), and facilitates faster internal communication (Haddud et al., 2016, pp.4-5).

By shrinking the geographic and hierarchical distance between employees, internal social media also offers the chance for employees to expand their social networks (Ewing et al., 2019, p.112; Haddud et al., 2016, pp.4-5; Leonardi et al., 2013; Loom, 2022). Liu et al. researched the role of internal social media on work stressors and determined that it can reduce work stressors and "enhance organisational socialisation and the social embeddedness of employees" (2021, p.7).

Challenges of Internal Social Media

The speed and ease with which conversations can occur through internal social media pose some challenges for organisations. Primarily around the security of internal information, as easier file sharing and frequency of conversations can lead to information flowing between employees or external stakeholders, regardless of intentionality (Ewing et al., 2019; Haddud et al., 2016; Wang & Kobsa, 2009). Another challenge is the implementation of any internal social media platforms, which requires clear guidelines, policies, and training programs (Ewing et al., 2019, p.126; Haddud et al., 2016, p. 18). The increased access and frequency of information may result in information overload, or negative feedback posted publicly (Ewing et al., 2019, p.113;

Haddud et al., 2016, p.3). Additionally, internal social media may silo individuals creating subgroups or echo chambers within an organisation (Leonardi et al., 2013). Nonetheless, these challenges can be overcome through internal training and ongoing dialogue between employees and management.

Enterprise Social Media

Internal social media is a blanket term used to describe all social media activity conducted by an employee within an organisation. To be more specific, Wang and Kobsa separated the types of social media activity between general social networking sites (SNS) and enterprise social networking sites to determine potential privacy concerns (2009). General SNS are social media sites that are open to the public and are used by employees (e.g. Facebook, LinkedIn); enterprise SNS are social media sites accessible only to employees (Ewing et al., 2019). These restricted social media sites have also been called Enterprise 2.0, social tools, or social software (Cardon & Marshall, 2015, p.276).

In their paper on the definition, history, and outlook of enterprise social media, Leonardi, Huysman, and Steinfield (2013) defined enterprise social media as:

Web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organisation; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organisation at any time of their choosing. (p.2)

This titular definition highlights the main difference between traditional ICT and internal social media that all communications are persistent and visible across time and geographic

distribution. Leonardi et al. further subdivided enterprise platforms between open source (e.g. Internal wikis) or proprietary systems (e.g. Beehive by IBM) (2013, p.5). A third division that has become increasingly popular in the last decade is purchasable platforms, such as Yammer (Liang, 2021), Slack (Azarova et al., 2022), Microsoft Teams, or Workplace by Meta.

Through a variety of features and functions, these enterprise social media tools create space for digital collaboration and social networking. As this research study is focused on building employee engagement through employee communication, all internal social media platforms studied will be enterprise social media.

Employee communication at remote companies

Remote work arrangements have been available in various formats since the advent of ICTs for the workplace. However, its adoption rate has risen dramatically since COVID-19 and the subsequent restrictions placed in 2020. Two years on, many organisations have decided to adopt fully remote or hybrid work environments (Lee, 2023, p.1). Yet, despite the proliferation of research on remote work, these environments have been inconsistently characterised (Federici et al., 2022, p.453).

Definitions

Numerous terms have been used to describe the phenomenon of remote work. Phrases like New Ways of Working, virtual workplace, virtual work arrangement, work-from-anywhere, and telecommuting have all been used to describe employees that do not commute but instead rely on ICTs for work (Akkirman & Harris, 2005; Johnson, 2022; Shi & Weber, 2018; ten Brummelhuis et al., 2012, p.201; Viererbl et al., 2022). Some researchers specifically use the term work-from-home to highlight the employee's work location within their own home (Federici et al., 2022; Lee, 2023). In their research on remote work quality, Federici et al. defined

it as the "working situations in which employees work outside of the office via a form of technology in their own adaptable space" (2022, p.451). This definition will be utilised throughout this study to describe remote work.

Communication challenges

Employee communication for remote employees is distinctive from communication for in-office employees. With limited opportunities for face-to-face interactions, employee communication for remote workers must play the dual role of knowledge transfer and relationship building. This can pose difficulties for employees who are apprehensive or unfamiliar with ICTs used at work. As remote employees rely on ICTs to communicate with peers and managers, reluctance to engage may hinder their ability to build rapport (Feitosa et al., 2022; McGloin et al., 2022). Additionally, research found that remote companies have difficulties with knowledge transfer and sharing among peers (Shi & Weber, 2018. p.1319). The challenge lies in the balance between frequent communications and high-quality communications, as an imbalance can impact job performance and burnout (Shockle et al., 2021, p.1475).

Due to their geographical distribution, remote employees lack opportunities for information or spontaneous interaction (Viererbl et al., 2022). This can dampen their engagement within the organisation as fewer social connections are established between peers and managers. Additionally, a lack of interactions with a direct supervisor may lead to diminished rapport or support (Larson et al., 2020; McGloin et al., 2022, p.45). Therefore, managers and communication practitioners need to provide opportunities for scheduled and spontaneous, formal and informal interactions to ensure engagement (Larson et al., 2020; Lee, 2023).

Furthermore, communication mediated through ICT increases the possibility of miscommunication or misunderstanding, negatively impacting rapport among employees. To ensure the least amount of friction, remote organisations need to provide rules of engagement and training for any communication channels introduced (Feitosa et al., 2022, p.236; Larson et al., 2020). The multiple challenges posed by remote work demand a more robust and purpose-built solution to employee communication.

Communication channels

Research on remote work highlights the usage of ICTs such as email, instant messages, phone calls, video chats, online forums, internal wikis, and enterprise social media to facilitate internal communication (Feitosa et al., 2022; Lee, 2023; Loom, 2022; McGloin et al., 2022; Shi & Weber, 2018). In their study of employees who had moved to remote work due to COVID-19, McGloin et al. found that the main communication channels were emails, phone calls, and text messages. They surmised that since these were established communication channels before remote work, employees continued to utilise them regardless of their geographic distribution (McGloin et al., 2022, p.49). The limitation of these channels is that they are most adept at transferring information; different tools are needed to re-create collaborative work environments for remote employees. To create a collaborative remote work environment, employees need tools for co-creating documents, holding virtual meetings, and hosting informal interactions (Akkirman & Harris, 2005; Feitosa et al., 2022, p.234). All of which could be performed on a singular platform, such as an enterprise social media.

Analysis of literature

The research on employee engagement, employee communication, internal social media, and remote work proves that internal social media can be an effective tool for employee

engagement. Previous research indicates that greater employee engagement can lead to better health amongst employees and productivity within organisations. This relationship between engagement and productivity has led researchers from Business Management, Organisational Psychology, and Communications to study its effects and influences. Most notable is the influence of employee communication on engagement.

As per the JD-R model, engagement is influenced by an employee's available job resources, personal resources, and job demands. More specifically, an individual's job resources and personal resources help mitigate their job demands, impacting their work engagement. Based on Bakker and Demerouti's definition, employee communication can be considered a job resource for its ability to reduce job demands and provide extrinsic and intrinsic motivation.

Employee communication acts as a crucial job resource for employees, mitigating the impact of job demands by facilitating symmetrical communication between employees, management, and the organisation. Downward communication, such as internal corporate communication identified by Welch (2007), provides the necessary information to employees, whereas upward communication facilitates a dialogue between management and employees (Mbhele & de Beer, 2021). Furthermore, employee communication provides extrinsic motivation by supporting work goals. For example, Robson and Tourish found that symmetrical communication was a component of managerial problem-solving and was crucial to their work (2005). It also provides intrinsic motivation, as research has found a positive relationship between symmetrical communication and organisational culture and identification (Men & Yue, 2019; Welch, 2011). Across various studies, employee communication has been identified as positively impacting employee engagement. However, research is lacking regarding the specific tools used to facilitate employee communication.

One tool that has recently become more widely available is enterprise social media. For remote work organisations, enterprise social media must perform various functions: broadcasting news to the organisation, facilitating work conversations amongst various teams, and offering an outlet for peer-to-peer conversations (Cardon & Marshall, 2015; Men et al., 2020). In its ability to facilitate multiple types of communication, enterprise social media can be considered a job resource. For remote workers, enterprise social media functions as a tool for work, alleviating job demands by hosting work-related conversations. It enhances extrinsic motivation by removing communication boundaries and democratising communication between different levels of management. Furthermore, its capacity to facilitate greater symmetrical communication impacts employees' sense of trust in their organisation, influencing their intrinsic motivation at work (Men et al., 2020; Sievert & Scholz, 2017).

However, it is unclear how this happens. Research into the relationship between employee engagement and enterprise social media is lacking. There is also a gap in research regarding the specific social media platforms or mechanisms that influence employee engagement through communication. After reviewing the literature, the proposed research is uniquely positioned to respond to calls for more research on topics of engagement-based internal communication (Welch); the contribution of internal social media to employee engagement (Ewing et al., 2019; Nguyen & Aleš, 2018); and enterprise social media use within organisations (Leonardi et al., 2013).

To understand the relationship between employee engagement and communication, this study aimed to determine if communication through enterprise social media could be defined as a job resource (per the JD-R model). This study focused on a single platform (Slack) and its usage by employees at the remote work company (Shopify Inc) to narrow the factors influencing

engagement. First, to understand the impact of Slack, this study established a baseline of how Slack is used at Shopify. Next, the impact of this communication was categorised by its function. Evidence that Slack usage reduced job demands and provided extrinsic and intrinsic motivation to employees signalled a positive relationship between employee engagement and communication facilitated through enterprise social media.

Summary

This chapter provided an overview of research on employee engagement, employee communication, internal social media, and remote work organisations. Most importantly, it provided evidence of the relationship between employee communication and engagement. Whilst further presenting the advantages and challenges of internal social media, and the unique context of employee communication for remote employees. The relationship between these four research areas was explored to lay the foundation for the research's design.

Central to this research project is the concept of employee engagement and its antecedents. Amidst the various definitions, employee engagement is presented as a multifaceted reaction to one's role or organisation. Most commonly, this engagement is characterised by vigour, dedication, and absorption into their role (Schaufeli et al., 2022). Antecedents to engagement can be categorised as job resources, personal resources, or job demands, according to the JD-R model of work engagement. Specifically, job resources are aspects of an employee's role that reduce job demands and provide extrinsic and intrinsic motivation. These theories provide one explanation of how employee communication positively influences engagement and lay the foundation for understanding how internal social media can have a similar influence.

To investigate this further, this study will survey employees at Shopify to understand their internal social media usage and its impact. First, baseline information on how Slack is used will

be collected through interviews. Next, employees will document their usage of Slack through daily diary responses. Finally, the perceived impact of Slack on their role and organisation engagement will be documented through a final interview. The following research questions will guide this study:

1. How do remote work employees at Shopify use Slack?
2. How does Slack impact employee engagement?

Research Design and Methodology

This research was localised to employee experiences at Shopify to study the impact of enterprise social media on employee engagement amongst remote employees. Shopify's extensive use of Slack for employee communication and its recent switch to remote work offered a unique case study.

To answer the question of how internal social media may influence employee engagement, this study must first establish how Slack is used at Shopify. Once established, the relationship between Slack and employee engagement can be studied. To gather this information, two interviews (a pre- and post-diary interview) and a solicited diary were used. These responses were individually analysed through a directed content analysis, then collectively analysed. The results provide an understanding of how Slack is used and how it can impact engagement at a remote organisation.

This chapter outlines the theoretical framework used to guide the data collection and corresponding content analysis. Furthermore, the practical reasons for the research's setting, participants, and instruments are outlined. Finally, the research procedures are detailed to ensure the replicability of this study by other researchers.

Design

To answer the question of how Slack impacts employee engagement, this research draws on the Job Demand-Resource model of work engagement. As defined by the JD-R model, employee engagement is directly impacted by a job's demands and resources. This research aimed to determine if employee communication through Slack could be defined as a job resource by asking participants about their usage of Slack. To be considered a job resource, Slack usage by participants would need to reflect the following: reduce their job demands, support an employee's work goals, and create opportunities for personal growth and development.

To investigate a "contemporary phenomenon...within its real-world context," this research was designed as a single case study (Yin, 2014, p.16). By focusing on a single communication tool used within one company, this researcher could investigate in-depth the experiences of a specific population and isolate the variables that could impact employee engagement (Denscombe, 2010, p.53; Yin, 2014, p.17). A single case study also allowed this researcher to utilise "multiple sources of evidence" and triangulate responses for greater validity (Yin, 2014, p.17).

Therefore, this research used data collected from two interviews and solicited diary entries as a form of participant observation (Zimmerman & Wieder, 1977). These data collection methods were chosen over a survey to allow participants to offer richer descriptions with limited researcher intervention. Additionally, each stage collected slightly different information as sequential steps toward the research questions. The pre-interview was designed to orient participants to the research design and concepts of employee communication. The diary entries acted as "an observational log maintained by subjects" wherein immediate examples of Slack were documented (Zimmerman & Wieder, 1977, p.481). These entries became the basis for

questions asked during the diary-interview, which offered participants the chance to reflect on both the research process and the impact of Slack on engagement. Cumulatively, each step painted a holistic picture of how Slack was used for communication and engagement.

One challenge to this study is the limited transferability of the data collected. The corresponding findings cannot be inferred to other enterprise social media platforms by focusing on Slack. Similarly, this study is limited to remote work company employees with limited modes of communication. The design of this study is contextual, and therefore, any results should be considered within these contexts. Nonetheless, these findings will expand on existing theories of employee communication and engagement (Yin, 2014, p.21), particularly regarding internal social media usage.

Settings

Launched in 2006 by CEO Tobi Lütke, Shopify is a Canadian company that provides software for online retailers. In May 2020, Lütke announced that the company would move to remote work after months of disruption due to COVID-19 restrictions (Lütke, 2020).

Shopify was chosen for this research due to its rapid move from in-person to remote work. However, three years on, Shopify continues to face the challenge of engaging a globally distributed workforce. To solve this, Shopify relies on an ecosystem of communication technologies to replace in-person interactions, most importantly using Slack. As per Leonardi et al.'s definition, Slack is an enterprise social media platform (2013).

Enterprise social media platforms have become popular as organisations seek communication systems that can handle synchronous and asynchronous communication. In Slack, users can communicate with individuals or large groups, reveal colleagues as communication partners, post files for themselves and others, and view messages posted by other

colleagues on shared channels. In addition, Slack offers a myriad of integrations with other software applications, which makes it a highly customisable platform. By setting this research within Shopify and its usage of Slack, this researcher can narrow the variables that may affect employee engagement from communication.

Alternatively, this researcher considered surveying employees across organisations (such as the University of Alberta Students' Union, Shopify, and Jobber) to build a representative sample of Slack users. This would provide a wider variety of experiences though isolating factors influencing employee engagement would be difficult. Using an exploratory sample of Slack users at Shopify, this researcher could focus on the relationship between Slack usage and employee engagement without other factors (Denscombe, 2010, p.24). This limited the generalizability of results but provided insights into how employee engagement can be built through Slack at remote work companies.

Participants

Participants were current Shopify employees working remotely from outside Shopify office spaces. This ensured all participants only experienced digital employee engagement through Slack daily. The second criterion for participants was that they must be able to read and write in English and complete an online form (Jacelon & Imperio, 2005, p.992). Finally, there were no restrictions regarding the participants' age, gender, ethnicity, or role at Shopify, as these identities were not variables of the study.

This researcher obtained approval to conduct this research from their direct lead, the department lead, and the department's Human Resource Business Partner. Approval for this research was provided on two conditions: that the research did not require participants to reveal

proprietary information about their work or work at Shopify; that participants were purposely selected.

Six participants were recruited through purposive sampling rather than random sampling to ensure their relevance to the research topic. Purposive sampling is a process whereby the researcher chooses participants due to specific circumstances or qualities (Denscombe, 2010, p.35). Due to recent layoffs at Shopify, this researcher was asked to recruit participants purposefully rather than randomly to ensure participants understood that my research did not impact their role. Potential participants were identified through word-of-mouth before being formally invited to participate in the study through a Slack recruitment message (Appendix E). At the time of the study, this researcher was employed at Shopify in the Talent Support Operations department. So to ensure participants did not feel coerced to participate, all participants were recruited from outside the department and with whom this researcher did not have a working relationship (Resnik, 2016, p.11).

My role as a researcher was repeatedly emphasised throughout the recruitment process. The recruitment form and message clearly stated my role as a researcher rather than my role at work. Furthermore, all interviews and correspondence occurred outside working hours and through personal emails. Most importantly, the consent form clearly stated that no incentive (financial or otherwise) was provided for participation, and all responses were anonymised. Participants gave explicit consent through the recruitment and consent forms, which they could withdraw.

Instrument

The research design revolved around the diary:diary-interview method, conceptualised by Zimmerman and Wieder (1977). This method starts with a solicited diary, which invites

participants to notate daily activities, reflections, and opinions (Jacelon & Imperio, 2005; Lewis et al., 2005). Next is a diary-interview, where questions are generated from diary responses (Zimmerman & Wieder, 1977, p.489). In this study, a pre-interview was added to orient participants to the study and gather baseline information.

Each set of questions was mapped from concepts on employee communication, internal social media, employee engagement, and remote work. These were chosen as they provided background information on how remote employees use internal social media for communication and how communication impacts employee engagement. These concepts were further divided into individual variables, from which questions were devised. The resulting questions aimed to provide examples of Slack usage and its potential to impact engagement.

The pre-interview questions were chosen from concepts regarding communication for remote workers and internal social media (see Appendix A). The questions aimed to discover other communication tools used by Shopify employees and their usage. Additionally, questions regarding the purpose of Slack and its frequency of use were included. These provided baseline information on how remote employees communicated at work.

Two key concepts guided the development of diary prompts and diary-interview questions. First is employee communication's dual function in remote work settings (knowledge transfer and relationship building). Second, according to the JD-R model, the three defined characteristics of a job resource (acts as extrinsic motivation, intrinsic motivation, and reduced job demands).

A solicited diary was chosen so participants could provide examples of using Slack without recalling past examples (Lewis et al., 2005, p.223). These entries utilised recurring prompting questions to solicit experiences and opinions otherwise unobservable from

participants (Jacelon & Imperio, 2005; Lewis et al., 2005). To ensure relevant examples were provided, five potential use cases were used as prompts: whether Slack was used for knowledge transfer, relationship building, achieving work goals, personal development, or any other purpose (see Table A2).

As recommended by other researchers, the solicited diary was designed to address a specific topic and provide content for the diary-interview over a short duration (Jacelon & Imperio, 2005, p.993; Zimmerman & Wieder, 1977). The contents of each prompt connected to concepts of employee communication and engagement (see Appendix A), and responses were used for further questions in the diary-interview. A duration of ten business days was intentional to ensure sufficient entries from all participants, as it was unlikely they would respond every day (Jacelon & Imperio, 2005, p.994). The prompts were also kept to a minimum and remained optional to ensure participants spent no more than ten minutes responding.

The diary-interview questions were crafted to supplement the diary entries, allowing participants to elaborate on their responses (Zimmerman & Wieder, 1977). As the goal was to learn the mediating effects of Slack usage on job demands, participants were asked about existing job demands and job resources. If their diary entries provided relevant examples to the five prompting questions, they were further asked to remark on these examples (see Table A3). Additionally, participants were asked if Slack acted as a job resource and their thoughts on the relationship between Slack and engagement (see Appendix D). This question was asked at the end of the research process to create a space for “structured reflection” that would not have occurred without participation in this research (Lewis et al., 2005, p.221).

Both interviews included no more than ten planned questions, with ample time left for prompting questions. Participants were prone to respond with short, concise answers and

required further probing questions to provide greater detail. To further avoid these situations, the interview questions required participants to elaborate on experiences rather than provide simple yes/no responses. Lastly, to prevent researcher bias and assumptions, participants were asked to elaborate on any Slack processes unique to Shopify (Zimmerman & Wieder, 1977, p.490). These practices ensured interview responses offered a full understanding of how participants used Slack.

Procedures

The research process was divided into the following steps: recruitment, pre-interview, daily diary entries, diary-interview, and content analysis. First, a list of potential participants was built through word of mouth. Then, potential participants were recruited through Slack and asked to complete a recruitment form (Appendix E). Once the recruitment Google form was completed, participants were emailed to book a time for the pre-interview.

After the participant chose an interview time, an email reminder and consent form were sent. As participants were located across Canada, the interviews were conducted virtually over Google Meet for thirty minutes and were transcribed through Otter.ai. The audio recording and transcription files were saved using a pseudonym in a password-protected Google Drive. A copy of these files was sent to participants to verify their responses. In addition, the recording and transcription were also stored for content analysis later.

The next step was for participants to complete the solicited diary entries for ten business days over Google Forms (see Appendix C for an example). Each form was tied to a specific participant and labelled under a pseudonym to ensure all entries could be sent to participants at the end of ten days. A daily reminder was also sent to participants to mitigate low response rates.

As Google Form responses could be viewed immediately, all entries were analysed concurrently in preparation for the diary-interview (Zimmerman & Wieder, 1977, p.489).

Once ten business days had passed, participants were asked to book a time for the diary-interviews. The interview questions included a mix of general and participant-specific questions. The general questions asked participants to describe the job demands and resources they faced at work and the potential for Slack to act as a resource. The participant-specific questions were drafted to validate the responses collected through each diary (Morse, 2015). These questions reflected the five potential uses of Slack (see Table A2). Once completed, a recording and transcription of the interview were saved and sent to the participant for verification.

A major challenge throughout the data collection stage was the lack of varied responses throughout the diary entries. Initially, participants would provide unique and detailed examples, but these would become repetitive as the process continued. Though the duration of ten business days offered more diary entries, it compromised the variety of responses provided.

Finally, all collected data were analysed through directed content analysis. This type of content analysis seeks “to validate or extend conceptually a theoretical framework or theory” by using themes identified in research (Hsieh & Shannon, 2005, p.1281).

Analysis

This study utilised an analysis process documented by Auerbach and Silverstein that turned raw text into a narrative through six sequential steps (2003). First, the research questions must be clearly defined. Next, the relevant text must be pulled from raw text, in this case, interview transcripts and diary entries. Once the relevant text has been selected, repeating ideas can be identified and grouped. These repeating ideas are further grouped into themes based on

categories. These themes are then connected to theoretical concepts, which become the foundation for a theoretical narrative that connects the collected data with existing research.

Figure 2.

Six Steps for Constructing a Theoretical Narrative from Text

Table 5.1

Six Steps for Constructing a Theoretical Narrative from Text

MAKING THE TEXT MANAGEABLE

1. Explicitly state your research concerns and theoretical framework.
- 2.=Select the relevant text for further analysis. Do this by reading through your raw text with Step 1 in mind, and highlighting relevant text.

HEARING WHAT WAS SAID

3. Record repeating ideas by grouping together related passages of relevant text.
4. Organize themes by grouping repeating ideas into coherent categories.

DEVELOPING THEORY

- 5.=Develop theoretical constructs by grouping themes into more abstract concepts consistent with your theoretical framework.
 - 6.=Create a theoretical narrative by retelling the participant's story in terms of the theoretical constructs.
-

Throughout this process, this researcher used directed content analysis to identify potential categories for themes and theoretical concepts. This approach utilised existing concepts and theories to identify coding categories and allowed new research to validate or extend upon existing theories (Hseih & Shannon, 2005). For all interview transcripts and diary entries, examples of Slack usage were coded as one of five potential categories: to achieve work goals, personal growth, knowledge transfer, relationship building, and others. The first two categories were pulled from the JD-R model and its definition of a job resource. The latter categories were chosen due to their prevalence in remote employee communication research. Furthermore, responses regarding engagement were categorised under Schaufeli et al.'s engagement

characteristics. Any responses related to a participant's engagement were categorised as impacting their vigour, dedication, or absorption at work.

As a qualitative study, it was imperative to consider the reliability and validity of the data collected, terminology borrowed from quantitative research. In quantitative research, reliability and validity would be determined by the repeatability and dependability of collected data. However, for qualitative research, responses are contextual, unique to each participant, and not easily replicated. In lieu of borrowed terminology, Lincoln and Guba recommend determining the trustworthiness of the research instead (Cope, 2014).

The various stages of data collection and content analysis ensure the trustworthiness of this research and its findings. Firstly, the dual process of solicited diary entries and diary-interviews acts as a form of triangulation, substantiating diary responses with interview responses (Lewis et al., 2005; Morse, 2015). Furthermore, by analysing diary responses from ten business days, responses can be generalised to more accurately represent a participant's experiences (Morse, 2015). Second, each data set was coded using the same process, which provided a replicable method for determining repeating ideas, themes, and theoretical constructs. Finally, using categories established from existing research ensured the transferability of this research and its analysis (Weber, 1990, p.19).

A challenge of directed content analysis is the reliance on existing theory may blind researchers to other contextual factors surrounding the data collected (Hsieh & Shannon, 2005, p.1283). In particular, the categories identified for internal social media usage may have skewed the themes for repeating ideas. Additionally, three stages of data collection resulted in three sets of data, which resulted in different theoretical constructs. The three sets of theoretical constructs required a final coding round to determine overall theoretical constructs encompassing all data.

These challenges were considered during content analysis and factored into the findings of this research.

Summary

This study was designed to uncover how Shopify employees use Slack and its potential impact on engagement. A single case study was employed to isolate the variables that could impact employee engagement over Slack. This led to Shopify as a research setting and its current employees as participants. The three stages of data collection were designed to answer the research questions in sequential order. First, the pre-interview collected baseline information to understand how Slack was used. Next, solicited diary entries collected examples of Slack usage and its impact on participants. Then, participants provided deeper responses regarding engagement through diary-interviews. Finally, all responses were analysed using directed content analysis, which revealed patterns that either validated or extended upon existing concepts. The following chapter presents the findings and final analysis of this research and its relation to the research questions.

Findings and Discussion

This research began as an exploration of employee communication's impact on employee engagement at remote work organisations. To narrow the field of research, employee communication was isolated to enterprise social media use, specifically on the application Slack. Due to limited research on Slack, this study had to first collect information on its usage. Next, to study the relationship between Slack usage and employee engagement, this research was designed to determine if communication through Slack could be defined as a job resource. This led to the development of the following research questions:

1. How do remote work employees at Shopify use Slack?
2. How does Slack impact employee engagement?

To investigate the relationship between Slack and engagement in-depth, this study focused on a single case study of Shopify employees. Six participants were recruited to participate in two rounds of interviews and ten days of prompted diary entries. Each stage collected information that sequentially provided answers to the research questions. The pre-interview was intended as an introduction to the research process and a brief survey of how respondents used Slack. The diary entries were designed to capture examples of both Slack usage and its impact on employee engagement over two work weeks. Finally, the diary-interview was an in-depth conversation about how Slack could impact employee engagement. Data collected was then analysed through a six-step process (see Figure 2) that turned raw text into theoretical constructs anchored in existing theories.

The text collected from transcripts and diary responses were systematically grouped during the analysis. First, from raw text to relevant text, grouped into repeating ideas, then into ten themes, and finally, three theoretical constructs. The ten themes are summarised and grouped under each research question to present the data authentically. Next, the analysis of the theoretical constructs is presented as part of the Discussion. This section explores the relationship between the final analysis, the research questions, and existing research.

The following chapter offers an overview of the results of this research. First, the collected data will be presented as theme summaries. These are grouped according to the relevant research question. Next, the data analysis process and measures taken to ensure trustworthiness are discussed at length. Lastly, a discussion of the final analysis and its relationship to the research questions is presented alongside research biases and limitations.

Data Presentation

Six Shopify employees were recruited through purposive sampling and participated in all data collection stages. The first stage was the pre-interview, where participants were asked about their tenure at Shopify and their usage of Slack. In lieu of other demographic information related to their age, gender, or role, these questions were asked to form a baseline understanding of how Slack was used at Shopify. Participants were also asked to estimate how much time they spent on Slack daily. Their responses provided an understanding of how familiar participants were with Slack.

Table 1.

Demographic Information of Participants

Respondent	Tenure	Have they ever worked at a Shopify office/in-person?	What percentage of their day is spent on Slack?
Anna	17 years	Yes	80%
Bartholomew	4 years	Yes	90%
Janice	3 years	No	Every 2-5 minutes
Lilith	2 years	No	50%
Melissa	3 years	No	50%
Roy	5 years	Yes	50 - 60%

After the pre-interview, participants were asked to complete a diary entry for ten business days through individualised Google Forms. Each diary prompted participants to document how they used Slack that day: to share information, build relationships, complete a work goal, or personal growth. If applicable, they were further prompted to provide an example. Furthermore, they were asked to identify any impact on their sense of vigour, dedication, and absorption from

using Slack. If applicable, they were prompted to provide examples; if not applicable, they were able to choose “none of the above.” The six participants completed fifty responses in total.

The final round of data collection was the diary-interview. During this interview, participants were asked about existing job demands, job resources, and Slack’s impact on their engagement. They were asked to elaborate on examples in their diary responses to provide clarity or additional context. This interview aimed for participants to reflect on their usage of Slack and speak about its impact on their engagement. This reflection would not have been possible without the prior stage, where they were asked to continually record their usage.

From the collected data, relevant text was parsed out, grouped into repeating ideas, then further grouped into themes. The resulting ten themes show how Slack is used at Shopify and its impact on employee engagement.

Table 2.

Resulting Themes

Research Question 1	How do remote work employees at Shopify use Slack?
Related Themes	1. Slack is crucial for work
	2. When to use Slack versus other tools
	3. How Slack is used to complete work tasks
	4. How Slack is used information sharing and gathering
	5. How Slack is used to build relationships
	6. Managing Slack notifications
	7. Unwritten expectations of using Slack
Research Question 2	How does Slack impact employee engagement?
Related Themes	8. Slack impacts engagement as a communication tool
	9. Slack impacts engagement as a work tool

	10. Job resources and demands that impact engagement
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How do remote work employees at Shopify use Slack?

Most responses collected throughout all three stages revolved around how participants used Slack. The following seven themes provide an in-depth understanding of how Slack is used by the respondents and its importance to daily work.

Slack is crucial for work

As shown in Table 1, Slack usage across all six participants was extensive. The importance of Slack was evident through responses provided in both interviews, as participants described Slack as both a communication tool and an integral work tool. When asked to imagine the absence of Slack, one participant responded, “I don’t know if it’d be possible to get my job done without Slack” (Anna, Diary-Interview, 07:02). When asked about alternative communication tools, participants recalled existing tools like email, Google Meet, and Google Chats. However, most indicated that these tools were comparatively slower forms of communication than Slack and less desirable for work.

When to use Slack versus other tools

Although Slack is primarily an instant messaging platform, participants provided examples of using audio tools to communicate. “Sometimes, when the troubleshooting is too, too problematic, and it’s like, Oh, come on, let’s talk instead of typing” (Melissa, diary-interview, 28:53). Some respondents described using the voice recording function in Slack as a mechanism to brainstorm ideas or provide a quick update. Others utilised Huddle, a microphone-only meeting tool available in Slack, in place of typing, while some used Google Meet. The choice

between using Huddle or Google Meet for brief conversations was based on personal preference and depended on individual context.

How Slack is used to complete work tasks

Slack is not only used to communicate about work. Respondents provided many examples where the platform was fundamental to completing work tasks. Most commonly, Slack was used for real-time collaboration. This could take the form of dedicated project channels, where project updates and questions were shared, or a team channel, where peers troubleshoot issues and solicit feedback.

Another use case for Slack was organisation-wide or team-wide help channels, where respondents were tasked with answering incoming questions. This was referred to as a “Slack Goalie Shift,” where a few individuals are responsible for monitoring incoming questions and actively resolving them through Slack.

For some respondents, Slack was also a mechanism to announce their status at work. This could occur in the morning, as they greeted their teams before their work day began. It could be during a busy day when they would let their peers know they would be unavailable. For those working on a Slack goalie shift, they would announce to their peers that they were stepping away from their keyboard to note their absence.

Respondents also mentioned a host of other integrated applications used within Slack to increase efficiency. The most popular was a Google Calendar integration, which notified respondents of an upcoming meeting via a message in Slack. Another common example was a note-taking app that provided both a reminder and meeting notes for upcoming meetings. Some respondents mentioned purpose-built applications for their team or specific functions. These ranged from automated surveys to project updates, many of which were built by Shopify.

How Slack is used to share and gather information

Throughout the diary entries, the most cited use for Slack was the sharing or gathering information. Respondents provided examples where information gathered from internal webpages, emails, or other Slack channels was shared with their teams through shared channels or direct messages (DMs). Others utilised the instant messaging capabilities of the platform to share links to internal documents or videos.

Some respondents dedicated time to seek information and post it to dedicated channels. They would either find information serendipitously or purposefully by reading through messages posted on other channels. Some respondents would actively seek out information by asking questions in topic-specific channels. A feature within Slack, keyword notification, enabled some respondents to be notified of specific topics. For example, one respondent created a keyword notification for the word “intern,” which notified them of anyone who posted in a public Slack channel, ensuring they were aware of any questions posted by interns.

The ease with which information could be accessed on Slack provided ample learning opportunities. Some participants mentioned learning updates by reviewing previously posted questions, and some learned how to handle issues by watching their peers engage through Slack.

How Slack is used to build relationships

Relationships at Shopify were maintained mainly through social interactions on Slack. This could be direct messages between peers or shared conversations in team channels. Team channels offered a dual purpose of building camaraderie and collaboration through shared jokes, personal updates, and project updates.

Additionally, most respondents frequented social channels for non-work engagement. One respondent discussed participating in the OUT Employee Resource Group as an outlet for

socialising, while another belonged to a social channel centred around coffee. Some were part of private social channels that formed around friends at Shopify. The main goal of these channels was to delineate work-related conversations from social conversations.

Unwritten expectations of using Slack

The balance between using team channels for work and socialising was different for each respondent. How to adequately engage within a team channel was part of the tacit agreements new employees had to learn. These were unwritten expectations that proved challenging for new hires.

So but like getting into that group and feeling that sense of belonging is hard and getting started and knowing what questions to ask, how to interact, what's appropriate, how will that be received, is all part of the fear. (Anna, pre-interview, 13:04)

An added challenge was the collective understanding that Slack responses should be instantaneous and intentional. All respondents praised Slack for its ability to deliver instant responses compared to other communication tools. Though there was no external pressure to respond immediately, respondents felt an internal pressure to respond to DMs as soon as possible. Due to the short response time, they also expected Slack messages to be short and direct so that they could read and respond instantly.

To maintain quick responses, emojis were considered a valid response in Slack. For example, using the “yes” or “checkmark” emoji was a valid response to questions. If someone asked a question in a help channel, using the “eyes” emoji indicated someone would respond to your question shortly. Emojis were also used to convey sarcasm or ensure the tone of a joke was clearly communicated. Similarly, “heart” or “hug” emojis were used to empathise with someone

who had posted personal news. These were only a few examples out of many, as Slack allows users to create custom emojis.

The use of emojis further helped to deliver tone across messages. The tone was an important factor in how messages were crafted, and respondents noted adjusting their tone depending on their relationship with the message recipient or the channel where the message was posted.

Like if you're in your org channel, you're not going to say anything unless it's specifically thought out, you know, your audience versus the channel with me and two other colleagues will probably want to be much more open in what we talk about so it's understanding the etiquette of the channel you're in is very important. (Bartholomew, pre-interview, 20:12)

Managing Slack notifications

The unwritten expectation that Slack responses were instant could leave respondents overwhelmed by notifications. The incoming notifications could come from DMs, questions posed in public channels, or updates posted by team members. This led to individualised strategies for managing notifications in Slack.

Most respondents reported continuously monitoring Slack throughout the day, unlike their email inbox, which they checked periodically. To ensure they knew which notifications were important, some participants developed strategies to group specific Slack channels and individuals. Then, when a notification appeared from a specific grouping, they would decide whether it warranted an immediate response. Some would read a message then mark it as “unread,” prompting them to respond later. Alternatively, some would use the “Remind Me Later” feature in Slack to remind them to respond to a message. Some would even decide to turn

off notifications for specific channels, such as social channels, or for Slack entirely. Each respondent had a unique plan for managing their notifications.

How does Slack impact employee engagement?

To determine the relationship between Slack and engagement, this researcher asked respondents to reflect on the impact of using Slack during the daily diary entries and the diary-interview. The following three themes aggregate their responses from both stages.

Slack impacts engagement as a communication tool

During each diary entry, participants were asked if their use of Slack impacted their sense of vigour, dedication, absorption, or none of the above. These options were chosen as identifying characteristics of employee engagement, according to Schaufeli et al. Participants were further prompted to provide an example if they chose an option.

From the examples provided, a clear delineation formed between how Slack impacted engagement as a communication tool and a work tool. Respondents provided many examples where conversations over Slack impacted their sense of vigour, dedication, or absorption.

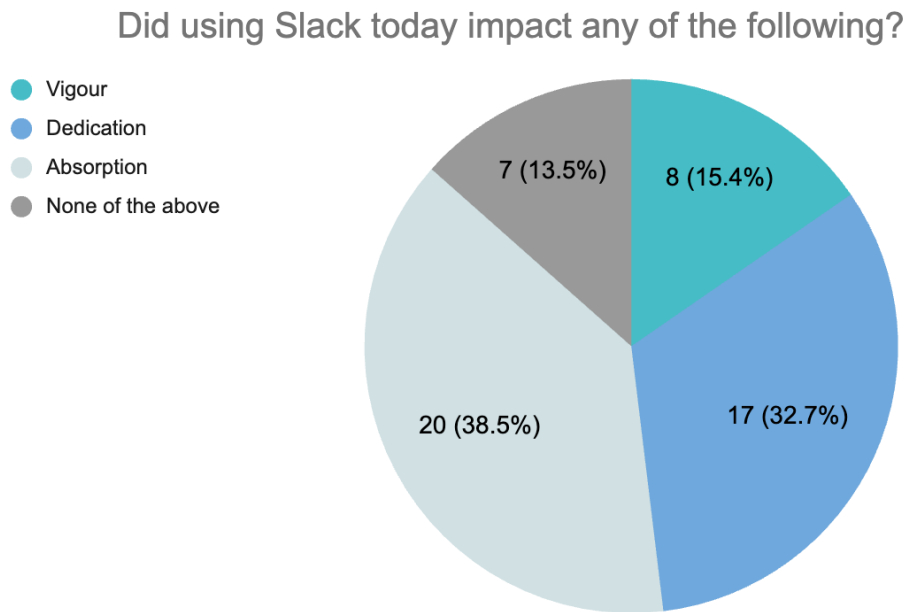
During the diary-interviews, participants were asked to elaborate on how Slack impacted their engagement. One commonality among responses was Slack's capacity to share sentiment. Team successes and personal stories helped boost team morale, while celebratory emojis or public praise influenced individual engagement. On the other hand, negative comments or disagreements could impact employee sentiment.

In terms like the company I think it does help with engagement there. We can see good news stories, people sharing links. I think the flip side can also be true where if someone

posts something that you like, don't like or disagree with...this like it can have that bit of a negative effect too. (Roy, diary-interview, 25:35)

Figure 3.

Diary Entry Responses



Slack impacts engagement as a work tool

During the diary-interview, participants were asked if they considered Slack a job resource or a job demand. The majority of responses indicated Slack was both. These responses echoed the engagement examples provided in diary responses, where respondents mentioned Slack's integral role as a work tool and, therefore, a job demand. This was particularly evident when respondents discussed their role in supporting organisation-wide help channels or active collaboration in team channels.

However, Slack also positively impacted respondents' sense of dedication and absorption. For example, one participant noted that using Slack enabled them to see the direct impact of their work: "I felt dedicated and important while using Slack for the project I

mentioned” (Janice, diary entry, June 16, 2023). Another response highlighted their preference for instant messaging over virtual meetings: “Keeps me from having to join meetings because working async is better to allow me to stay on task rather than get interrupted” (Bartholomew, diary entry, June 9, 2023).

Table 3.

Responses to “Do you consider Slack to be a job demand or job resource?”

Respondent	Diary-Interview response
Roy	“So slack I think it's both like a demand and a resource where a lot of things that have to come through slack, slack is demanding...but it's also a really great resource where I can just say like, oh, reach out to this person, just tag them or say like, like, here's a resource, put it in there and like send it instead of trying to like find things and tell them where to go.” (Roy, diary-interview, 07:08)
Janice	“I would say even like 60/40 or 60%, like helps me do work. 40% gives me work. Maybe like 75/25 but around there.” (Janice, diary-interview, 04:24)
Bartholomew	“Because like as much as a ping can be stressful, like, we wouldn't be anywhere without slack.” (Bartholomew, diary-interview, 08:40)
Anna	“I think it's more a job resource. If I had to like push the scale one way like demand I could get...I don't know if it'd be possible for to get my job done without slack...That's how I receive and give that and get like just a feeling for what's happening. So somewhere in the middle, and i know that seems like a cop out, but it isn't.” (Anna, Diary-Interview, 07:02)

Job resources and demands that impact engagement.

During the diary-interview, participants were asked to provide examples of job resources and demands to help them reflect on Slack’s role as a demand or resource. Responses collected for this question revealed four demands: being knowledgeable, time management, supporting others, and engaging with others. Most of these demands could be connected to prior examples of Slack usage, which hints at its role as a job demand.

Conversely, participants listed peer support and access to tools and applications as job resources. Mutual aid between colleagues was crucial to accessing resources, while access to tools and efficient workflows through integrated applications eased their workload. Again, responses from the diary entries highlighted the importance of these resources for participants.

Data Analysis

To analyse the large amount of data collected, this research utilised Auerbach and Silverstein's process for constructing a narrative from raw text (2003). Their process guides the researcher through six steps that sequentially build a compelling narrative from qualitative research methods. In tandem, this research relied on directed content analysis to establish potential themes for categorising collected data.

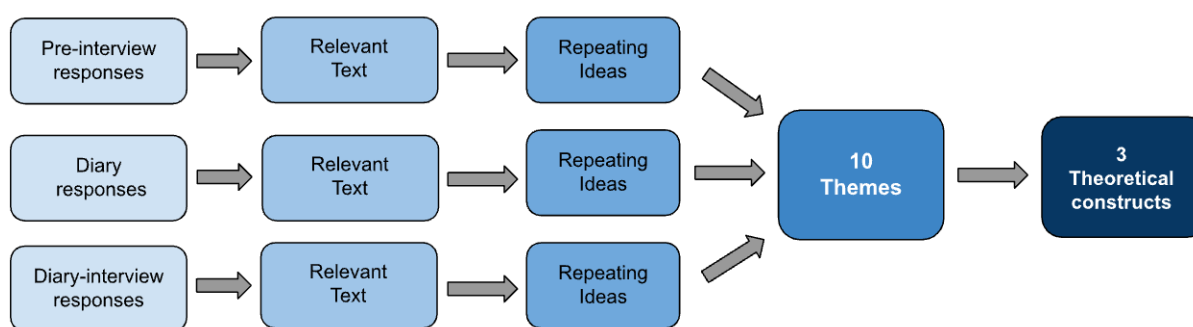
The analysis began by selecting relevant text from the interview transcripts and diary responses. The interview transcripts were reviewed, and responses related to the research questions were copied verbatim into a separate document. The diary responses for each participant were aggregated into a single document before the relevant text was similarly chosen. Next, each set of relevant text was reviewed, and similar responses were grouped into repeating ideas. This resulted in three sets of repeating ideas, one for each data collection stage.

The three sets of repeating ideas were further grouped into themes. Some themes were predetermined based on established research. For example, themes regarding Slack usage were derived from research regarding enterprise social media use. As the interview and diary questions were based on similar research, the repeating ideas naturally fell into the predetermined themes. Any other patterns were grouped into new themes. This created a list of ten themes from the relevant text (see Table 2).

Finally, the ten themes were grouped into three theoretical constructs. Each construct began as a natural grouping of similar themes, which were later anchored to established theories regarding employee engagement, employee communication, internal social media, and remote work. The theoretical constructs are discussed further under the discussion of research findings.

Figure 4.

Data Analysis Process



Collecting responses at different stages can lead to questions regarding the reliability and validity of the resulting analysis. In quantitative research, reliability refers to the consistent analysis of results over time and population; validity refers to the researcher’s ability to measure “that which it was intended to measure” (Golafshani, 2003, p.599). As a qualitative research project, this study aims to present a trustworthy analysis instead of a reliable and valid analysis. According to Lincoln and Guba, a study’s trustworthiness can be measured based on its credibility, dependability, confirmability, transferability, and authenticity (Cope, 2014). This study implemented two steps to ensure the trustworthiness of the corresponding data analysis: ensuring the data was credible and that the analysis authentically reflected participant responses.

“Credibility refers to the truth of the data...and the interpretation and representation of them by the researcher” (Cope, 2014, p.89). As this research depended on authentic responses from participants, this study included three mechanisms to ensure responses were accurate

representations. In its design, the study incorporated various data collection methods to triangulate responses. For example, during the diary entries and diary-interviews, participants were asked to recollect their usage of Slack. When responding to the diary prompts, respondents provide concise examples. When asked about the same examples during the diary-interview, they provided more contextual information that revealed the purpose and emotion involved. This technique was repeated for engagement questions. In the diary entries, participants were asked to reflect on their use of Slack and its impact on their engagement, defined as their sense of vigour, dedication, or absorption. The responses indicated a pattern of what each respondent considered meaningful interactions on Slack and how it impacted engagement. Conversely, during the diary-interview, they were asked about engagement in relation to job demands and resources and Slack's impact on both. The aggregated responses from both questions provided a better understanding of how Slack impacted engagement.

Furthermore, ethical considerations also acted as credibility measures. All participants were guaranteed complete anonymity throughout recruitment, participation, and data collection. Their leads were not notified of their participation, and their responses were recorded using a pseudonym. All transcripts and diary entries were sent to them within five days of completion so that responses could be validated.

The method of analysis was chosen due to its reverence for the raw text. By choosing relevant text, entire responses were carried over through each analysis stage, leaving context intact. When grouping repeating ideas, all text had to fall under a repeating idea, which forced the creation of new categorizations.

This process was repeated when grouping themes with one key variation: some themes were predetermined based on existing research regarding enterprise social media use and

employee engagement. Although some repeating ideas were neatly categorised under predetermined themes, others forged new themes which revealed new patterns. The combined effect of retaining complete quotes and categorising all responses resulted in an authentic analysis of collected data.

Discussion

How do remote work employees at Shopify use Slack?

After analysing all responses, the resulting data provided a wealth of information regarding Slack usage and its impact on employee engagement. As an enterprise social media platform, existing research indicated that Slack could be used for “consuming, conversing, and contributing,” which was corroborated by the research findings (Men et al., 2020, p.2).

Throughout each data collection stage, respondents reported using Slack to consume knowledge by sharing information, resources, and direct learning from others. As remote workers, respondents relied on written communications for knowledge transfer, made accessible through Slack via public channels and direct messages (Shi & Weber, 2018).

Another key function of Slack was its ability to promote conversations between individuals and teams. As Shopify’s main communication tool, respondents utilised Slack to strengthen existing relationships and expand their networks (Ewing et al., 2019; Haddud et al., 2016). This was facilitated through team channels, direct messages, and larger social channels. The use of social channels dedicated to non-work topics was consistent with previous research on employee engagement but unique to remote workers. These channels provided spontaneous and informal conversations, interactions that were otherwise lost to remote workers (Viererbl et al., 2022).

The third and most cited use of Slack among respondents was its capacity to contribute to work through “virtual collaboration” (Feitosa et al., 2022, p.234). This finding was unsurprising as previous research indicated that internal social media promoted team collaboration (Cardon & Marshall, 2015, p.277). Data collected from interviews and diary responses revealed many examples: to actively troubleshoot problems or issues in a team channel, to provide live updates on dedicated project channels, to solicit feedback or solutions from colleagues, to create documents, or to share links and resources. Nonetheless, responses indicated that Slack was not a substitute for in-person collaboration but was the preferred communication alternative. “Personally speaking, coming out of this digital bubble. I think nothing substitutes like person-to-person interaction.” (Melissa, pre-interview, 29:47)

The connectivity afforded by Slack also brought challenges to remote workers. Predictably, respondents reported feeling overwhelmed or distracted by Slack, as all admitted to continuously monitoring notifications throughout the day. Research on internal social media has warned of the possibility of information overload or stress caused by increased connectivity (Ewing et al., 2019; Stranzl et al., 2021). In response, each respondent found ways to mitigate this by employing a combination of features. Most commonly, they would group channels under one heading, visually representing the most important conversations. Inversely, some would mute specific channels that were less important. Some respondents used the Scheduled Send or Remind Me Later features to ensure messages were sent and replied to.

One of the more fascinating results of this research was the revelation that each team had different tacit expectations of how to use Slack. This ranged from an acceptable frequency of engagements in team channels to the expected response time to a Slack notification and even how emojis were used. Some participants managed new hires to Shopify and noted that there was

a distinct learning curve for using Slack. One reason for this was the difficulty in interpreting tone over typed messages. New hires struggled to grasp or convey the correct tone without an established relationship. To mitigate the lack of social cues, respondents often relied on emojis. This is consistent with Loom's research on Slack usage which found that "97% feel the need to add something extra in digital communication to clarify tone; 77% have felt the need to use emojis" (2022, p.4). This learning curve likely indicates that more clear training or guidelines should be created to explain acceptable Slack usage, which is recommended by other research on enterprise social media adoption (Ewing et al., 2019; Haddud et al., 2016; Larson et al., 2020).

How does Slack impact employee engagement?

Research on the merits of enterprise social media highlights its ability to boost engagement as a communication tool. This is attributed to its capacity to facilitate symmetrical communication (Men & Yue, 2019); facilitate "two-way, interactive" communication (Men et al., 2019, p.112); and increase employees' sense of belonging (Men et al., 2020). In diary responses, participants provided examples of how Slack conversations impacted their sense of vigour, dedication, or absorption. This correlation was usually due to the interpersonal relationship built through the interaction or shared sentiment.

When I said I do that thing at one and when I did it, I got a bunch of thumbs up, a bunch of cool emojis, even a gif...like, snowball effect like it helped me feel more dedicated, more involved, more important on the team with the project. (Janice, diary-interview, 15:07)

Another mechanism in which Slack impacted engagement was as a job resource and demand. According to the JD-R model, personal resources, job resources, and job demands impact an employee's engagement at work. Specifically, job resources help to reduce job

demands, support an employee's work goals, and create opportunities for personal growth. As a way to determine the influence of Slack on engagement, respondents were asked if they considered Slack to be a job resource or job demand. Most respondents answered that it was both (see Table 3). Slack was an integral part of their daily work and, therefore, a job demand. However, it also acted as a job resource to ease job demands and support their work goals.

For employees at Shopify, Slack acted as a virtual office. It brought more work through direct messages or organisation-wide help channels, but it also alleviated work by instantaneously connecting employees to resources and peer support. In a similar function, Slack reduced the need for virtual meetings by creating channels for synchronous collaboration, but this also resulted in more notifications. Slack also created opportunities for informal conversations through team and social channels. For some respondents, Slack functioned as their office door, using it to announce their status or capacity. Just as the office is an integral aspect of employee engagement, so is Slack.

In summary, this research demonstrated that Slack, as an enterprise social media platform at Shopify, was used to share information, build relationships, and collaborate on work. This builds on existing research for enterprise social media by demonstrating the specific uses and unique challenges remote work employees face. Furthermore, this research provided evidence that enterprise social media use at remote organisations impacts engagement as a communication and work tool. Current research has focused largely on the communicative functions of internal social media, but the examples provided by this study demonstrate other ways it can impact engagement. This provides an opportunity for further research into the relationship between enterprise social media use and employee engagement.

Biases and limitations

Access to participants and the information collected resulted from my role as an employee at Shopify. However, this familiarity with Shopify and Slack led to direct and indirect biases in this analysis. Most notably, my role as a Shopify employee indirectly impacted how participants responded to interview questions and diary prompts. During interviews, I often had to prompt them for further details regarding acronyms or processes specific to Shopify. Conversely, certain details regarding internal processes and tools needed to be redacted from transcripts, which limited the data available for analysis. My understanding of Slack usage led to the development of some themes during the analysis. For example, themes regarding the unwritten expectations of Slack were influenced by my knowledge of what was currently provided as internal guidelines.

Another limitation of the current study is the lack of depth regarding engagement data. Due to the limited research on employee engagement through internal social media, this study did not account for the role of Slack as a work tool. As a result, questions about engagement did not specifically ask participants to reflect on Slack's role as a communication tool. This led to a lack of relevant information, making it difficult to analyse responses related to engagement.

Similarly, engagement questions were inconsistent between the diary prompts and diary-interview. Initially, this tactic was chosen to ensure some information would be collected regarding engagement. However, during the analysis, it became apparent that responses to these disparate questions could not be reconciled. As a result, the final analysis could not provide specific recommendations on influencing employee engagement through Slack. For future research, it would be recommended to use established engagement surveys to measure engagement over internal social media platforms.

Finally, the use of solicited diary entries proved to be challenging. Although the diary:diary-interview method was chosen to ensure participants had space to reflect and expand on their experiences, the collected responses ranged in quality and length. Some entries provided in-depth answers, while others were worded similarly across multiple days. This variation was likely the result of participant fatigue and the repetitiveness of prompting questions. Another consideration was that participants were asked not to reveal proprietary information regarding their role or work at Shopify. This led to generic responses that required additional prompting in the diary-interview.

Summary

Overall, the research findings and analysis answered the two research questions. Respondents provided ample examples of how Slack was used at Shopify, which could be categorised as either consume, converse, or contribute. These findings build on existing research on internal social media and provide examples of how remote workers can utilise these tools for communication and work. The affordances provided by Slack also brought challenges documented in existing research, namely information overload and unwritten expectations. This highlighted that Slack usage at Shopify was typical of other enterprise social media tools.

The most unexpected discovery was the role of Slack as both a job demand and a resource. Responses related to engagement provided evidence that Slack did impact engagement. However, the analysis cannot definitively prove that this impact was due to employee communication only. Instead, Slack's impact resulted from its combined role as a communication tool and work tool. Using the analogy of a virtual office, Slack brings work and alleviates work demands for employees at Shopify. This dual function highlights the need for further research

into remote worker engagement and its close connection to enterprise social media, which are discussed in the following chapter.

Conclusion

Since 2020, organisations have increasingly explored hybrid or remote work environments. The push to remote work has subsequently pushed the advancement and improvement of communication tools like enterprise social media. These cultural changes resulted in an uptake of enterprise social media tools among organisations, but how do employees utilise them? Particularly, how do remote work employees use enterprise social media tools to facilitate the same communication and engagement present in in-person work environments? Although research has established that employee communication can influence engagement, can enterprise social media tools do the same? These questions led to the development of this study and the corresponding research questions:

1. How do remote work employees at Shopify use Slack?
2. How does Slack impact employee engagement?

To conclude this report, this chapter will provide an overview of the research findings and explain their importance to the research questions under the Summary of Findings. Next, the implications of these findings concerning research on employee communication and engagement are discussed in the section Contextualising Findings. Finally, the section titled Future Research will discuss the current study's limitations and opportunities for future research. Overall, this chapter will summarise the contributions of this research to the larger field of employee engagement and communication research.

Summary of Findings

The data collected during this research provided many examples of how Shopify employees used Slack. Examples reflected the use of Slack to share information, build relationships, and collaborate on work consistent with existing research. Most surprisingly, the responses from diary entries and interviews indicated that Slack was used as both a communication and a work tool. As a communication tool, Slack was used to socialise with colleagues and troubleshoot issues. As a work tool, built-in features and integrated applications extended Slack into a productivity tool. The dichotomy of Slack as a tool that brings in work and alleviates work demands is best represented through the analogy of a virtual office. Slack is a required component of work but also an integral remediator of work.

These findings answer the research question, “How do remote work employees at Shopify use Slack?” Consistent with existing research, Shopify employees use Slack to consume information, converse with peers, and contribute to work. Regarding how Slack impacts engagement, the response is more nuanced. Initially, this research presumed Slack would impact engagement as a communication tool, per established theories regarding engagement and communication. However, the findings indicated that Slack was used as a communication and work tool at Shopify, impacting engagement as both a job demand and a resource. Although this research provides evidence that enterprise social media use can impact engagement, it cannot differentiate if it does so as a job demand or a job resource.

Contextualising findings

This research leaned heavily on established theories regarding engagement and communication. In doing so, the results of this research can also expand on these same theories, namely the JD-R model of work engagement. Findings related to enterprise social media use as

both a job resource and demand add to existing research regarding job resources. Furthermore, the findings prove that employee communication through Slack can be considered a job resource. This was evident through examples of engagement that related to informal conversations, collaborative work, and social channels.

As a case study of a specific tool, the findings of this research add to internal social media research. Through the summary of themes, this report offers specific examples that prove the usability of enterprise social media in remote organisations. In tandem, it offers evidence that enterprise social media can be considered a job resource and impact employee engagement.

Overall, the findings of this research extend upon existing research that argues for the connection between employee communication and engagement. Specifically, these findings indicate that the relationship between communication and engagement is much stronger for remote employees. However, more research is required to prove that the results of this study are transferable to other organisations and tools.

Outside of academia, these findings have practical implications for remote organisations. Most importantly, when choosing an enterprise social media tool, organisations should consider its potential impact as a communication and work tool. Can the chosen tool provide a virtual space for consuming information, conversing with colleagues, and contributing to work? Secondly, organisations should consider how the tool's implementation will impact engagement. If remote workers currently have a mechanism for informal conversations, how will implementing an enterprise social media tool impact them? Will the chosen tool increase engagement as a communication or work tool? These considerations are important in light of this research's findings.

Future Research

This study was limited by three factors which provide opportunities for future research. First, the design of this study was structured around a single case study of Slack usage at Shopify. Though this offered an in-depth investigation into Slack's use, it limited the opportunity to study other enterprise social media tools. The most used enterprise social media tool is Microsoft Teams due to its integration into Microsoft Office suite. A study of Microsoft Teams usage could offer more transferable results regarding enterprise social media use and its impact on engagement. Conversely, this research was set amongst Shopify employees due to the researcher's role as an employee. A future study of Slack could recruit participants from multiple organisations to compare and contrast their use of Slack or its impact on engagement.

Second, the use of solicited diary entries offered both advantages and challenges to this research. On the one hand, these entries provided a plethora of examples regarding Slack usage and its purpose at Shopify. However, the prompts lacked specificity regarding Slack's impact on engagement. Future research that utilises solicited diary entries need to carefully consider the phrasing of prompting questions to ensure optimal responses from participants.

A related limitation was this study's investigation regarding engagement. After analysis, it was evident that the diary and diary-interview questions did not adequately prompt participants to reflect on their engagement through Slack. The responses collected did not clearly distinguish between Slack's impact as a communication or work tool on employee engagement. Future research on engagement through enterprise social media would be best served by modifying established engagement surveys. These surveys, such as the Utrecht Work Engagement Scale developed by Schaufeli et al., can provide a more accurate measure of an employee's engagement at work. However, they would likely require modification to include enterprise social media use. Regardless of the lack of specificity regarding engagement antecedents, this

research provides evidence that enterprise social media can impact engagement. Therefore future research can extend beyond proof to study how enterprise social media relates to engagement.

Conclusion

This research sought to understand the relationship between employee communication and engagement at remote work organisations. Focusing on communications transmitted through an enterprise social media tool, the goal was to determine how employee engagement was impacted. The resulting research questions were set within the context of Shopify's use of Slack and were designed to sequentially answer "how Slack impacted employee engagement?"

Though the results of this research cannot definitively prove that Slack impacted engagement as a communication tool, it did provide insight into how it impacted engagement. Findings regarding Slack's use as a communication and work tool expand on existing research, providing evidence for established theories and establishing the importance of communication tools for remote workers. This opens the door for future research into enterprise social media use and its impact on engagement.

To conclude, the results of this research fill a gap in both research and professional practice regarding remote work. Academically, this research's data and resulting analysis expand upon research on employee communication, employee engagement, internal social media, and employee communication at remote organisations. It further provides insight for organisations that may intend to or already have implemented enterprise social media tools. As a cursory investigation of enterprise social media use at a remote organisation, this study adds to the growing research investigating the intersection between communication and technology.

References

- Akkirman, A. D., & Harris, D. L. (2005). Organizational communication satisfaction in the virtual workplace. *Journal of Management Development*, 24(5), 397-409–409.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/02621710510598427>
- Auerbach, C., & Silverstein, L. (2003). *Qualitative Data : An Introduction to Coding and Analysis*. NYU Press.
- Azarova, M., Hazoglou, M., & Aronoff-Spencer, E. (2022). Just slack it: A study of multidisciplinary teamwork based on ethnography and data from online collaborative software. *New Media and Society*, 24(6), 1435-1458.
<https://doiorg.login.ezproxy.library.ualberta.ca/10.1177/1461444820975723>
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The Meaning, Antecedents and Outcomes of Employee Engagement: A Narrative Synthesis. *International Journal of Management Reviews*, 19 (1), 31-53.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1111/ijmr.12077>
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223–223.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/13620430810870476>
- Bakker, A.B., Albrecht, S.L. & Leiter, M.P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, Vol. 20 No. 1, pp. 4-28.
- Berger, B. (2008, November 17). Employee / Organization Communications. Institute for Public Relations. <https://instituteforpr.org/employee-organizational-communications/>
- Cardon, P. W., & Marshall, B. (2015). The hype and reality of social media use for work collaboration and team communication. *International Journal of Business*

Communication, 52 (3), 273-293.

<https://doi-org.login.ezproxy.library.ualberta.ca/10.1177/2329488414525446>

Cornelissen, J. (2020). *Corporate Communication: A Guide to Theory & Practice* (6th ed.). Sage Publications.

Denscombe, M. (2010). *The Good Research Guide* (4th ed.). Open University Press.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands–Resources Model of Burnout. *Journal of Applied Psychology*, 86(3), 499–512.

DongXu Liu, Beigang Hou, Yuanyuan Liu, & Pingqing Liu. (2021). Falling in Love With Work: The Effect of Enterprise Social Media on Thriving at Work. *Frontiers in Psychology*, 12. <https://doi-org.login.ezproxy.library.ualberta.ca/10.3389/fpsyg.2021.769054>

Ewing, M., Men, L.R. and O’Neil, J. (2019). Using social media to engage employees: insights from internal communication managers, *International Journal of Strategic Communication*, Vol. 13 No. 2, pp. 110-132.

Federici, S., De Filippis, M. L., Mele, M. L., Borsci, S., Bracalenti, M., Bifulchi, G., Gaudino, G., Amendola, M., Cocco, A., & Simonetti, E. (2022). Approaches Adopted by Researchers to Measure the Quality of the Experience of People Working from Home: a Scoping Review. *Journal of Technology in Behavioral Science: Official Journal of the Coalition for Technology in Behavioral Science*, 1–17. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1007/s41347-022-00264-4>

Feitosa Jorge, L., Mosconi, E., & Santa-Eulalia, L. A. (2022). Enterprise social media platforms for coping with an accelerated digital transformation. *Journal of Systems and Information Technology*, 24(3), 221-245–245. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/JSIT-08-2021-0154>

- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report* 8(4), 597-606. <https://doi.org/10.46743/2160-3715/2003.1870>
- Grunig, J. (1992). Excellence in Public Relations and Communication Management. Lawrence Erlbaum Associates, Publishers.
- Haddud, A., Dugger, J., & Gill, P. (2016). Exploring the impact of internal social media usage on employee engagement. *Journal of Social Media for Organizations*, 3(1), 1–23. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/02683940610690169>
- Hyers, L. (2018). Diary methods. Oxford University Press. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1093/oso/9780190256692.001.0001>
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15 (9), 1277–1288. doi:10.1177/104973230527668710.1177/1049732305276687
- Jacelon, C., Imperio, K. (2005). Participant diaries as a source of data in research with older adults. *Qualitative Health Research*, 15(7), 991-997–997. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1177/1049732305278603>
- Johnson, L. (2022, April 5). Why nearly 80% of Fortune 100 companies rely on Slack Connect to build their digital HQ. Slack. <https://slack.com/blog/transformation/fortune-100-rely-slack-connect-build-digital-hq>
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *The Academy of Management Journal*, 33(4), 692–724.
- Kalla, H. K. (2005). Integrated internal communications: A multidisciplinary perspective. *Corporate Communications*, 10 (4), 302-314–314. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/13563280510630106>

- Kang, M., Sung, M. (2017). How Symmetrical Employee Communication Leads to Employee Engagement and Positive Employee Communication Behaviors: The Mediation of Employee-Organization Relationships. *Journal of Communication Management* 21 (1): 82-102–102. doi:10.1108/JCOM-04-2016-0026.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68–68.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1016/j.bushor.2009.09.003>
- Krippendorff, K. (2019). *Content analysis*. SAGE Publications, Inc.,
<https://doi.org/10.4135/9781071878781>
- Larson, B., Vroman, S., & Makarius, E. (2020, March 18). A Guide to Managing Your (Newly) Remote Workers. *Harvard Business Review*.
<https://hbr.org/2020/03/a-guide-to-managing-your-newly-remote-workers>
- Lee, Y. (2020). A Situational Perspective on Employee Communicative Behaviors in A Crisis: The Role of Relationship and Symmetrical Communication. *International Journal of Strategic Communication*, 14 (2), 89–104. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1080/1553118X.2020.1720691>
- Lee, Y. (2023). ICT use, internal communication satisfaction, and engagement of working-from-home employees: The moderating role of affiliative tendency. *Computers in Human Behaviour*, 138, 1-10. <https://doi.org/10.1016/j.chb.2022.107472>
- Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, 19(1), 1-19–19.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1111/jcc4.12029>

- Lewis, K., Sligo, F., & Massey, C. (2005). Observe, record, then beyond: Facilitating participant reflection via research diaries. *Qualitative Research in Accounting & Management*, 2(2), 216-229–229.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/11766090510635451>
- Liang, M., Zhang, X., Yan, D. X., & Jianxiang, F. (2021). How to improve employee satisfaction and efficiency through different enterprise social media use. *Journal of Enterprise Information Management*, 34(3), 922-947–947.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/JEIM-10-2019-0321>
- Loom. (2022, May 19). Building Connection in the Post-Modern Workplace.
<https://cdn.loom.com/assets/marketing/ebooks/loom-modern-work-communication-report.pdf>
- Lütke, T. [@tobi]. (2022, May 21). *As of today, Shopify is a digital by default company. We will keep our offices closed until 2021 so that we can rework them for this new reality. And after that, most will permanently work remotely. Office centricity is over.* [Tweet]. Twitter.
<https://twitter.com/tobi/status/1263483496087064579?s=20>
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52, 397–422.
- Mbhele, S., & de Beer, E. (2021). Achieving employee engagement through effective internal communication. *Communicare*, 40(2), 153–182.
- McGloin, R., Coletti, A., Hamlin, E., & Denes, A. (2022). Required to work from home: examining transitions to digital communication channels during the COVID-19 pandemic. *Communication Research Reports*, 39(1), 44-55–55.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1080/08824096.2021.2012757>

- Men, L. R., & Yue, C. A. (2019). Creating a positive emotional culture: Effect of internal communication and impact on employee supportive behaviors. *Public Relations Review*, 45 (3). <https://doi-org.login.ezproxy.library.ualberta.ca/10.1016/j.pubrev.2019.03.001>
- Men, L. R., O'Neil, J., & Ewing, M. (2020). Examining the effects of internal social media usage on employee engagement. *Public Relations Review*, 46(2).
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1016/j.pubrev.2020.101880>
- Meng, J., & Berger, B. K.. (2012). Measuring return on investment (ROI) of organizations' internal communication efforts. *Journal of Communication Management*, 16 (4), 332-354–354.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/13632541211278987>
- Morse, J. M. (2015). Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. *Qualitative Health Research*, 25(9), 1212–1222.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1177/1049732315588501>
- Moustakas, C. (1994). *Transcendental phenomenology: Conceptual framework*. SAGE Publications, Inc., <https://dx.doi.org/10.4135/9781412995658>
- Nguyen, L.H.L., & Aleš, G. (2018). Social media: New channel of internal communication for employee engagement? [Paper Presentation] 14th Annual International Bata Conference for Ph.D. Students and Young Researchers. <https://doi.org/10.7441/dokbat.2018.16>
- O'Neil, J., Ewing, M., Smith, S., & Williams, S. (2018). A Delphi Study to Identify Standards for Internal Communication. *Public Relations Journal*, 11 (3).
- Resnik, D. Employees as Research Participants: Ethical and Policy Issues. *IRB: Ethics & Human Research*, 38(4), 11-16.

<https://search-ebshost-com.login.ezproxy.library.ualberta.ca/login.aspx?direct=true&db=edsjsr&AN=edsjsr.45046397&site=eds-live&scope=site>

Robson, P. J. A., & Tourish, D. (2005). Managing internal communication: An organizational case study. *Corporate Communications*, 10(3), 213-222–222.

<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/13563280510614474>

Ruck, K., & Welch, M. (2012). Valuing internal communication; management and employee perspectives. *Public Relations Review*, 38(2), 294-302–302.

<https://doi-org.login.ezproxy.library.ualberta.ca/10.1016/j.pubrev.2011.12.016>

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619–619.

Saks, A. M. (2019). Antecedents and consequences of employee engagement revisited. *Journal of Organizational Effectiveness*, 6(1), 19-38–38.

<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/JOEPP-06-2018-0034>

Schaufeli, W. B., & Bakker, A. B. (2004). Job Demands, Job Resources, and Their Relationship with Burnout and Engagement: A Multi-Sample Study. *Journal of Organizational Behavior*, 25(3), 293–315.

Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, 3(1), 71–92.

<https://doiorg.login.ezproxy.library.ualberta.ca/10.1023/a:1015630930326>

Sharma, A., & Bhatnagar, J. (2016). Enterprise social media at work: web-based solutions for employee engagement. *Human Resource Management International Digest*, 24(7),

16-19–19.

<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/HRMID-04-2016-0055>

Shi, W., & Weber, M. S. (2018). Rethinking the complexity of virtual work and knowledge sharing. *Journal of the Association for Information Science & Technology*, 69(11), 1318–1329. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1002/asi.24055>

Shockley, K. M., Allen, T. D., Dodd, H., & Waiwood, A. M. (2021). Remote Worker Communication During COVID-19: The Role of Quantity, Quality, and Supervisor Expectation-Setting. *Journal Of Applied Psychology*, 106 (10), 1466–1482.

<https://doi-org.login.ezproxy.library.ualberta.ca/10.1037/apl0000970>

Shopify. (n.d.). *Company Info*. Retrieved on March 7, 2023, from

<https://news.shopify.com/company-info>

Shopify. (n.d.). *Shopify Careers*. Retrieved on March 7, 2023, from

<https://www.shopify.com/ca/careers>

Sievert, H., & Scholz, C. (2017). Engaging employees in (at least partly) disengaged companies. Results of an interview survey within about 500 German corporations on the growing importance of digital engagement via internal social media. *Public Relations Review*, 43(5), 894–903. doi:10.1016/j.pubrev.2017.06.001

Stranzl, J., Wolfgruber, D., Einwiller, S., & Brockhaus, J. (2021). Keeping up the spirit. *Internal communication in an increasingly virtual work environment (Communication Insights, Issue 13)*

Ten Brummelhuis, L. L., Bakker, A. B., Hetland, J., & Keulemans, L. (2012). Do new ways of working foster work engagement? *Psicothema*, 24(1), 113–120.

- Verčič, A. T., & Spoljaric, A. (2020). Managing internal communication: How the choice of channels affects internal communication satisfaction. *Public Relations Review*, 46(3).
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1016/j.pubrev.2020.101926>
- Verčič, A., Verčič, D., & Sriramesh, K. (2012). Internal communication: Definition, parameters, and the future. *Public Relations Review*, 38(2), 223-230.
<https://doi.org/10.1016/j.pubrev.2011.12.019>
- Viererbl, B., Denner, N., & Koch, T. (2022). “You don’t meet anybody when walking from the living room to the kitchen”: informal communication during remote work. *Journal of Communication Management*, 26(3), 331-348–348.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/JCOM-10-2021-0117>
- Wang, Y., & Kobsa, A. (2009) Privacy in Online Social Networking at Workplace [Presentation]. International Conference on Computational Science and Engineering 2009,
DOI:10.1109/CSE.2009.438
- Weber, R. (1990). Basic content analysis. SAGE Publications, Inc.,
<https://doi.org/10.4135/9781412983488>
- Welch, M. (2011), The evolution of the employee engagement concept: communication implications, *Corporate Communications: An International Journal*, Vol. 16 No. 4, pp. 328-346. <https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/13563281111186968>
- Welch, M. (2015), Internal communication education: a historical study, *Journal of Communication Management*, Vol. 19 No. 4, pp. 388-405.
<https://doi-org.login.ezproxy.library.ualberta.ca/10.1108/JCOM-09-2014-0053>

Welch, M., & Jackson, P. (2007). Rethinking internal communication: a stakeholder approach.

Corporate Communications: An International Journal, 12(2), 177-198. [https://DOI](https://doi.org/10.1108/13563280710744847)

10.1108/13563280710744847.

Yin, R. (2014). Case study research: design and methods (5 edition.). SAGE.

Zimmerman, D., & Wieder, L. (1977). Diary: Diary-Interview Method. *Urban Life* 5 (January), 479–98.

<https://search-ebscohost-com.login.ezproxy.library.ualberta.ca/login.aspxdirect=true&db=hsr&AN=520750390&site=eds-live&scope=site>

Appendix A

Logic Table for Questions

Pre-Interview Questions		
Concept	Variable	Question
Employee Communication for remote workers	Remote workers use information communication technology to mediate all employee communication	As a remote worker, what communication tools do you use?
	Remote workers face different communication challenges than in-person employees	What are some differences between communicating with colleagues in-person vs a remote team? How do you work around these differences as a remote worker? What tools do you use?
Slack as an employee communication tool	Usage	On a day-to-day basis, how do you use Slack?
	Frequency of use	On a day-to-day basis, what percentage of the messages you send or receive are through Slack?
Internal Social Media	Internal social media is an alternative to traditional communication systems because users can consume, create, and engage in content	In comparison to the other tools mentioned, what are some pros and cons to using Slack?

Table A1. Logic table for pre-interview questions

Diary Entries		
Concept	Variable	Question
Slack as an employee communication tool	Usage	Did you use Slack today? <ul style="list-style-type: none"> • Yes → continue on to next question • No → skip entry for today
Employee Communication for remote workers Aspects of a Job Resource	<ul style="list-style-type: none"> • Communication for remote workers must be used for knowledge transfer • Communication for remote workers must be used for relationship building • functional in achieving work goals (extrinsic motivation) • stimulate personal growth, learning, and development (intrinsic motivation) 	Did you use Slack today for any of the following? <ul style="list-style-type: none"> • share information or knowledge? • to build rapport or relationships with your peers • to complete a work goal or task • for personal growth, learning, or development If yes, can you provide an example?
Slack as an employee communication tool	Usage	Did you use Slack for any other purpose than those mentioned above? If yes, can you provide an example?
Relationship between Slack usage and employee engagement	Employee engagement characteristics: <ul style="list-style-type: none"> • Vigour • Dedication • Absorption 	Did using Slack today impact any of the following? <ul style="list-style-type: none"> • Vigour • Dedication • Absorption If yes, can you provide an example?

Table A2. Logic table for diary entries

Diary:interview Questions		
Concept	Variable	Question
JD-R model of work engagement	Job Demands	What are some job demands you face at work? These could be physical, mental, or emotional.
	Job Resources	What are some resources that help reduce those demands? These could be physical, social, organisation.
Aspects of a Job Resource	reduce job demands and the associated physiological and psychological costs	Does Slack act as a resource to reduce those demands? If yes, can you provide some examples?
Examples from diary entries	Slack usage and purpose: <ul style="list-style-type: none"> ● share information or knowledge? ● to build rapport or relationships with your peers ● to complete a work goal or task ● for personal growth, learning, or development 	In your diary responses, your most common usage for Slack was X. <ul style="list-style-type: none"> ● Can you elaborate on this example <insert details> ● What would happen if you could no longer use Slack for X? How would that impact your work?
	Using Slack for any other purposes	In your diary responses, you also provided the following uses for Slack: <ul style="list-style-type: none"> ● Can you elaborate on this example <insert details> ● Are there usages for Slack not listed here?
Relationship between Slack usage and employee engagement	Employee engagement characteristics: <ul style="list-style-type: none"> ● Vigour ● Dedication 	In your diary responses, your most common response to the question “Did using Slack today impact your vigour, dedication,

	<ul style="list-style-type: none"> • Absorption 	<p>and absorption?” was X.</p> <ul style="list-style-type: none"> • Can you elaborate on this example <insert details> • In general, how does using Slack impact X at work? <p>What are other factors that impact your vigour, dedication, and absorption at work?</p>
	<p>How does Slack impact employee engagement?</p>	<p>Now that you have reflected on your Slack usage for 2 weeks, what are your thoughts on the relationship between Slack usage and employee engagement?</p>

Table A3. Logic table for diary:interview questions

Appendix B

Pre-interview script & questions

Pre-interview script:

Pre-interview Questions:

1. Demographic Information:
 - a. When did you start working for Shopify?
2. As a remote worker, what communication tools do you use?
3. What are some differences between communicating with colleagues in-person vs a remote team?
 - a. How do you work around these differences as a remote worker? What tools do you use?
4. On a day-to-day basis, how do you use Slack?
5. On a day-to-day basis, what percentage of the messages you send or receive are through Slack?
6. In comparison to the other tools mentioned, what are some pros and cons to using Slack?

Appendix C


Diary entry questions & example of diary entry form


Questions for Diary Entries:

1. Please input today's date:
2. Did you use Slack today?
 - a. Yes --> Continue on to diary entry
 - b. No --> Form will be submitted
3. Did you use Slack today for any of the following? (To share information or knowledge; To build rapport or relationships with your peers; To complete a work goal or task; For personal growth, learning, or development)
 - a. If yes, can you provide an example?
4. Did you use Slack for any other purpose than those mentioned above?
 - a. If yes, can you provide an example?
5. Did using Slack today impact any of the following? (Vigour, dedication, absorption)
 - a. If yes, can you provide an example?

Example of diary entry form:

Daily Diary Entries | Participant B


cwray@ualberta.ca [Switch account](#) 

 Not shared

*** Indicates required question**

Please input today's date: *

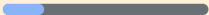
Date

2023-05-27 

Did you use Slack today? *

Yes


No


[Next](#)  Page 1 of 5 [Clear form](#)

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Daily Diary Entries | Participant B


cwray@ualberta.ca [Switch account](#) 

 Not shared

Yes, I used Slack today.

Some notes to consider:


1. When answering the following questions, only consider your use of Slack for **today**.
2. Only share examples of your experience and **not** any proprietary information related to Shopify.


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Daily Diary Entries | Participant B

cwray@ualberta.ca [Switch account](#) 

 Not shared

* Indicates required question

Did you use Slack today for any of the following?

- Share information or knowledge
- Build rapport or relationships with your peers
- Complete a work goal or task
- personal growth, learning, or development

Did you use Slack today for any of the following? *

Share information or knowledge

Build rapport or relationships with your peers

Complete a work goal or task

personal growth, learning, or development

If yes, can you provide an example(s)?

Your answer _____

Did you use Slack for any other purpose than those mentioned above? *


Yes

No

Other: _____

If yes, can you provide an example?

Your answer _____

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Daily Diary Entries | Participant B

cwray@ualberta.ca [Switch account](#) Draft saved

Not shared

* Indicates required question

Did using Slack today impact any of the following?

- Vigour:** defined as a willingness to invest more energy into your role
- Dedication:** defined as a sense of significance, enthusiasm, inspiration, pride, and challenge
- Absorption:** defined as being fully concentrated and deeply engrossed in one's work, where time passes quickly

Did using Slack today impact any of the following? *

Vigour

Dedication

Absorption

If yes, can you provide an example how using Slack impacted your sense of vigour, dedication, or absorption?

Your answer

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Daily Diary Entries | Participant B

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Diary Entry Complete!

Thank you for completing your daily diary entry.

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Appendix D

Diary-Interview questions

Questions for Diary-Interview:

1. What are some job demands you face at work? These could be physical, mental, or emotional.
2. What are some resources that help reduce those demands? These could be physical, social, organisation.
3. Does Slack act as a resource to reduce those demands?
 - a. If yes, can you provide some examples?
4. In your diary responses, your most common usage for Slack was X.
 - a. Can you elaborate on this example <insert details>?
 - b. What would happen if you could no longer use Slack for X? How would that impact your work?
5. In your diary responses, you also provided the following uses for Slack:
 - a. Can you elaborate on this example <insert details> ?
 - b. Are there usages for Slack not listed here?
6. In your diary responses, your most common response to the question “Did using Slack today impact your vigour, dedication, and absorption?” was X.
 - a. Can you elaborate on this example <insert details>?
 - b. In general, how does using Slack impact X at work?
7. What are other factors that impact your vigour, dedication, and absorption at work?
8. Now that you have reflected on your Slack usage for 2 weeks, what are your thoughts on the relationship between Slack usage and employee engagement?

Appendix E

Recruitment Post and Form Questions

Hi team, my name is Charlotte and I am looking for folks to participate in my graduate research project!

Who am I?

My name is Charlotte Wray and I am a graduate student at the University of Alberta. I am currently working towards my final capstone project as part of the [Masters of Art in Communication and Technology program](#).

At Shopify, I support Talent Support Operations (TSO) as a Talent Coordinator on the Enablement Team.

What is my research project?

I am researching the relationship between employee engagement and internal social media platforms (like Slack). I am curious to know how remote work employees experience employee engagement through Slack.

Will participating in this study impact me at work?

My research is separate from my role at Shopify. Responses collected for this study will be made anonymous and any results that are presented to employees at Shopify will be generalised.

What is the time commitment?

1. Attend an initial 30 minute interview at the beginning of the research process (last week of April)
2. Answer questions for 5 - 10 minutes daily, for 10 business days (May 1 - 13, 2023)
3. Attend a second 30 - 60 minute interview at the end of the research process (second week of May)

Where can I sign up?

If you are interested in participating, fill out the recruitment form [here](#). I will be contacting interested participants in 2 weeks.

Form Questions:

1. I understand what participation in this study requires and would like to participate.
2. Please list your full name:
3. Please provide an email address: (This email is the primary way I will communicate with you.)