ADOPTION OF TELECOMMUTING IN THE BANKING INDUSTRY: A TECHNOLOGY ACCEPTANCE MODEL APPROACH

Amro Al-Madadha  
Department of Business Administration, Princess Sumaya University for Technology, Amman, Jordan  
Email: a.almadadha@psut.edu.jo

Mohammad Hamdi Al Khasawneh  
Department of E-Marketing and Social Media, Princess Sumaya University for Technology, Amman, Jordan  
Email: m.alkhasawneh@psut.edu.jo

Ola Al Haddid  
Department of Business Administration, Princess Sumaya University for Technology, Amman, Jordan  
Email: o.alhaddid@psut.edu.jo

Ahmad Samed Al-Adwan*  
Department of Electronic Business & Commerce, Al-Ahliyya Amman University, Amman, Jordan  
Email: a.adwan@ammanu.edu.jo

* Corresponding author

ABSTRACT

Aim/Purpose  
Currently, the world faces unprecedented challenges due to COVID-19, particularly concerning individuals’ health and livelihood and organizations and industrial performance. Indeed, the pandemic has caused rapid intensifying socio-economic effects. For instance, organizations are shifting from traditional working patterns toward telecommuting. By adopting remote working, organizations might mitigate the impact of COVID-19 on their workforce, explicitly concerning their safety, wellbeing, mobility, work-life balance, and self-efficiency. From this perspective, this study examines the factors that influence employees’ behavioral intention to adopt telecommuting in the banking industry.

Background  
The study’s relevance stems from the fact that telecommuting and its benefits have been assumed rather than demonstrated in the banking sector. However, the pandemic has driven the implementation of remote working, thereby revealing possible advantages of working from home in the banking industry. The study investigated the effect of COVID-19 in driving organizations to shift
Adoption of Telecommuting in Banking Industry

from traditional working patterns toward telecommuting. Thereby, the study investigates the banking sector employees’ behavioral intention to adopt telecommuting.

Methodology The study employed a survey-based questionnaire, which entails gathering data from employees of twelve banks in Jordan, as the banking sector in Jordan was the first to transform from traditional working to telecommuting. The sample for this research was 675 respondents; convenience sampling was employed as a sampling technique. Subsequently, the data were analyzed with the partial least square structural equation modeling (PLS-SEM) to statistically test the research model.

Contribution Firstly, this study provides a deep examination and understanding of facilitators of telecommuting in a single comprehensive model. Secondly, the study provides a deeper insight into the factors affecting behavioral intention towards telecommuting from the employees’ perspective in the banking sector. Finally, this study is the first to examine telecommuting in the emerging market of Jordan. Thereby, this study provides critical recommendations for managers to facilitate the implementation of telecommuting.

Findings Using the Technology Acceptance Model (TAM), this study highlights significant relationships between telecommuting systems, quality, organizational support, and the perceived usefulness and ease of use in telecommuting. Employees who perceive telecommuting systems to be easy and receive supervision and training for using these systems are likely to adopt this work scheme. The results present critical theoretical and managerial implications regarding employees’ behavioral intentions toward telecommuting.

Recommendations for Practitioners This study suggests the importance of work-life balance for employees when telecommuting. Working from home while managing household duties can create complications for employees, particularly parents. Therefore, flexibility in terms of working hours is needed to increase employees’ acceptance of telecommuting as they will have more control over their life. These increase employees’ perceived self-efficacy with telecommuting, which smooths the transition toward remote working in the future. In addition, training will allow employees to solve technical issues that can arise from using online systems.

Recommendations for Researchers This study focused on the context of the banking sector. The sensitivity of data and transactions in this sector may influence employers’ and employees’ willingness to work remotely. In addition, the job descriptions of employees in banks moderate specific factors outlined in this model, including work-life balance. For instance, executive managers may have a higher overload in banks in contrast to front-line employees. Thus, future studies should explore different contexts, including manufacturing and consultation, to understand the industry’s effect on remote working. Similarly, future research should concentrate on the influence of job descriptions on employees’ intentions toward telecommuting.

Impact on Society The COVID-19 pandemic created a sudden shift towards telecommuting, which made employees struggle to adopt new work schemes. Therefore, managers had to provide training for their employees to be well prepared and increase their acceptance of telecommuting. Furthermore, telecommuting has a positive effect on work-life balance, it provides employees with the flexibility to organize their daily schedule into more activities. Along the same line, the study highlighted the correlation between work-life balance and telecommuting. Such a relationship provides further evidence for the need to understand employees’ lifestyles
in facilitating the adoption of telecommuting. Moreover, the study extends the stream of literature by outlining critical factors affecting employees’ acceptance of telecommuting.

**Future Research**

Future studies should explore different contexts, including manufacturing and consultation, to understand the industry’s effect on remote working. Similarly, future research should concentrate on the influence of job descriptions on employees’ intentions toward telecommuting. Furthermore, the research team conducted the study by surveying 12 banks. Future research recommends surveying the whole banking industry to add more validation to the model.

**Keywords**
telecommuting, Technology Acceptance Model (TAM), employee’s self-efficacy, behavioral intentions, banking

### INTRODUCTION

Currently, the world is facing unprecedented global challenges due to COVID-19, particularly concerning individuals’ health and livelihood and organizations and industrial performance (Budayová et al., 2022; Jamal et al., 2021). In addition, the COVID-19 pandemic has caused rapid intensifying socio-economic effects (Tkáčová et al., 2021; Palumbo, 2021). For example, the pandemic has driven organizations unaccustomed to having their critical operations via virtual private networks (VPN) to shift from traditional working patterns towards flexible remote working (Oxford Analytica, 2020). Therefore, the study explores the implications of COVID-19 on occupation and industrial shifts, such as telecommuting. As a result, companies/organizations are adopting telecommuting, also known as the ‘new normal,’ to combat COVID-19. Thereby, organizations ensure social distance and control the spread of COVID-19 (Jamal et al., 2021). Furthermore, organizations ensure the attainment of their objectives, which sustain their long-term profit and survival (Jamal et al., 2021). Following the introduction of telecommuting, there has been a significant increase in both academic and mainstream press articles pertaining to telecommuting, especially during the lockdowns. According to Jamal et al. (2021), the articles rely on pre-pandemic knowledge and information about telecommuting. Therefore, given the unprecedented situation, it is essential to study full-time telecommuting, thereby gathering statistically crucial information and information that might assist academics and managers in tackling new and emerging challenges in the workplace. Consequently, this study explores the implications of COVID-19 on occupation and industrial shifts, such as telecommuting.

Telecommuting (also called remote-working) entails employees flexibly conducting tasks, operations, and processes through electronic technology, permitting communication through written and spoken phrases and visual images and videos with colleagues, partners, and geographically remote customers. By adopting remote working, organizations mitigate the impact of COVID-19 on their workforce concerning their safety, well-being, mobility, work-life balance, and self-efficacy (Oxford Analytica, 2020). Even though COVID-19 has threatened organizations “business-as-usual”, the study argues that COVID-19 might reveal many unforeseen and yet-to-be-realized opportunities (Jamal et al., 2021). Thus, if organizations are to capture these opportunities, then organizations should consider adopting flexible-remoting working.

To encourage the adoption of flexible remote working, studies argue that organizations should focus on system quality, supervisor support, and organizational support in the eyes of their employees to facilitate the acceptance of adopting and implementing telecommuting. According to Errichiello and Pianese (2016), external factors influence employees’ perception of remote working, explicitly, system quality, supervision, and organization support. They argued that those external institutional and infrastructural factors influence behavioral intention, thereby the likelihood of implementing telecommuting scheme. Similarly, De Menezes and Kelliher (2017) found that other external factors influence employees’ perception of telecommuting, such as work-life balance and employee self-effi-
Adoption of Telecommuting in Banking Industry

cacy. They argued that those external social factors influence behavioral intention, therefore the likelihood of adopting remote working. Along the same line, Marx et al. (2021) claim that flexible working hour and home-based teleworking is more attractive for employees and will increase job quality.

The study's relevance stems from the fact that “flexible-remote working” and its benefits have been assumed rather than demonstrated in the banking sector. The COVID-19 pandemic has driven the implementation of remote working and discussions around the benefits of working from home in the banking industry. According to Mungania et al. (2016), flexible remote working positively influences employee work-life balance and self-efficacy. Furthermore, Mungania et al. (2016) found that flexible remote working positively affects organization performance, increases productivity, reduces operation costs, and increases customer satisfaction. By adopting telecommuting, organizations attract, retain, and engage workers during the COVID-19 epidemic (Jamal et al., 2021; Palumbo, 2021). Moreover, Jamal et al. (2021) suggest that future research examines the effect of flexible remote working in different industries as their study has been conducted in the IT sector. Besides, their study has been based on the JD-R model; they suggest that future research uses different frameworks. Thus, this study investigates the impact of remote work on employees in the banking sector. Additionally, the study uses the TAM model to examine the effect of system quality, supervisor support, self-efficacy, and organization on employees’ job satisfaction and behavioral intention to adopt telecommuting. The study reveals the effect of COVID-19 in driving organizations to shift from traditional-working patterns towards flexible-remoting working. The present study extends the stream of literature on the effect of telecommuting on employees. It provides an alternative framework by examining the impact of the TAM model on employee job satisfaction and behavioral intention to adopt telecommuting. Furthermore, the study is among the first to investigate telecommuting in the banking industry in Jordan. Thereby, the present study provides recommendations regarding telecommuting for decision-makers in the banking industry.

LITERATURE REVIEW

The term teleworking (or telecommuting) was first coined by Jack Nilles (an engineer in the National Aeronautics and Space Administration (NASA)) in the 1970s, which entails utilizing data, information, and technology-related interfaces to support tasks and activities – undertaken away from the traditional office-based workplace (Allen et al., 2015; Burton et al., 2021). Since then, the term utilized frequently has been telecommuting, alternatively also known as ‘remote working’ (Allen et al., 2015; Burton et al. 2021; Daniels et al., 2001).

Before the COVID-19 pandemic, telecommuting did not receive enough attention among academics and practitioners (Carnevale & Hatak, 2020; Saura et al., 2022; B. Wang et al., 2021). Thereafter, as a consequence of the COVID-19 pandemic, reliance on teleworking has further increased, because companies have been forced to practice social/physical distancing, thereby avoiding face-to-face meetings, which led to remote working becoming the ‘new normal’ (Battisti et al., 2022; Carnevale & Hatak, 2020; Chatterjee et al., 2022; B. Wang et al., 2021). This led to a growing interest in understanding the opportunities and challenges of the adoption of new digital technologies and platforms for telecommuting (Reizer et al., 2022; Saura et al., 2022; Singh et al., 2022; Soga et al., 2022).

Globally, national governments adopted strict lockdown measures and mechanisms to protect individuals and society against COVID-19 infection, especially among the medically vulnerable (Carnevale & Hatak, 2020; Zhang et al., 2021). Furthermore, these lockdown measures and mechanisms changed the nature, pattern, and duration of work. This shift toward greater understanding and implementation of telecommuting (Mariani et al., 2021; Saura et al., 2022) linked to the consequences of the COVID-19 pandemic intensified, forcing: firstly, practitioners to adopt ‘new’ digital technologies and platforms; and secondly, researchers to study the adoption of ‘new’ digital technologies and platforms (Davis, 1989). However, it was found that researchers and practitioners had a lack of agreement on whether or not telecommunication is a source of premium or a penalty for the workforce (Leslie et al., 2012).
Telecommuting is a ‘flexible’ working agreement that allows managers and employees to work remotely (at a distant location) from their headquarters or production facilities through digital technology-related interfaces, such as online - phone and video conferencing, as well as voice messages and electronic mail among others (Reizer et al., 2022; Soga et al., 2022). In order to enable telecommuting, companies provide their employees with digital technologies and platforms (Song & Gao, 2020; Soga et al., 2022), such as software and specialized hardware. That is, the ‘success’ of telecommuting (also known as remote working) relies on digital technologies and platforms (Battisti et al., 2022).

Telecommuting, defined as a ‘flexible’ working agreement, has significant perks for the organization and workforce (Nieminen et al., 2011). For instance, an increase in productivity, motivation, and employee retention can be felt in organizations that are adapting to telecommuting (Martin & MacDonnell, 2012), and a reduction in company (real estate) expenses (Ye, 2012). Furthermore, employees are more likely to be committed and satisfied and less likely to experience anxiety, stress, and work-life imbalance (Gajendran & Harrison, 2007; Nicklin et al., 2009). Moreover, Ismail et al. (2012) found that personal and household, work-related, and travel-related factors significantly influence the choice of adopting telecommuting - a powerful tool - to improve work-life balance, job flexibility, and reduce traffic and congestion.

Despite the positive aspects of telecommunication, many researchers have highlighted the negative aspects of adopting telecommunication. From the organization’s perspective, managers working remotely fear losing control, thereby governance over employees (Bailey & Kurland, 1999). From the workforce perspective, employees might be overlooked from (in)formal opportunities for socialization, learning, mentorship, and communication, thereby suffering from isolation in both social and professional settings (Crandall & Gao, 2005). Given the pervasive adoption of telecommunication, it is critical that research investigates telecommunication utilizing a multidimensional approach, That is, a multidimensional approach, which reveals the hierarchy of constructs that might facilitate or hinder telecommuting in the banking industry.

According to Clark et al. (2012), prior research tends to focus on situational (external) factors, rather than personality (internal) factors that influence the adoption of telecommunicating. Therefore, they investigated the influence of the ‘big five’ personality dimensions, particularly, emotional stability, openness, extraversion, conscientiousness, and agreeableness, on the adoption of telecommunicating. While Monzavi et al. (2013) investigated external (individual, societal, organizational, and technological) factors, which might influence the perceived usefulness (PU) and perceived ease of use (PEOU) of telecommunicating, this study investigates both situational (external) factors and personality (internal) influencing variables in the adoption of telecommunicating. Thereby, this study provides a comprehensive conceptual model that sheds light on internal as well as external elements that influence the adoption of telecommunicating in the banking industry of Jordan.

Accordingly, Palumbo (2021) differentiated between the understanding and conceptualization of telecommunication as either an employee-oriented or organization-oriented human resource practice. For the former, Palumbo (2021) highlights that employees endeavor to reduce the friction between their private and work life by adopting telecommunication, thereby triggering work-life balance. In turn, organizations attain direct and indirect positive benefits, such as enhanced social exchange processes, reduced turnover, and increased productivity. As for the latter, organizations endeavor to reduce managerial costs, as well as increase intensification and techno-centric control of remote workers. In turn, employees suffer from work-life conflict, thereby increasing resistance to change, increased dissatisfaction and turnover, and reduction of productivity and generated outcomes.

Little is known about the adoption of telecommunication in the banking industry, especially during the unprecedented lockdowns due to the COVID-19 pandemic. This gap might be preventing the revealing of the hierarchy of constructs that might be facilitating or hindering telecommuting. Furthermore, this gap might be hindering the employment of tailored human-resource management interventions, which might facilitate the adoption of telecommuting in a similar industrial context.
Therefore, this study intends to examine the facilitators of the adoption of telecommuting by focusing on the banking industry, particularly in Jordan, an economically developing country in the global south.

Moreover, prior studies on telecommuting have deployed organizational behavior and management theories as well as some psychological theories (Soga et al., 2022). For instance, the job demand and resources model (Ter Hoeven et al., 2016), the technostress model (Suh & Lee, 2017), the job characteristics model and job demand and resources (Johnson et al., 2020), the theory of work adjustment (Carillo et al., 2021), technostress model (Battisti et al., 2022), and perceived organizational support theory (Chatterjee et al., 2022). However, Soga et al. (2022) observed a dearth of references to technology acceptance models and theories (i.e., TAM) and their variants.

THEORETICAL BACKGROUND

Technology Acceptance Model (TAM)

This study draws on the technology acceptance model (TAM), an information system (IS) theory that focuses on external factors (XF) (Abdullah & Ward, 2016; Clark et al. 2012; Monzavi et al., 2013), which might have an impact on perceived usefulness (PU) and perceived ease of use (PEOU) of adopting telecommuting (i.e., intrinsic benefit at the individual level). That is, the study investigates the influence of five external factors (XF) on perceived usefulness (PU) and perceived ease of use (PEOU), thereby capturing the individual perceptual element that influences the ‘acceptance’ of digital technologies and platforms (Abdullah & Ward, 2016; Lu et al., 2019); namely, work-life balance, supervisors support, system quality, employee self-efficacy, and organizational support. By combining these external factors, the study deduces that employees might be inclined to adopt teleworking (also known as remote working) in the banking industry of Jordan.

According to Davis (1989), perception determines the attitude (A) towards utilizing technology, thereby influencing behavior intention (BI). As aforementioned, digital technologies and platforms, such as software and specialized hardware, facilitate teleworking (also known as remote working) (Song & Gao, 2020; Soga et al., 2022). However, companies might be utilizing multiple types and forms of digital technologies and platforms, such as Skype, Google Meets, Zoom, and WhatsApp among others (Chatterjee et al., 2022). Therefore, the study deduces that employees’ perceptions toward digital technologies and platforms might differ, thereby influencing their attitude toward telecommuting; explicitly, employee job satisfaction in the banking industry. If employees exhibit satisfaction with remote working, then employees’ behavior intention would drive the adoption of remote working in the bank industry. From this perspective, the study argues that adopting remote working would reduce turnover intention. Figure 1 outlines the adopted independent, intermediary, and dependent variables composing the technology acceptance model (TAM).

Overall, we draw upon the technology acceptance model (TAM) to hypothesize that: (1) perceived work-life balance positively influences behavioral intention; (2) perceived system quality has a positive influence on perceived usefulness; (3) perceived supervisor support has a positive influence on perceived usefulness; (4) employee self-efficacy positively influences perceived ease of use; (5) organization support positively influences perceived ease of use; (6) perceived usefulness and perceived ease of use have a direct positive influence on employee job satisfaction; (7) employee job satisfaction has a direct positive influence on behavioral intention; and (8) behavioral intention has a direct negative influence on turnover intention. From this perspective, the study deduces that employees would perceive remote working as a flexible working pattern or arrangement, which positively affects their productivity and well-being. Moreover, employees facing work-life conflict would be driven and motivated to embrace flexible remote working.
Concerning flexible working patterns, limited studies have examined the relationship between work-life balance and flexible remote working (De Menezes & Kelliher 2017; Mungania et al., 2016). According to De Menezes and Kelliher (2017), employees’ subjective assumptions and perceptions drive their behavioral intentions, such as adopting remote working. For employees to buy into remote working, employers should promote remote working as a flexible working pattern or arrangement, which assists and facilitates the achievement of work-life balance. De Menezes and Kelliher (2017) explain that employers adopting flexible working patterns and arrangements build a sense of loyalty, obligation, and satisfaction, especially with the woman responsible for domestic activities and child or adult care. Employees responded by reciprocation, in the form of increased efficiency, effectiveness, and productivity.

According to Valmohammadi (2012), a socio-cultural factor also influences the adoption of telecommunication; for instance, Iranian “male” employees dislike telecommunication because this goes against traditional beliefs and ideas of power, as well as characteristics of masculinity in their culture. Therefore, Valmohammadi (2012) found that, based on socio-cultural factors, women strongly desired to telecommute more than men. However, Valmohammadi (2012) highlighted Golden et al.’s (2006) study, which suggested separating the impact of telework on work-life balance into two conflicts: first, work-to-family, and second, family-to-work. Thereby, they discovered that with the adoption of telework, the degree to which there is disruption and competition caused by work impacting family life decreased, but competition increased due to family interruption of professional work life.

Furthermore, Golden et al. (2006) examined different factors. For instance, scheduling flexibility, the level of work autonomy as well as the size of the household. Generally, individuals have low flexibility in large households, particularly in the Middle East. Thereby, they argued that the increased adoption of telecommuting might cause fewer work interfaces with family and more family interfaces with work. Similarly, Jamal et al. (2021) found that the adoption of telecommuting provided autonomy, schedule flexibility, and better work-life balance during the lockdowns of the COVID-19 pandemic. Thereby, the adoption of telecommuting resulted in beneficial employee outcomes, such as job fulfillment, and boosts productivity and performance in the Information technology (IT) sector. Alternatively, Palumbo (2021) found that the adoption of telecommuting negatively affected employees,
causing work-life conflicts. Employees in the public sector are experiencing increased work-related weariness as a result of telecommuting. Therefore, the study hypothesizes that:

\[ H1: \text{Perceived work-life balance (WLB) positively influences behavioral intention (BI) to adopt telecommuting.} \]

**PERCEIVED USEFULNESS (PU)**

For perceived usefulness (PU), Rasull et al. (2020) investigated the effect of benefit factors (perceived usefulness, perceived ease of use, and perceived system quality) and sacrifice factors (perceived cost and perceived risk) on behavioral intention to practice online banking from the customer perspective. According to Rasull et al. (2020), individuals develop their perception of system quality through practice, experience, and opinion. They found that individual practices informed their perception of system quality (SQ), which significantly positively impacts behavioral intention (BI) in the banking industry. However, Rasull et al.’s (2020) study focused on the customers’ perception of system quality and the usefulness of online banking. By doing so, Rasull et al.’s (2020) study neglected the facilitators which contribute to shaping the end user’s perception of system quality, explicitly, employees in the banking industry. From this perspective, the study mainly focuses on the employee’s construction of positive or negative perceptions regarding remote working. Due to COVID-19, organizations adopted remote working, allowing employers and employees to test flexible remote working. During this time, employees socially constructed system quality perception, which informed their perceived usefulness of remote working. The study argues that employees’ perception of system quality (SQ) influences their perceived usefulness (PU) of remote working.

Valmohammadi (2012), through a survey-based empirical study, investigated the perceptions of employees and managers from state-owned enterprises in the context of Iran on the benefits, challenges, and willingness to telecommute. They found that 88% of their respondents acknowledge and perceive the benefits of teleworking. However, poor information technology (IT) infrastructure, which was ranked by respondents as the main barrier and hindrance to respondents, dropped to 50% of respondents’ desire to telecommute.

Similarly, Mungania et al. (2016) found that employers shape and construct employees’ perception of usefulness (PU). However, Mungania et al. (2016) found that employers’ supervisor support influences employees’ perceived usefulness (PU) of flexible working arrangements, specifically in the banking industry. They explained that employers demonstrate supervisor support through advocating, supporting, and adopting flexible remote-working patterns (Alalwan et al., 2016; Eisenberger et al., 2020; Mungania et al., 2016).

Likewise, Masuda et al. (2017) have examined the effects of telecommuting adoption on engagement, by analyzing two critical career-related mediators: perceived supervisor goal support and work goals progress. To investigate, they conducted a longitudinal study, which found that employees working for an organization that offers telecommuting have a higher engagement than employees working in organizations that do not offer telecommuting. Furthermore, telecommuting adoption is related to engagement directly and indirectly via perceived supervisor goal support and work goal progress.

According to Lebopo et al. (2020), teleworking provides various benefits to the individual, organization, and society, although it has not achieved the anticipated levels of adoption and implementation. Therefore, they argue that telecommunicating requires compatibility (fit) at the individual, organization, and social levels. Thereby, through a survey questionnaire, they found that job characteristics, senior management support, and organizational culture more strongly influence telework adoption. As a result, employees would be driven and motivated to adopt flexible remote working in the banking industry. Thereby, the study hypothesizes that:

\[ H2: \text{Perceived system quality (SQ) has a positive influence on perceived usefulness (PU) to adopt telecommuting.} \]

\[ H3: \text{Perceived supervisor support (SS) has a positive influence on perceived usefulness (PU) to adopt telecommuting.} \]
**PERCEIVED EASE OF USE (PEOU)**

In terms of perceived ease of use, Eisenberger et al. (2020) assert that perceived organizational support influences perceived ease of use (PEOU) which, in turn, influences behavioral intention (BI). However, Eisenberger et al. (2020) refer to employees’ perception of organizations’ support, which entails organizations valuing employees’ economic productivity and performance, and considering employees’ health and wellbeing. They explained that employees’ perception of organizations’ ‘intrinsic’ drivers motivates the adoption of flexible remote-working patterns. The study argues that organizations should promote and advocate telecommuting as applicable and within their employees’ best-interest.

Gu et al. (2009) found that self-efficacy strongly influences perceived ease of use (PEOU), which directly and indirectly affects behavioral intention (BI) in the banking industry. According to Gu et al. (2009), self-efficacy is an internal socially constructed belief, assumption, and perception of capabilities. However, Gu et al. (2009) focused on customers’ perceived self-efficacy regarding adopting mobile banking. Within the context of this study, perceived self-efficacy is employees’ belief in their capability to execute and perform a task through adopting flexible working patterns, such as remote working. The study hypothesizes that:

\[ H_4: \text{Employee self-efficiency (SE) positively influences perceived ease of use (PEOU) to adopt telecommuting.} \]

\[ H_5: \text{Organizational support (OS) positively influences perceived ease of use (PEOU) to adopt telecommuting.} \]

**EMPLOYEE JOB SATISFACTION (ES)**

According to Mbama and Ezepue (2018), perceived usefulness (PU) and perceived ease of use (PEOU) are two critical factors for measuring and predicting satisfaction, thus hypothesizing the adoption of flexible remote-working. Employees’ preconceived assumptions and perceptions influence their attitude towards accepting or rejecting flexible remote working. The study argues that employees’ perception affects their satisfaction with flexible telecommuting in the banking industry.

Employee job satisfaction is an essential factor in adopting flexible working patterns in the banking industry. Employee job satisfaction refers to the employee’s acceptance of flexible working patterns in the banking industry. If employees are dissatisfied with remote working, the operation would be disrupted (Maier et al., 2013). The organizations, thus, would face customer dissatisfaction with products and services (Navimipour & Soltani, 2016). As a result, organizations would damage their customer base and market share and lose face in front of their customers. Accordingly, the study hypothesizes:

\[ H_6: \text{Perceived usefulness (PU) and perceived ease of use (PEOU) have a direct positive influence on employee job satisfaction (ES) to adopt telecommuting.} \]

Employees are motivated to adopt flexible-working patterns that meet their tasks’ requirements (Avgoustaki & Bessa, 2019). Employees demonstrate satisfaction with flexible working patterns, which assist and facilitate tasks, such as flexible remote working. Therefore, employee job satisfaction – an intermediary variable – confirms and determines the behavioral intention to adopt remote work in the banking industry (Avgoustaki & Bessa, 2019). The study hypothesizes:

\[ H_7: \text{Employee job satisfaction (ES) has a direct positive influence on Behavioural Intention (BI) to adopt telecommuting.} \]

Collectively, the study hypotheses aggregate multiple factors, which construct a multidimensional framework. The theoretical framework facilities the investigation into the effect of COVID-19 in driving organizations to shift from traditional working patterns toward flexible remoting working; thereby, the impact of remote work on employees and employers, especially in the banking sector.
METHODOLOGY

SAMPLING AND PROCEDURES

A survey-based questionnaire has been employed to fulfill this research’s objectives (Sekaran & Bougie, 2013). Based on the main objective of this study, it is important to survey the banks that have shifted from traditional working patterns toward telecommuting. Data were collected from employees across 12 banks in Jordan. Due to the absence of the sample frame as it was difficult to obtain the exact number of employees in the 12 banks, random sampling techniques was not possible to apply. Thus, participants were selected based on the convenience sampling method. The questionnaire has been distributed through google forms. To minimize any sampling errors, this research followed the recommendations of Field’s (2016) suggestion to have at least 15 participants per questionnaire item. With 45 items under investigation, the adequate sample for this research was computed to be 675. Accordingly, the data collection commenced between August and December 2020, leading to 739 responses. A rigorous data cleaning approach was implemented following data collection to check for missing entries and invalid responses. Entries with over 50% missing data were eliminated as they indicated poor engagement with the questionnaire. A total of 25 responses were eliminated from data analysis leading to a total of 714 valid responses. More female respondents (48%) took part in the study compared to males (52%). Most respondents had a bachelor's degree (72.60%) in contrast to graduate courses (1.2%). This contributed to the mean age group for employees being 31.4 years. Concerning organizational tenure, the average was 6.54 years. The following section highlights the analysis of the structural equation model.

MEASURES

The scale items for each construct were adapted from previous literature (see Appendix). Before sending out the questionnaire to the respondents, the questionnaire was translated from English to Arabic using the translation and back-translation methods to ensure construct equivalence (Brislin, 1980). There were two sections in the questionnaire form. The demographic information for the participants was included in the first section (gender, age, educational level, and organizational tenure). In the second section, a set of questions were displayed for participants to test the constructs of the theoretical model of this study. A five-point Likert scale was the response scale from 1 strongly disagree to 5 strongly agree. A pilot test was conducted by academics and managers in the banking sector to make sure that the scale items were adequate for this research and that the participants could comprehend the questionnaire correctly (Creswell, 2014; Oppenheim, 2000). A total of 37 individuals (21 managers and 16 academics) were invited. Only 18 respondents were obtained (7 managers and 11 academics). The aim was to ensure the clarity, relevancy, and readability of the questionnaire. The results demonstrated that no issues were reported with the questionnaire clarity and readability.

Perceived Supervisor Support (SS)

This construct was assessed with 4 items adopted from Karasek (1985) to measure how employees perceive supervisor support within the banking industry. Example items were “My supervisor is helpful in getting the job done”, and “My supervisor gives me credit for things I do well”. The reliability coefficient was 0.94.

Perceived System Quality (SQ)

The present study used 4 items to measure the perceived system quality in the banking industry. This scale was developed by Rivard et al. (1997). Example items for the scale were “Our system provides functionalities needed”, and “Our System provides all the information needed”. The reliability coefficient was 0.88.
Employee Self-efficacy (ES)
ES was measured by 3 items developed by Spreitzer (1995) to measure the employees’ self-efficacy in the workplace. Sample items for the scale were “I am confident about my ability to do my jobs” and “I have mastered the skills necessary for my job”. The reliability for this construct was 0.91.

Organizational Support (OS)
Four items were adopted from Bachtiar et al. (2018) to measure how employees perceive organizational support within the context of the study. Sample items were “My organization appreciates my extra work” and “A good performance is well appreciated by my organization”. The reliability coefficient was 0.88.

Perceived Work-life Balance (WB)
Four items developed by Hill et al. (1998) were adopted to measure the work-life balance within the banking industry. Sample items for the scale were “I keep worrying about work problems when I am not working”, and “I find that my job prevents me from giving the time I want to my partner or family”. The reliability for this scale was 0.91.

Perceived Usefulness (PU)
Four items were adopted from Davis (1989) to measure the extent that using technology in the workplace could improve employees’ performance. Example items were “Using banking system enables me to accomplish tasks more quickly” and “Using banking system improves my performance”. The reliability coefficient was 0.91.

Perceived Ease of Use (PEOU)
Four items were adopted from Bachtiar et al. (2018) to measure how employees perceive organizational support within the context of the study. Sample items were “I find it easy to use our system to do what I want to do” and “My interaction with our system does not require much effort”. The reliability coefficient was 0.91.

Employee Job Satisfaction (ES)
Three items were adopted from Dotson and Allenby (2010) to measure the satisfaction level of employees in the banking industry. Sample items were “I can do different things from time to time” and “I am able to help people when I am working”. The reliability coefficient was 0.9.

Behavioral Intention (INT)
To measure behavioral, 3 items were adopted from Golden et al. (2006). This scale was adopted to measure the intention of employees to work from home in the banking industry. Sample items were “I will strongly recommend others to work from home” and “I plan to work from home”. The reliability coefficient for this scale was 0.87.

Statistical Analysis
Structural equation modeling (SEM) was performed to statistically test the research model by applying partial least squares (PLS). SEM-PLS is considered an effective tool to estimate hierarchical and complex models that include more than two latent constructs (Akter et al., 2017). Thus, SmartPLS (version.3.2.4) software was used for performing PLS-SEM analysis (Ringle et al., 2015). Similar to previous research (Al-Madadha et al., 2019; Helalat et al., 2019; Al-Madadha et al., 2021; Nasir et al., 2022), PLS-SEM analysis was performed in two main steps: (1) measurement model; and (2) structural model testing.
DATA ANALYSIS

MEASUREMENT VALIDATION

This stage included three tests: (1) internal consistency, (2) convergent validity, and (3) discriminant validity. The internal consistency for all constructs was assessed using Cronbach’s alpha (α). A value of ≥ 0.7 is deemed acceptable for Cronbach’s alpha. According to Hair et al. (2019), in PLS-SEM, Cronbach’s alpha (α) as the traditional measure of internal consistency is underestimated due to its sensitivity to the number of items on the scale. Accordingly, it is recommended to evaluate composite reliability (CR) in order to assess the internal consistency of all constructs. Hair et al. (2019) point out that a value of ≥ 0.7 is considered acceptable for CR. As Table 1 shows, the importance of Cronbach’s alpha (α) (ranging from 0.87 to 0.94) and CR (ranging from 0.88 to 0.94) for all constructs were acceptable as all values were higher than 0.7. Two indicators were assessed to confirm the presence of convergent validity; namely, item loading and “average variance extracted” (AVE). The AVE value for each construct should be beyond 0.5, and the loading for each item should be ≥0.707 (Hair et al., 2019). Table 1 confirms that these two conditions were satisfied, indicating that convergent validity is attained.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Loading</th>
<th>α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Intention (INT)</td>
<td>INT1</td>
<td>0.81</td>
<td>0.87</td>
<td>0.88</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>INT2</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INT3</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Support (OS)</td>
<td>OS1</td>
<td>0.87</td>
<td>0.88</td>
<td>0.88</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>OS2</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OS3</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OS4</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Ease of Use (PEOU)</td>
<td>PEOU1</td>
<td>0.88</td>
<td>0.91</td>
<td>0.91</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>PEOU2</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceives Usefulness (PU)</td>
<td>PU1</td>
<td>0.91</td>
<td>0.91</td>
<td>0.92</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>PU2</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU3</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PU4</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Job Satisfaction (ES)</td>
<td>ES1</td>
<td>0.86</td>
<td>0.90</td>
<td>0.91</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>ES2</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ES3</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Self- efficacy (SE)</td>
<td>SE1</td>
<td>0.84</td>
<td>0.91</td>
<td>0.91</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>SE2</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE3</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived System Quality (SQ)</td>
<td>SQ1</td>
<td>0.81</td>
<td>0.88</td>
<td>0.88</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>SQ2</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ3</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQ4</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Construct | Item | Loading | α | CR | AVE
---|---|---|---|---|---
Perceived Supervisors Support (SS) | SS1 | 0.94 | 0.94 | 0.94 | 0.81
| SS2 | 0.88 |
| SS3 | 0.91 |
| SS4 | 0.86 |
Perceived Work-life Balance (WB) | WB1 | 0.85 | 0.91 | 0.91 | 0.71
| WB2 | 0.82 |
| WB3 | 0.87 |
| WB4 | 0.83 |

* α: Cronbach’s alpha, CR: Composite reliability, AVE: Average variance explained.

For evaluating discriminant validity, Fornell-Larcker (1981) criterion was employed. Hair et al. (2019) state that this criterion requires the square root of each construct’s AVE to exceed the squared correlation with any other construct. As displayed in Table 2, the square root of the AVE (diagonal values) for each of the constructs was higher than its highest correlation with any other construct. Consequently, the discriminant validity of the constructs in the research model was confirmed. To support the results obtained from the Farnell-Larcker test, the heterotrait-monotrait ratio of correlations (HTMT) test was performed. As displayed in Table 3, all values were less than 0.85, confirming that discriminant validity is present (Hair et al., 2019).

Table 2. Discriminant validity analysis

<table>
<thead>
<tr>
<th>INT</th>
<th>ES</th>
<th>SE</th>
<th>OS</th>
<th>PEOU</th>
<th>SS</th>
<th>SQ</th>
<th>WB</th>
<th>PU</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT</td>
<td>*0.836</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>**0.653</td>
<td>0.877</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.628</td>
<td>0.732</td>
<td>0.848</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OS</td>
<td>0.3</td>
<td>0.221</td>
<td>0.246</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEOU</td>
<td>0.665</td>
<td>0.633</td>
<td>0.627</td>
<td>0.395</td>
<td>0.847</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS</td>
<td>0.675</td>
<td>0.746</td>
<td>0.707</td>
<td>0.306</td>
<td>0.677</td>
<td>0.898</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ</td>
<td>0.675</td>
<td>0.741</td>
<td>0.701</td>
<td>0.218</td>
<td>0.686</td>
<td>0.809</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>0.632</td>
<td>0.625</td>
<td>0.548</td>
<td>0.18</td>
<td>0.579</td>
<td>0.683</td>
<td>0.692</td>
<td>0.844</td>
</tr>
<tr>
<td>PU</td>
<td>0.615</td>
<td>0.682</td>
<td>0.601</td>
<td>0.254</td>
<td>0.644</td>
<td>0.761</td>
<td>0.7</td>
<td>0.65</td>
</tr>
</tbody>
</table>

* The numbers on the leading diagonal are the √AVE for each construct
** Correlation among the constructs

Table 3. HTMT Discriminant validity analysis

<table>
<thead>
<tr>
<th>INT</th>
<th>ES</th>
<th>SE</th>
<th>OS</th>
<th>PEOU</th>
<th>SS</th>
<th>SQ</th>
<th>WB</th>
<th>PU</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT</td>
<td>0.653</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>0.631</td>
<td>0.731</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.299</td>
<td>0.219</td>
<td>0.243</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEOU</td>
<td>0.665</td>
<td>0.632</td>
<td>0.625</td>
<td>0.396</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS</td>
<td>0.675</td>
<td>0.745</td>
<td>0.704</td>
<td>0.306</td>
<td>0.676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SQ</td>
<td>0.678</td>
<td>0.742</td>
<td>0.704</td>
<td>0.219</td>
<td>0.687</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>0.632</td>
<td>0.624</td>
<td>0.546</td>
<td>0.179</td>
<td>0.578</td>
<td>0.683</td>
<td>0.693</td>
<td></td>
</tr>
<tr>
<td>PU</td>
<td>0.618</td>
<td>0.683</td>
<td>0.604</td>
<td>0.255</td>
<td>0.644</td>
<td>0.761</td>
<td>0.702</td>
<td>0.651</td>
</tr>
</tbody>
</table>
STRUCTURAL MODEL TESTING

After assessing the measurement model’s reliability and validity, the structural model was evaluated. The PLS algorithm and bootstrapping procedure were used to evaluate the structural model. This stage mainly involves examining the predictive capabilities: predictive power ($R^2$), effect size ($f^2$) for the research model, and the significance of path coefficients ($\beta$) (the proposed hypotheses) and their relevance ($Q^2$) (Hair et al., 2019). Mainly, while the PLS algorithm was used to calculate the path coefficients and predictive power ($R^2$), the bootstrapping procedure (5000 re-samples) was used to calculate the significance of the path coefficients ($p$-values and $t$-statistic) and their predictive relevance. Furthermore, the multicollinearity issue was examined by assessing VIF (Variance Inflation Factor). As shown in Table 4, all VIF values were <3 for all dependant variables confirming the absence of multicollinearity concern in the dataset of this study (Hair et al., 2019).

Table 4. Collinearity test

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT</td>
<td>EB</td>
<td>1.83</td>
</tr>
<tr>
<td></td>
<td>ES</td>
<td>2.03</td>
</tr>
<tr>
<td>ES</td>
<td>PU</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>PEOU</td>
<td>1.22</td>
</tr>
<tr>
<td>PU</td>
<td>SS</td>
<td>2.43</td>
</tr>
<tr>
<td></td>
<td>SQ</td>
<td>1.11</td>
</tr>
<tr>
<td>PEOU</td>
<td>SE</td>
<td>1.35</td>
</tr>
<tr>
<td></td>
<td>OS</td>
<td>2.6</td>
</tr>
</tbody>
</table>

As presented in Figure 2, the results of the structural model evaluation show support for all of the proposed hypotheses. Perceived supervisor support (SS) ($\beta=0.562$, $p$-value <0.001) and perceived system quality (SQ) ($\beta=0.246$, $p$-value <0.01) act as significant predictors of perceived usefulness (PU). Both SQ and SS explain a 60% ($R^2=0.6$) of the total variance in PU, indicating a moderate predictive power (Chin, 1998). Further, employee self-efficacy (SE) ($\beta=0.564$, $p$-value <0.001) and organizational support (OS) ($\beta=0.257$, $p$-value <0.001) had significant effects on perceived ease of use (PEOU). Both ES and OS contributed to explaining 45.5% ($R^2=0.455$) of the total variance in PEOU. Such predictive power is considered moderate (Chin, 1998).

Employee job satisfaction (ES) was influenced significantly by PU ($\beta=0.469$, $p$-value <0.001) and PEOU ($\beta=0.331$, $p$-value <0.001). These effects have resulted in explaining 52% ($R^2=0.52$) of the variance in ES, demonstrating a moderate predictive power. Finally, behavioural intention (INT) (the outcome variable) was predicted positively by perceived work-life balance (WB) ($\beta=0.368$, $p$-value <0.001) and ES ($\beta=0.423$, $p$-value <0.001). The total variance explained in INT by ES and WB was moderate (50.9% ($R^2=0.509$)).

For assessing the predictive relevance ($Q^2$), the procedure of blindfolding with the omission distance of ($D=7$) was performed. As Table 5 illustrates, all $Q^2$ values (calculated only for dependent variables) were beyond zero (Geisser, 1975), implying that the proposed research model has high predictive relevance (Cohen, 1988).
Evaluating the effect size ($f^2$) values of the independent variables on the dependent variables was varied (see Table 6). According to Cohen (1988), the evaluation suggests that the effect sizes for ES→INT, SS→PU, and PU→ES were medium, and for OS→PEOU, PEOU→ES, SQ→PU, and WB→INT were small. Finally, the effect size of SE→PEOU was large.

### Table 6. Effect size evaluation

<table>
<thead>
<tr>
<th>Independent variable → Dependent variable</th>
<th>$f$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES→INT</td>
<td>0.222</td>
</tr>
<tr>
<td>SE→PEOU</td>
<td>0.549</td>
</tr>
<tr>
<td>OS→PEOU</td>
<td>0.113</td>
</tr>
<tr>
<td>PEOU→ES</td>
<td>0.136</td>
</tr>
<tr>
<td>SS→PU</td>
<td>0.272</td>
</tr>
<tr>
<td>SQ→PU</td>
<td>0.052</td>
</tr>
<tr>
<td>WB→INT</td>
<td>0.168</td>
</tr>
<tr>
<td>PU→ES</td>
<td>0.273</td>
</tr>
</tbody>
</table>
**Adoption of Telecommuting in Banking Industry**

**Indirect Effects**

The significance of the indirect effects was examined by performing a bootstrapping procedure (5000 re-samples). All the indirect results were found significant (see Table 6). SS generated the strongest indirect effect on ES through PU ($\beta=0.263$, p-value <0.001). This implies that the increase in SS would indirectly increase ES by boosting PU. Similarly, the strongest indirect effect on INT was generated by PU through ES ($\beta=0.198$, p-value <0.01). This suggests that improving PU would lead to enhanced INT by increasing ES.

Table 6. Indirect effect analysis

<table>
<thead>
<tr>
<th>Mediator</th>
<th>Direction</th>
<th>$\beta$</th>
<th>T Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU</td>
<td>SS -&gt; PU -&gt; ES</td>
<td>0.263</td>
<td>4.059</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>SQ -&gt; PU -&gt; ES</td>
<td>0.115</td>
<td>2.257</td>
<td>0.024***</td>
</tr>
<tr>
<td>PEOU</td>
<td>SE -&gt; PEOU -&gt; ES</td>
<td>0.187</td>
<td>3.476</td>
<td>0.001**</td>
</tr>
<tr>
<td></td>
<td>OS -&gt; PEOU -&gt; ES</td>
<td>0.085</td>
<td>3.297</td>
<td>0.001**</td>
</tr>
<tr>
<td>ES</td>
<td>PEOU -&gt; ES -&gt; INT</td>
<td>0.14</td>
<td>2.583</td>
<td>0.01***</td>
</tr>
<tr>
<td></td>
<td>PU -&gt; ES -&gt; INT</td>
<td>0.198</td>
<td>3.326</td>
<td>0.001**</td>
</tr>
</tbody>
</table>

**Discussion**

This research demonstrates the examination of the important elements that have an impact on employee job satisfaction and behavioral intentions to telecommute in the banking sector in Jordan. The theoretical framework of the current research was built based on the technology of acceptance model (TAM), with the additional four external variables of work-life balance, supervisors' support, system quality, employee self-efficacy, and perceived organizational support. In accordance with the results of the present data analysis, the proposed research model has been shown to be a useful and viable framework for technological acceptance, to experimentally understand employees' satisfaction and behavioral intentions to telecommute in the Jordanian context.

The current research findings confirm all the suggested hypotheses regarding the connections among the model's variables. In addition to that, the empirical data analysis findings have shown strong support for the extended TAM in anticipating employee job satisfaction and behavioral intentions to telecommute during COVID19. Specifically, the explanatory power of the present research model revealed an $R^2$ of 52.9% for employees’ satisfaction with telecommuting. Likewise, an $R^2$ of 50.9% for employees’ behavioral intentions to telecommute points out that the newly extended model can explain a relatively high percentage of dissimilarity in employees’ satisfaction and behavioral intentions to work remotely in the Jordanian banking sector. Furthermore, the study discovered that the influence of perceived ease of use, and perceived usefulness of telecommuting on employees’ satisfaction with telecommuting, was found significant. Additionally, perceived ease of use was affected substantially by perceived organizational support and perceived employee self-efficacy. Moreover, it was noted that perceived usefulness was heavily and significantly influenced by perceived supervisor support and perceived system quality. Last but not least, behavioral intentions to telecommuting were found strongly and impacted considerably by employees’ satisfaction along with telecommuting and perceived work-life balance.

The data analysis findings for the first hypothesis determined that perceived supportive work-life balance was found positively and significantly related to employees’ behavioral intentions to telecommute. Similarly, this finding is in line with findings by Palumbo (2020) and Wardana et al. (2020), who concluded that perceived work-life balance had a direct and significant positive effect on workers’ be-
havioral intentions to telecommute. Wardana et al. (2020) noted that work-life balance had a significant negative influence on turnover intention. This has been previously supported by several previous studies which demonstrated that reduced negative spillover was a result of a better work-life balance (Nitzsche et al., 2014; Sirgy & Lee, 2015). In addition, employees recognize telecommuting is seen as advantageous for balancing work-life difficulties and increasing productivity (Chen & Fulmer, 2018).

Further, teleworking had positive implications for teleworkers’ job engagement (Palumbo, 2020). Telecommuting enhances employees’ performance by giving them flexibility and freedom to work from anywhere while forming balanced satisfaction between work and home (Divol & Fleming, 2012). Based on the current research findings, perceived work-life balance is considered one of the significant factors that could influence employees’ behavioral intentions to telecommute. This is attributed to telecommuting’s ability to reduce conflicts between life and personal life, decrease stress levels, and increase job satisfaction. Therefore, telecommuting can enhance positive behavioral intention to work.

The data analysis showed that perceived supervisor support significantly influences employees’ perceived usefulness of telecommuting. According to the current study’s respondents, the degree to which supervisors care for their well-being and appreciate their contributions, remote working has played an important influence in changing workers’ attitudes and perceptions of the usefulness of telecommuting and their readiness to adopt remote working in the future. This finding aligns with prior research within the organizational theory context (Eisenberger et al., 2020; Mungania et al., 2016). Accordingly, employers who adopt “supervisor support” through advocating, supporting, and adopting flexible remote working patterns would shape, enhance, and construct employees’ perception of usefulness (PU). It is noted that managerial attitudes may be a vital factor in the strategic decision-making of whether to implement a telecommuting arrangement (Beham et al., 2015; Kaplan et al., 2018).

The data analysis demonstrated that perceived system quality used in remote working has a strong positive influence on Jordanian employees’ perceived usefulness of telecommuting. This outcome is in line with previous study findings presented by Ansong et al. (2017). Perceived system quality would significantly contribute to the ability of remote workers to telework with the increased capabilities of advanced systems used to assist them in completing their job duties and assignment (Allen et al., 2015; Powell et al., 2019). However, it is noted that secure internet connections, cloud computing, firewalls, high-speed computers (Think Pads), and smartphones are examples of sophisticated telecommunications systems (Allen et al., 2015; Moskaliuk et al., 2017). Belzunegui-Eraso & Erro-Garcés (2020) also suggested that remote workers increased with the advent of the laptop computer and advanced technological software. However, little empirical evidence has been found to underpin such a relationship in the existing literature.

According to the current study, there is a substantial positive association between these two constructs concerning perceived organizational support and its positive impact on employees’ perceptions of ease of using telecommuting systems. Furthermore, the current research confirms that perceived organizational support has played an important influence on the perceived ease of remote working in Jordan. These empirical findings were consistent with earlier research done in a variety of contexts (Esen & Özbağ, 2014; Zainab et al., 2017). To the best of our knowledge, however, only a few studies have looked at such correlations in the managerial setting.

Furthermore, the current research findings reveal that employee self-efficacy has a significant favorable influence on PEOU, which was found consistent with the assertions of previous studies (Luse et al., 2013; Purzer, 2011; Y. Wang & Haggerty, 2011; Xanthopoulou et al., 2013). The respondents of this study consider that higher levels of self-efficacy were vital for them to successfully execute duties assigned to them due to the virtual environment. It has been noted that most workers with higher self-efficacy are more likely to persist in completing tasks and perceive task difficulty to be minimal.
Likewise, it was demonstrated that employees’ self-efficacy impacted virtual competency, which influenced a teleworker’s levels of performance and job satisfaction (Y. Wang & Haggerty, 2011).

The perceived usefulness of telecommuting was discovered to have a considerable favorable impact on employees’ satisfaction with telecommuting. The present study’s sample argued that the nature of the information offered by sophisticated technology and working associated systems is a useful motivator that leads to better satisfaction in telecommuting. Employees will be more satisfied if they believe remote working is appropriate. This conclusion is consistent with previous research (Mbama & Ezepue, 2018; Virick et al., 2010). According to Virick et al. (2010), telecommuting permits flexibility and independence for teleworkers, which leads to meeting their job and personal life requirements.

It was expected that perceived ease of use would have a substantial effect on employees’ satisfaction with working remotely. This idea is supported by the present research findings. This conclusion was also found to be consistent with past relevant literature in a number of contexts and settings. A previous study, particularly in the context of e-learning, discovered that perceived ease of use was seen as an important component in students’ satisfaction with e-learning (ALQahtani & AlGahtani, 2014; Pham et al., 2018). Moving to the telecommuting context, according to Mbama and Ezepue (2018), PEOU is considered an essential factor for measuring and predicting “satisfaction”, thus leading to the adoption of flexible remote working. Employees’ preconceived assumptions and perceptions influenced their attitude towards accepting or rejecting flexible remote working. This research supports the hypothesis that perceived ease of using technology for telecommuting significantly impacts employees’ satisfaction with telecommuting. This leads to greater acceptance and higher intention to telecommute in the future. Finally, employees’ satisfaction with telecommuting was noted to have a solid significant positive impact on employees’ behavioral intentions to adopt flexible remote working arrangements in Jordan. Moreover, several prior research has validated this conclusion, which found a clear correlation between satisfaction and behavioral intentions in a variety of contexts, including the managerial environment (Avgoustaki & Bessa, 2019; Maier et al., 2013; Mbama & Ezepue, 2018).

**THEORETICAL AND MANAGERIAL IMPLICATIONS**

This research first examined the facilitators of telecommuting in one comprehensive model. Previous studies (De Menezes & Kelliher, 2017; Rasull et al., 2020) examined different factors independently, with limited insights into the effect of all factors combined. The TAM model adopted in this study provides a framework for the drivers of telecommuting and their impact on telecommuting intentions. Similarly, the study further contributes to the literature by highlighting a positive impact between work-life balance and telecommuting intentions. Such a relationship provides further evidence for the need to understand employees’ lifestyles in facilitating the adoption of telecommuting and increasing its efficiency.

Additionally, this study examined the factors affecting telecommuting from the employee’s perspective in the banking sector. While previous work focused on customers’ adoption of online banking services (Rasull et al., 2020), limited attention was given to employees’ acceptance of remote banking services. Since the bank employees deliver a superior customer banking experience, understanding the factors that influence employees’ endorsement of remote banking services can help them provide better services to the consumers. Therefore, this study extends the literature by outlining critical factors affecting employees’ acceptance of remote banking services.

Furthermore, this research provides empirical evidence for the effect of employees’ self-efficacy and organization support on the perceived usefulness of telecommuting. The literature assumed these relationships (De Menzes & Kelliher, 2017) with a bit of demonstration in the banking sector. By examining employees’ self-efficacy with telecommuting systems, this study shows a strong positive effect of this factor on the perceived ease-of-use of telecommuting systems. Such a finding suggests that training employees and raising their competency are critical to facilitating the transition towards
telecommuting. Conversely, employees with low perceived efficacy may struggle to use telecommuting systems. Therefore, future research should focus on understanding the self-efficacy factors for telecommuting to advance the literature. Finally, this study is the first to examine telecommuting in the emerging market of Jordan. Emerging markets remain under-researched despite their contribution to the world’s economic growth (Shankar & Narang, 2020). COVID-19 heavily impacted the Jordanian market, where the technological infrastructure was under-developed. Therefore, this research highlighted the importance of system quality in telecommuting since employees were not equipped with systems that facilitate working remotely.

Likewise, examining the Jordanian market may have influenced the relationship between work-life balance and behavioral intentions since cultural values and lifestyles are different from other markets. Therefore, the findings of this research provide a basis for comparative studies across other markets. In terms of managerial implications, this research provides critical recommendations for managers to facilitate the implementation of telecommuting. First, this study highlights the importance of organizational support on employees’ intentions to telecommute. The COVID-19 pandemic created a sudden shift towards telecommuting, leading to employees being unprepared to adopt such a work scheme. Accordingly, employees had to learn new systems to telecommute with minimal supervision. As such, their perceived ease-of-use of telecommuting was low. To increase employees’ acceptance of this work scheme, managers need to provide training sessions before moving them to the telecommuting scheme. These increase employees perceived self-efficacy with telecommuting, which smooths the transition toward remote working in the future. In addition, training will allow employees to solve technical issues that can arise from using online systems.

Second, this study reported a positive relationship between system quality and employees’ intentions to telecommute. Employees’ perceived ease of use of telecommuting justifies such a relationship. However, limited system quality and technological infrastructure can restrain employees’ telecommuting ability. For instance, not having access to banking software from home can create a dysfunctional system where an employee must revisit the office to complete the tasks. Given that banking systems are susceptible, organizations (banks) should invest in building their system infrastructure (including giving employees access to laptops, secured networks, IT assistance, etc.) to empower employees and enhance their perceived ease of use of telecommuting. Access to high-quality systems will create a seamless telecommuting experience for employees, which can yield positive intentions toward adopting telecommuting work scheme.

Third, this study suggests the importance of work-life balance for employees when telecommuting. Working from home while managing household duties can create complications for employees, particularly parents. Therefore, flexibility in terms of working hours is needed to increase employees’ acceptance of telecommuting as they will have more control over their life. As such, managers should develop remote working schemes for employees that consider lifestyle factors. For example, managers can create around-the-clockwork shifts that employees can sign up for according to their availability. This work pattern ensures that work efficiency is not compromised as the bank can have employees available around the clock whilst also providing maximum output from employees.

**CONCLUSION, LIMITATIONS, AND FUTURE WORK**

Using the Technology Acceptance Model (TAM), this study highlights significant relationships between telecommuting systems, quality, organizational support, and the perceived usefulness and ease of use in telecommuting. Employees who perceive telecommuting systems to be easy and receive supervision and training for using these systems are likely to adopt this work scheme. This study contributed new findings to the literature by investigating a comprehensive model for the impact of entrepreneurial education. However, some limitations could influence the results of this study. First, the empirical data used in this study covered one country (Jordan), limiting the generalisability of the findings. Second, cultural differences across employees from other emerging countries could outline different strengths for the relationships highlighted in the model presented. Particularly, mobility and
accessibility to transportation across countries may influence employees’ perception of remote working, consequently their behavioral intentions towards this scheme of work. Additionally, systems quality in Jordan may be different from other markets, which can influence the strengths of the relationships demonstrated in the model. Hence, further work should examine the framework presented in this study across other countries to gain additional insights.

Likewise, this study focused on the context of the banking sector. The sensitivity of data and transactions in this sector may influence employers’ and employees’ willingness to work remotely. In addition, the job descriptions of employees in banks moderate specific factors outlined in this model, including work-life balance. For instance, executive managers may have a higher overload in banks in contrast to front-line employees. Thus, future studies should explore different contexts, including manufacturing and consultation, to understand the industry’s effect on remote working. Similarly, future research should concentrate on the influence of job descriptions on employees’ intentions toward remote working.

Additionally, this study was conducted at the beginning of the COVID-19 pandemic. The disturbance caused by these unprecedented circumstances may have influenced the behavioral intentions toward telecommuting and remote working. For instance, corporates in Jordan had limitations with a technological infrastructure that influenced system quality factors and organizational support for employees to work remotely. As such, the perceived usefulness of remote working may not have been fully realized by employees, which affected their intentions towards this scheme of work. Therefore, a longitudinal study is recommended to examine employees’ acceptance of remote working and their behavioral intentions. Finally, the sample demographic showed that most of the respondents were females. Therefore, gender differences may influence employees’ willingness to remote work. Thus, future studies can examine demographic differences across genders to help organizations develop better remote working schemes. Finally, given that this study is quantitative, as suggested by Al Adwan (2017), mixed method-based research can provide valuable and contextualized research models.

REFERENCES


Adoption of Telecommuting in Banking Industry


Adoption of Telecommuting in Banking Industry


APPENDIX - SCALE ITEMS FOR EACH CONSTRUCT

Work-life Balance (Hill et al., 1998)
1. I keep worrying about work problems when I am not working.
2. I feel too tired after work to enjoy the things I would like to do at home.
3. I find that my job prevents me from giving the time I want to my partner or family.
4. I find that my partner or family gets fed up with the pressure of my job.

System Quality (Rivard et al. 1997)
1. Our system provides the functionalities needed.
2. Our System provides all the information needed.
3. Our System contains all the information required to produce comprehensive outputs.
4. Our System is available at all times at an acceptable speed.

Supervisor Support (Karasek., 1985)
1. My supervisor gives me credit for things I do well.
2. My supervisor is helpful in getting the job done.
3. My supervisor cares about me.
4. My supervisor appreciates me.

Self-Efficacy (Spreitzer, 1995)
1. I am confident about my ability to do my jobs.
2. I am self-assured about my capabilities to perform my work activities.
3. I have mastered the skills necessary for my job.

Organizational Support (Liu et al., 2022)
1. My organization appreciates my extra work.
2. A good performance is well appreciated by my organization.
3. My organization wishes to give me the best possible job for which I am qualified.

Perceived Usefulness (Davis, 1989)
1. Using banking system enables me to accomplish tasks more quickly.
2. Using banking system improves my performance.
3. Using banking system will increase my productivity.
4. Using banking system enhances my effectiveness.

Perceived Ease of Use (Bachtiar et al., 2018)
1. I find it easy to use our system to do what I want to do.
2. My interaction with our system does not require much effort.
3. It is easy for me to become skillful at using our system.
4. I have the knowledge necessary to use our system technology.

Employee Satisfaction (Dotson & Allenby, 2010)
1. I can do different things from time to time.
2. I am able to help people when I am working.
3. My work is important in the eyes of other people.

Behavioral Intention (Golden et al., 2006)
1. I will frequently work from home in the future.
2. I will strongly recommend others to work from home.
3. I plan to work from home.
AUTHORS

Dr. Al-Madadha holds a Ph.D. in Management from Cardiff Metropolitan University, United Kingdom, an M.B.A. from New York Institute of Technology, and a B.Sc. in Banking Management from Hashemite University. Dr. Al-Madadha teaches at Princess Sumaya University for Technology. Amro’s research focuses on leadership, empowerment, creativity, organizational behavior, and entrepreneurship. His research has been published in several international journals.

Mohammad Hamdi Al Khasawneh is an Associate Professor in the Department of E-Marketing and Social Media at Princess Sumaya University for Technology, Amman, Jordan. He is also the current head of the E-marketing and Social Media Department at Princess Sumaya University for Technology. He earned his Bachelor’s in Accounting from Yarmouk University, Jordan, followed by a Master of Business Administration in Marketing from Coventry University, UK, and a Ph.D. in E-Marketing from Griffith University, Australia. His research has been published in several international journals such as Journal of Internet Commerce, International Journal of Internet marketing and advertising, International Journal of Electronic Marketing and Retailing, International Journal of business excellence, International Journal of Technology Marketing, Journal of Information Technology Education, International Journal of E-Business Research, International Journal of Cyber Behavior, Psychology and Learning, Interactive Technology and Smart Education, and International Journal of Business Information Systems. He has presented papers at several international conferences. His research interests include internet advertising, entrepreneurship, search engine advertising, social media marketing, viral marketing, mobile marketing, mobile banking, consumer behavior, and corporate social responsibility.

Dr. Ola Al Haddid holds a Ph.D. in Business Management, from The University of Sheffield (UoS). She has published previously in the business technology discipline. Therefore, among her research interests is business technology. However, her primary focus and main domain of research interests are sustainable development, sustainable operations and practices, and natural resource management, particularly water resource management.
Dr. Ahmad Samed Al-Adwan is an Associate Professor in electronic business and commerce, Business School, Al-Ahliyya Amman University, Jordan. He holds a Ph.D. in Management Information Systems Studies/E-business, and an MSc in Information Technology Management from the University of Wales, UK. Dr. Al-Adwan is a member of many international affiliations. He has authored and published many research articles in several reputed international journals.