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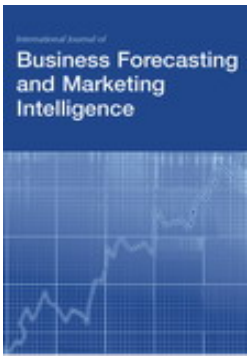

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Assessing the perceived e-readiness for teleworking: the case of a private company in Ghana

Acheampong Owusu

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Assessing the perceived e-readiness for teleworking: the case of a private company in Ghana

Acheampong Owusu

University of Ghana Business School,
Legon, Accra, Ghana
Email: aowusu@ug.edu.gh

Abstract: This study explores the readiness factors that influenced the adoption of teleworking in an organisation's operations. The perceived e-readiness model (PERM) was conceptualised as the theoretical underpinning for this study. The study used a sample size of 20 respondents who were purposively selected and interviewed for primary data. The data analysis was done through thematic analysis. The results revealed that, with perceived organisational e-readiness, the influencing factors were awareness, resources availability, commitment from top managers and executives of the firm as well as the implementation of governance measures and policies that facilitated the smooth telework processes in the firm. On the environmental e-readiness, government e-readiness was identified to be the only influencing factor, with market forces e-readiness, as a result of customer expectations, and supporting industries e-readiness were not felt to have had any impact in driving the firm to telework. Other implications are also discussed.

Keywords: telework; e-readiness; PERM model; qualitative study; Ghana.

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Biographical notes: Acheampong Owusu holds a PhD in Information Systems from Limkokwing University of Creative Technology, Cyberjaya, Malaysia. He is a Senior Lecturer at the Operations and Management Information Systems (OMIS) Department at the University of Ghana Business School. His research interests include business intelligence (BI) systems and analytics, technology diffusion, cloud computing, and e-commerce. He has published several research articles in peer-reviewed journals.

1 Introduction

The term 'teleworking' came into sight in the 1970s when it was used to represent the facilitation of work away from the usual office environment using telephone communication technologies rather than physical presence (de Vries et al., 2019). In this era of the 21st century, however, the emergence of more sophisticated technologies, i.e., information and communication technologies (ICTs) has provided the avenue for teleworking (Meroño-Cerdán, 2017). These technologies include portable computers or mobile computers, cloud computing systems and software, and reliable broadband

communications technologies that enable employees to work from remote locations commonly and asynchronously (Messenger and Gschwind, 2016). For example, workers can interact with their bosses, colleagues, or clients without having face-to-face interactions with them (Mayo et al., 2016). They can use tools like web-conferencing, audio-conferencing, instant messaging, and emails to perform these tasks and offer services (Meşhur and Ulusoy, 2013).

Teleworking is the ingenuity that is being adopted by firms in response to the way the demography of the workforce is changing, resulting in better effectiveness and globalisation of economic activity (Meroño-Cerdán, 2017). Telework has been defined to be synonymous with telecommuting (Baruch, 2001). It refers to a flexible work arrangement in which "employees perform all, or a substantial part of their work physically separated from the location of their employer, using IT for operation and communication" [Baruch, (2001), p.114].

According to the European Union, about 12% of employees telework, with IT companies leading in the number of companies that provide their employees with the opportunity to work from home (Allen et al., 2015). Hence, teleworking should be seen as a critical concept that is of importance to the social life and economic aspects of society (McGrath and Houlihan, 2002).

Even though teleworking has been studied by many researchers (e.g., Groen et al., 2018), not much has been done on the readiness for telecommuting by firms to ensure its success (Torten et al., 2016). Hence, this study sought to explore the perceived readiness factors that influenced teleworking in an organisation's operations using a private company (referred to as CompA) in Ghana as a case study.

Thus, the study seeks to answer the following research question:

1 What are the forms of telework in CompA?

2 What are the perceived readiness factors that influenced telework in CompA?

3 What are the outcomes of telework in CompA?

The significance of this study is three-fold, contribution to the body of knowledge, policy, and practice. Regarding contributions to the body of knowledge, the outcome of the study will provide insights into e-readiness for telework in a developing country which is lacking in the literature. In terms of policy, government agencies and policymakers can use the findings to formulate the requisite policies that will guide organisations that want to implement telework. Practically, the contributing factors that need to be looked at when it comes to telework will be revealed. This will help managers as to what decision to make when they are implementing teleworking in their organisations.

The rest of the paper is organised as follows: a literature review with the concepts and the theoretical foundation follows. This is followed by a methodology comprising data sampling size, data collection, and data analysis method used. Findings and discussions follow with a conclusion comprising implications and recommendations.

2 Literature review

2.1 Defining telework

Telework has received a lot of attention due to its ability to change or replace daily forms of commuting from home to the regular working environments and vice-versa, thereby reducing travelling periods associated with stress (Elldér, 2020). These abilities offered by teleworking are made possible with the development of new technologies and have generated more human and more efficient use of the potential of technologies and power of the Internet to replace the traditional forms of working (Kord et al., 2017).

According to the ILO (2016), the concept of teleworking has existed since the 1970s. However, despite its long existence, there has not been any definite definition of the concept (del Carmen Gutierrez-Diez et al., 2018), as it has been defined in many ways. Baruch (2001, p.114) defined teleworking as a flexible work arrangement in which "employees perform all, or a substantial part of their work physically separated from the location of their employer, using IT for operation and communication". Similarly, De Graaff and Rietveld (2007) defined telework as the use of ICT to facilitate full or partial work at home (or somewhere other than in the regular work environment). Also, Messenger and Gschwind (2016) refer to telework as one of the crucial ways of performing work in the 21st century away from traditional office spaces aided by new ICTs such as personal digital assistants and tablet computers.

In all these definitions as provided in the literature, one key pointer remains, which is the ability of workers to use technology to perform their duties without necessarily being at their substantive or regular duty post (Meşhur and Ulusoy, 2013; Ansong and Boateng, 2018).

2.2 Advantages of teleworking

Teleworking presents substantial benefits to people with disabilities. Through teleworking, people with some disabilities (especially mobility disabilities) could be considered candidates for telework because it enables them to work remotely by removing barriers related to health conditions, stress, safety, and the need for personal assistance at the designated worksite (Meşhur and Ulusoy, 2013; Bosua et al., 2017).

Also teleworking offers an opportunity for other groups who are unable to participate in working life for various reasons to find work or to continue to work. Examples of such groups include prisoners, pensioners, the hospitalised, pregnant women, and mothers with young children who can work through teleworking, or they can continue their jobs without interruption (Meşhur and Ulusoy, 2013). Further, teleworking bridges the disparity between rural and urban areas, between suburban areas and city centres, plummeting the drain on the environment by alleviating the transport system (reducing the number of cars used for commuting) coupled with transportation expenses, such as fuel, maintenance, or even in some cases the need to own a vehicle itself, is significantly reduced upon entering into a telework arrangement (Botzoris et al., 2016).

Again, for organisations, having fewer employees at the office increases on-site energy savings, as they can cut down costs by renting larger office space, coupled with saving on utility bills such as water and electricity (Beno, 2018). Moreover, teleworking helps to sustain job placement in a flexible job market (Meşhur and Ulusoy, 2013).

Additionally, considering that reporting to work physically requires formal business attire, telework decreases expenses on work clothes, as well as reduces the costs related to the upkeep of such attire, such as dry-cleaning bills or tailoring costs (Bunting, 2017). According to Kord et al. (2017), telework provides advantages to organisations and individuals who work in the organisation as well as general context advantages.

2.3 Challenges of telework

Despite the advantages or benefits of telework, there are still some conditions or situations that affect it. This study looks at the challenges from the individual or employee and organisational context.

Firstly, for teleworkers who work in the physical space of their homes, there is a blur difference between work and home activities (Martin and MacDonnell, 2012). This makes the concentration to work activities limited often making employees meet deadlines as sometimes they are tempted to use work hours to focus on their family or social activities (Hilbrecht et al., 2013).

Some authors (e.g., Fonner and Roloff, 2010; Delanoeije et al., 2019) also aver that teleworkers are likely to be interrupted by family or co-workers via email, calls, and chats, often leading to work-life conflict, as there is an uncontrolled boundary between work and personal life (Fonner and Stache, 2012; Tremblay and Thomsin, 2012). Thus, the supposed ability to work from anywhere and at any time may limit teleworkers' autonomy to decide when and where to engage with work (Mazmanian et al., 2013).

Also, teleworkers often become workaholics (Sarker et al., 2012) due to working longer hours (Basile and Beauregard, 2016; Anderson et al., 2015), partly as a result of the presence of work-related activities even after work when the times should be spent on personal or family-related activities (Adisa et al., 2017). For example, workers could still be answering phone calls after the close of business time because people think they are available 24/7 (Basile and Beauregard, 2016).

From the organisational or employer side, one of the critical issues arising from adopting telework practices is the perceived difficulty in monitoring and measuring employee performance and productivity respectively (Silva-C, 2019; Groen et al., 2018). In many instances of telework arrangements contracts, employers have relatively less control over what employees do daily when they are outside of the regular working environment and are, therefore, unable to properly monitor and assess such employees' job performance (Bunting, 2017). The lack of concentration according to Caillier (2014) is the autonomy and flexibility created by telework which makes teleworkers invest their time in their personal and family life issues instead of concentrating on their work.

Also, telework is seen to be a hindrance to organisational teamwork and collaboration as team members under telework practices may not physically collaborate, thereby reducing the ability to build consensus or understanding and implicit knowledge (Torten et al., 2016; Sarker et al., 2012). For example, among organisations' team members, telework can obstruct trust-building among them (Pyöriä, 2011) and reduce information exchange quality (Fonner and Roloff, 2010). Also, in some cases as averred by Tremblay and Thomsin (2012), team spirit and dedication can considerably be reduced as colleagues of employees who do not telework (non-teleworking co-workers) may feel left out of the perceived benefits enjoyed by their colleagues who telework.

Furthermore, with the reduction in social and informal interactions among employees, telework may add to feelings of social isolation and a lack of workplace involvement

(Maruyama and Tietze, 2012; Tremblay and Thomsin, 2012). Also, for most teleworkers, there is no urge to participate in organisational activities and events such as social outreach programs, as there is reduced identification with their organisations and reduced organisational commitment (Golden, 2009).

2.4 Review of relevant related studies on telework

Telework has drawn a great deal of scholarly interest over the past several decades (e.g., Kazekami, 2020; Beno, 2018; Meroño-Cerdán, 2017; Torten et al., 2016; Tavares, 2017; Tremblay and Thomsin, 2012).

Groen et al. (2018) for example investigated the relationship between the use of specific teleworking implementations and control system design using a survey of 897 employees from financial institutions in the Netherlands of whom 69% are teleworkers. They find among these employees who telework, there is a positive correlation between the number of hours that employees telework on the output controls that are put in place. Also, Kazekami (2020) investigated the mechanisms underlying the influence of telework on labour productivity in Japan and identify that appropriate telework hour increases labour productivity, but when telework hours are too long, productivity decreases. Other researchers like Beno (2018) sought to identify the factors that affect the attitude of teleworkers while keeping a focus on gender differences. Their findings indicated that the age and gender of generations X and Y and baby boomers do not affect the attitude of teleworkers.

Also, Tavares (2017) describes the health complications of telework on workers and identifies that there is a positive correlation between telework and worker health. However, there are also negative impacts on health such as depression and stress. On the whole, the findings reveal that telework is more likely to yield good than bad for individual health. Meroño-Cerdán (2017) also explored the special benefits and barriers to the adoption of teleworking by Spanish family firms and finds that the barriers do not have any impact on firms' adoption of teleworking practices.

In the context of Ghana, Ansong and Boateng (2018) sought to investigate the technological, environmental, and organisational factors that influence telecommuting adoption as well as the potential benefits of adopting telecommuting in the operations of a telecommunications firm in Ghana. They find that the firm and its staff had a lot of benefits from the adoption of telecommuting practices.

2.5 Theoretical framework

This study adopts and conceptualises the perceived e-readiness model (PERM). The model was propounded by Molla and Licker (2005a) and was originally used to explore e-commerce readiness. The model is made up of four adoption contexts (innovation, managerial, organisational, and environmental) which are broadly placed under two major constructs, being: perceived organisational e-readiness (POER) and perceived external e-readiness (PEER). Perceived organisational e-readiness is made up of the following constructs:

1 awareness (innovation context)

2 commitment (managerial context)

3 resources and governance (organisational context).

Perceived environmental e-readiness on the other hand refers to the level of support from government and other support-giving agencies to an organisation's e-commerce adoption, and the readiness of market forces to conduct e-commerce (environmental context).

2.6 Conceptual framework and propositions

The original model was conceptualised to explore only what really matters in this study. As e-commerce adoption can take various forms, Molla and Licker (2005a) identified two levels of adoption:

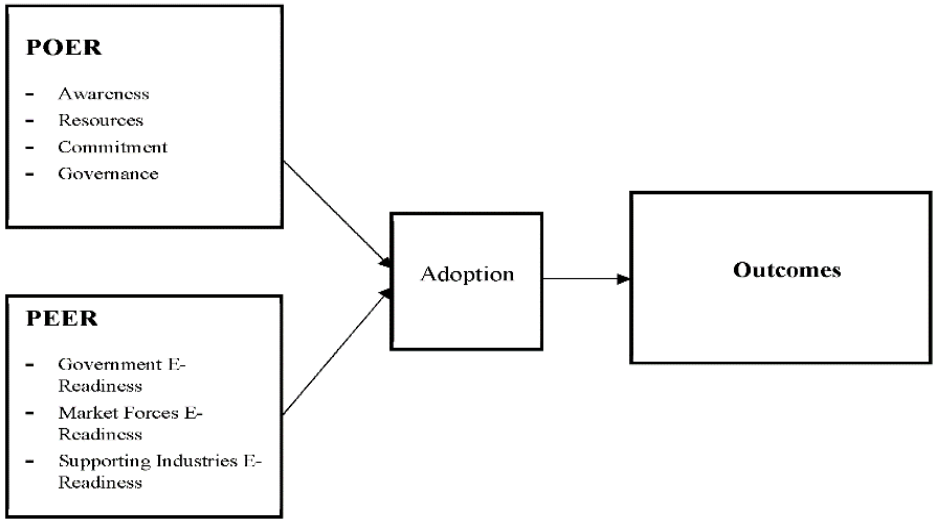
1 initial adoption

2 institutionalisation.

Where Initial adoption refers to an organisation's attaining an interactive e-commerce status and Institutionalisation referring to the extent to which an organisation can utilise e-commerce (reflecting its level of sophistication) and whether e-commerce has been an integral part of the organisation (Molla and Licker, 2005a).

However, within the context of this study, the focus on a firm that has already adopted telework is used as a case study. Given this, the concept of institutionalisation as seen in the original model is not considered. Rather, as proposed by El Rassi (2020), a model that considers 'outcomes' for the adoption – which was explored as the resultant matter that emerge from the adoption of teleworking by employees in the firm (Meroño-Cerdán, 2017) is used. The conceptualised model showing the constructs and factors is presented in Figure 1.

Figure 1 Conceptualised PERM model for teleworking



2.6.1 Perceived organisational e-readiness factors

- Awareness – this refers to the insights, perceptions, understanding, and projections that an organisation has regarding the benefits and risks of telework (Molla and Licker, 2005a; Hung et al., 2014). According to Swanson (1994), an organisation's awareness of innovation and its benefits is an important initial stage that may affect the decision to adopt or reject the innovation. Hung et al. (2014) for example in a study on e-readiness of website acceptance and implementation in SMEs find that awareness of a corporate website has a significant positive effect on both the intention to adopt it and the degree of implementation. Thus, it is proposed that:

  Proposition 1 Awareness of the benefits and risks of telework will influence the readiness to telework.

- Resources – this refers to the level of technological, human, and business resources the firm has to support teleworking (Broni and Owusu, 2020; Molla and Licker, 2005a). The provision and availability of resources affect the capacity of an organisation to respond to the challenges and opportunities of teleworking (Molla and Licker, 2005a; Hung et al., 2014). These can include human resources (employees with adequate information technology (IT) and other skills needed to telework), technological resources (extent of computerisation, IT base of an organisation, and experience with network-based applications), business resources (capabilities and assets, including the openness of organisational communication, risk-taking behaviour, nature of existing business relationships, and financial resources). Hung et al. (2014) for example in a study of e-readiness of website acceptance and implementation in SMEs find human resources had a significant positive effect on SMEs corporate website acceptance. Thus, it is proposed that:

  Proposition 2 Resource availability and skills needed to telework will influence the readiness to telework.

- Commitment – this is about the support given by key members (e.g., CEOs, heads of departments, line managers) of the organisation to champion the adoption of teleworking (Molla and Licker, 2005a; Owusu et al., 2017; Acheampong and Moyaid, 2016). The commitment of these key members to the implementation of IT is a critical success factor (Acheampong and Moyaid, 2016) as most IT adoption projects, especially in developing economies tend to fail in the absence of top-level management commitment (Wang and Cheung, 2004). Ali and Alrayes (2014) for example in their study of the effect of e-readiness factors on the adoption of e-procurement in the kingdom of Bahrain identified commitment as the most influential factor contributing to the adoption of e-procurement. Thus, it is proposed that:

  Proposition 3 Commitment and support from managers in the organisation will influence the readiness to telework.

- Governance – this is about the organisation's strategic, tactical, and operational model and how it supports the implementation of technology projects (Molla and Licker, 2005a; Hung et al., 2014). This includes the way organisations allocate resources and make decisions when it comes to implementing technology projects. An organisation's governance model that does not give priority to technology

projects adoption affects how the organisation adopts technology. Hung et al. (2014) for example in a study on e-readiness of cooperated website acceptance and implementation in SMEs finds governance to have a significant effect on both the intention to adopt a corporate website. Thus, it is proposed that:

Proposition 4 The governance of the organisation's business operations will influence the readiness to telework.

2.6.2 Perceived external e-readiness factors

- Government e-readiness – this refers to the role played by the government in the adoption of technology (Molla and Licker, 2005a; Hung et al., 2014). Having a government that does not develop its IT infrastructure and put in place policies and interventions to ensure smooth implementation and adoption of technology by citizens and business affects IT adoption in the country, especially in developing countries (Montealegre, 1999). Government e-readiness can include providing supportive infrastructure, and legal and regulatory frameworks. Ali and Alrayes (2014) for example in their study of the effect of e-readiness factors on the adoption of e-procurement in the kingdom of Bahrain identified government e-readiness as an influential factor in the adoption of e-procurement. Thus, it is proposed that:

  Proposition 5 Government involvement and support will influence the readiness to telework.

- Market forces e-readiness – this refers to the application and use of technology by an organisation's competitors, customers, suppliers, and other business partners (Molla and Licker, 2005a; Hung et al., 2014). For example, pressure from a firm's market forces (clients, suppliers, partners) can drive or force a firm to adopt a particular technology (Molla and Licker, 2005a). Ali and Alrayes (2014) for example in their study of the effect of e-readiness factors on the adoption of e-procurement in the kingdom of Bahrain identified government market forces e-readiness as an influential factor in the adoption of e-procurement. Thus, it is proposed that:

  Proposition 6 Market forces that interact with the firm will influence the decision to telework.

- Supporting industries e-readiness – this refers to the availability of other industries to provide support services for the technology adopted by firms (Hung et al., 2014; Molla and Licker, 2005a). These include the availability and affordability of services from the IT industry. In most developing countries, the IT industry is not fully developed to provide supporting roles to companies that adopt a particular technology. Hung et al. (2014) for example in a study on e-readiness of corporate website acceptance and implementation in SMEs find supporting industry e-readiness as positively impacting SMEs intention to accept a corporate website. Thus, it is proposed that:

  Proposition 7 The support of industry stakeholders of the firm will influence the decision to telework.

2.6.3 Outcomes

This was conceptually explored as the resultant matters that emerge from the adoption of teleworking by employees in the firm (Meroño-Cerdán, 2017). According to Tavares (2017), there were positive and negative effects of teleworking for workers. Thus, there is the need to explore outcomes (be it positive or negative) on worker performance, not just in the health sector but also in other sectors. It is therefore proposed that:

Proposition 8 Teleworking has a resultant positive and negative impact on workers and organisations.

3 Study methodology

The research approach used for this study is qualitative, as the study seeks to understand the perspectives and behaviour of the people in situations and the context within which they act.

3.1 Target population and sample size

The target population for the study is managers of CompA and specific employees who engaged in telework in the organisation. In all, there are five persons with managerial roles and 24 regular employees. In this study, a sample size of 20 employees, comprising managers and regular employees were targeted to be interviewed.

3.2 Data collection

The data collection was done through interviews. An interview guide was developed based on the themes of the research to provide answers to the research questions. Interview sessions were held with managers and employees who telework. The interviews were done in two segments: one for the managers and another for employees. The segmentation was done because the opinions of subordinate employees may be different from that of the managers. Additionally, the segmentation ensured the researcher can cover all relevant aspects of the study that neither of them can independently provide.

3.3 Data analysis technique

Data for this study were analysed via thematic analysis. Interviews recorded from respondents were first transcribed into text and carefully reviewed to identify key views presented by respondents and how they relate to themes in the research objectives and questions.

4 Findings and discussions

4.1 Company profile – CompA

CompA is a firm that is dedicated to creating and delivering world-class media planning and purchasing services. With over 12,000 employees operating in over 100 countries, CompA Ghana office is part of the world's biggest media network. The firm operates with a feeling of urgency and dedication to offering best practices and the highest return on investment (ROI) to its customers. It is one of Ghana's top media agencies and has consistently pioneered thought leadership in the industry by continuously reviewing syndicated technologies available in the nation in order to generate meaningful knowledge of audience behaviour and direct clients' investments in the media space. The firm also undertakes research to obtain insights into customer behaviour and provides local unique tools. CompA has its own products, such as the Media Facts Book, and uses worldwide tools such as OMNI, OMD Design, and others to provide data-driven solutions to its clients.

4.2 Profile of respondents

The 20 employees interviewed comprised four managers and 16 regular employees. Eight of them were male and 12 female. For anonymity and ethical purpose, only the first names of the respondents are provided.

4.3 Forms of telework in CompA

From the feedback received from the respondents, working from home was the preferred location for most employees. Thus, the formal office environments are now in the home of the employees. Some responses that pointed to this included:

> "I am often working from home. I have set up a desk where I am able to work like I am in the office" (Roslyn, regular employee)

Another said:

> "I work from home basically. These days there is nothing like cafés where you can go and sit. Now everyone has access to the internet." (Faustina, regular employee)

This finding corroborates that of Abbott and Yoong (2005) that workers (either full-time or part-time) are able to perform home-based teleworking of their duties during regular business hours while they are at home.

4.4 Perceived readiness factors that influenced the adoption of telework

The readiness of the firm to telework was explored using the two constructs of the perceived e-readiness model. These are the perceived organisational e-readiness (POER) and the perceived external e-readiness (PEER) Factors.

4.4.1 Perceived organisational e-readiness

In this research, the perceived organisation e-readiness by CompA was explored based on the level of awareness of telework practices, the resources to telework, the commitment and support from the leadership of the firm, and the governance structure in the form to support telework practices.

4.4.1.1 Awareness

The findings revealed that compared to the traditional ways of commuting to the regular office environment where employees had to spend hours in traffic and the costs associated with transportation, they could recognise that teleworking provided them with more flexibility and convenience in work arrangements. Some of the responses regarding this assertion include:

> "I have more flexible time to work and have time for my Family. It has been great so far. Some of us were actually doing some teleworkingbut COVID expanded that." (Ralph, manager)

Another said:

> "I was excited because of my convenience in working from home." (Rosalyn, regular employee)

These findings have similar traits to the assertion by Webster (2018) that as computer technology improves, more employees and businesses are able to take advantage of flexible work arrangements like telecommuting, which allows employees to work from home.

4.4.1.2 Resources

The findings reveal that employees had the needed skills to be able to telework. For most employees, they were abreast in the working of the various platforms and technologies needed to support their teleworking practices. Additionally, there were the needed available devices and technologies to be used for the telework practice, such as laptops and internet devices. Some of the responses regarding this assertion include:

> "Yes, ability to navigate Teams, Slack and Zoom either using Phone or Laptop. Because we work with global brands, these skills are already embedded in the teams when you are employed. COVID expanded our teleworking, so we had to get more laptops and MiFi for staff to be able to telework and we have servers that enable remote teleworking. Plus we are given monthly data allocation for the internet." (Ralph, manager)

Another said:

> "I am able to work with no supervision and also navigate my way around teams and Zoom for our client meetings. There is also this digital platform called TEAMS that we connect to be able to access documents and files that we work with." (Faustina, regular employee)

This finding corroborates that of Owusu et al. (2017) that organisation readiness in terms of financial resources, manpower, and IT infrastructure plays a key role in the adoption of novel technologies.

4.4.1.3 Commitment

The findings in this study reveal that top managers have been very accessible, and supported employees when the company decided to go full-scale on teleworking. The support includes making resources available for employees, such as giving approvals for training, and also sanctioning the telework process as they availed themselves to be reached via telework channels. Some of the responses from employees include:

> "Our manager has been supportive. I am able to call or access any of them when I need an information. On a scale I would give them 8 out of 10." (Joel, regular employee)

Another said:

> "The support has been good, literally had trainings for everyone on how to use these applications and constantly check up on us on how we are faring whiles working from home." (Rosalyn, regular employee)

Another said:

> "The CEO himself joins the zoom sessions and calls. Me personally, this gives me some reassurance that the big people in the company are supporting the process." (Ernest, regular employee)

This finding corroborates that of McAlearney (2006) who asserted that effective leadership also requires the capacity to empower and encourage people, establish, and communicate a vision, develop, and nurture trust and relationships, adhere to recognised norms and standards, and inspire staff to embrace change.

4.4.1.4 Governance

In this study, the findings indicate that there was the introduction of policies for 'one-employee-one laptop' to ensure that employees were able to telework, as well as policies to provide monthly internet data allowance for staff. Additionally, training on virtual work practices was instituted to keep staff abreast with remote work practices, especially on existing platforms and newly introduced ones. Some of the responses were:

> "The company made provision of laptops for all staff, and monthly internet which was financed by the company." (Ralph, manager)

Another said:

> "There is a monthly allocation for data and then laptops available, initially I was using a desktop. There was also continuous training on how to use the teams and other applications." (Gideon, regular employee)

This finding corroborates that of Molla and Licker (2005a).

4.4.2 Perceived external e-readiness factors

In this research, the perceived external e-readiness by CompA was explored through government e-readiness, market forces e-readiness, and supporting industries' e-readiness that aid the firms telework practices.

4.4.2.1 Government e-readiness

In this study, the legal regulation on the COVID-19 work restriction by the government of Ghana, as well as the temporary waiver on electricity bills for citizens were attributed. Some of the responses include:

> "Government lockdown necessitated that we all could not be at work at the same time and there were some freebies in water and electricity for some months." (Ralph, manager).

Another's response was:

> "There was lockdown order from the president, so we had no option than to comply, but the free electricity also helps because, when you are at home you spend more on electricity." (Faustina, regular employee)

This finding corroborates that of Hung et al. (2014) who find out government e-readiness which includes the policy to promote, support, and establishment of the related system as a standard for websites influences its adoption and that of Broni and Owusu (2020) who find out that regulations and policies, and government initiatives on technology are essential influencing factors evaluating the readiness to adopt blockchain in a developing economy.

4.4.2.2 Market forces e-readiness

The market forces e-readiness was explored by way of the pressure from the firm's market forces (clients, suppliers, partners) that influence their move to telework. The revelations were that the influence of some clients was not a major driver for their teleworking. Some of the responses regarding this theme were:

> "There were no competitions, but you see, when the lockdown came, most companies including our clients moved online so if you have a meeting and the client wants to do it online you cannot say no. You have to meet them online because most meetings are not online." (Desmond, regular employee).

Another said:

> "We don't really have any competition from anyone just that these days, most clients because of the COVID-19 want to do online meetings and discussions." (Nana, manager)

The findings are contrary to earlier research (Zhao, 2008) which confirmed that customers and clients drive the adoption of a particular technology.

4.4.2.3 Supporting industries e-readiness

The revelations were that there was no support from any industry player or actor. Most of the arrangements to ensure the success of the firm's teleworks were efforts by the firm and not anyone or person outside of the firm. Below are responses from some of the employees regarding the supporting industries' e-readiness.

> "I do not think we have any support from any technology player. Even the Telco's that we thought will reduce their data charges did not because the data we use here in Ghana is a bit expensive." (Gideon, regular employee)

Another said:

> "Everything we do from home is based on the allowances that are given to us. There were concerns from Ghanaians for the government to even reduce price on internet data, but nothing happened." (Ralph, manager)

This finding is in the variance of that of Hung et al. (2014) who found out that supporting industries' e-readiness influences the intention to accept a corporate website by SMEs.

4.4.3 Outcomes

This section presents the findings on the resultant outcomes in terms of benefits and challenges. These benefits were further broken down into individual benefits and firms level benefits.

4.4.3.1 Individual level benefits

Regarding individual level benefits, the employees indicate that telework reduced their spending on transportation to work, either using personal vehicles where they had to purchase fuel or using public transport or taxis where they needed to pay transportation to fares. Further, it offered the opportunity for flexibility and convenience in work arrangements, as employees are able to choose their own hours of work engagements and plan that suit their own productivity needs. Some of the responses given include:

> "I get to work at my own pace and manage my time well." (Joel, regular employee)

Another response was:

> "I am able to take most initiatives on my own with less supervision. It is more flexible, and I hardly work under pressure." (Rosalyn, regular employee)

This finding corroborates the assertion by O'Brien and Aliabadi (2020) that teleworking could eliminate transportation and reduce commuting time to travel to the central office, which carries a significant environmental and economic cost reduction for the teleworker. Further, telework offered the opportunity for flexibility and convince in work arrangements, as employees are able to choose their own hours of work engagements and plan that suit their own productivity needs. The findings also reveal telework employees (and their managers) have more productive time working at home than in the traditional office environment. This corroborates that of Kord et al. (2017).

4.4.3.2 Firm-level benefits

For the company, the benefits include a reduced level of consumption for office supplies and utilities such as water and electricity and the maintenance of the office and washrooms. Thus, the firm was able to channel the funds meant for such overhead costs into other productive activities. Additionally, telework made it possible for the firm's business continuity and operations in the height of the COVD-19 pandemic where public engagement in one location such as the traditional office environment needed to be avoided as there was a need to be socially distant in order to reduce the spread of the coronavirus. Moreover, clients of the firm also had resulted to telework practice and needed to transact business virtually. Some of the responses were:

> "I think now we are spending more time out of the office, which means we have fewer bills for the office because there is less use of electricity, cleaning and all that." (Phyllis, manager)

Another was:

> "We are able to keep the business going because it is COVID-19 times and all our clients have moved online so we also need to. No one will be willing to meet you face to face. They are scared of COVID-19." (Agatha, manager)

The findings support that of Roitz and Jackson (2006) who find out that during pandemics (e.g., Hurricane Katrina in the USA), telework contributes to business continuity, with significant advantages for firms, their customers, and employees.

4.4.3.3 Individual level challenges

The individual level challenges emerging from the findings of this study include the lack of concentration on tasks leading to them missing deadlines as employees are often distracted by their family and other social activities. The findings also point to more stress and fatigue in working long hours partially due to the fact that work-related activities are present even when employees are supposed to be off work, closed or time should be spent on personal or family-related activities. There was also an interesting finding related to individual-level challenges. These pointed to the rise in the cost of electricity and utility bills on the part of employees as a result of having cooling systems on (e.g. fans and air-conditioners), charging internet access points devices such as routers and MiFi's as well as laptops. There were also issues with power outages and challenges with internet speed and connectivity as some employees often stayed hours without electricity due to power outages and often had poor internet connectivity or had their laptop or internet access point device batteries run out because there was no power available to charge them at a particular time. Some of the responses that unearthed these findings include:

> "I sometimes become lazy, because there is not really someone physically here checking up on work done. There is disruption of internet because initially I was using my phone as hotspot so when a call comes it disrupts me especially when I am on a call meeting." (Lisa, regular employee)

Another said:

> "Because I am not in the office laziness and boredom sets in sometimes which contributes to my inability to finish my work." (Phyllis, manager)

Another response was:

> "There is poor internet challenges and slowness of laptops or computers. And interestingly, because I am not in the office working I have realised my electricity finishes earlier than usual. Thank God there was some free electricity else it would have been terrible to be buying credits every week." (Nana, manager)

This finding affirms that of Hilbrecht et al. (2013), Martin and MacDonnell (2012), Delanoeije et al. (2019) and Mazmanian et al. (2013) who indicate that home-based teleworkers are often unable to handle the temptations to drift their attention from their work schedule to family and other social activities that are going on in the home environment and are not able to discipline themselves to stick to work arrangements then

they work from home. The findings also point to more stress and fatigue in working long hours partially due to the fact that work-related activities are present even when employees are supposed to be off work, closed or time should be spent on personal or family-related activities as indicated by the authors such as (Sarker et al., 2012; Basile and Beauregard, 2016; Anderson et al., 2015; Adisa et al., 2017). There was also an interesting finding related to individual-level challenges. These pointed to the rise in the cost of electricity and utility bills on the part of employees. The challenge was that given their cost of staying at home power (electricity) and other utilities that were supposed to be used at the office were now being spent at home. These include having cooling systems on (e.g. fans and air- conditioners), charging internet access points devices such as routers and MiFi's as well as laptops. This finding is corroborated by Nakanishi (2015) who find out that telework increases energy usage at home while decreasing it in the office.

4.4.3.4 Firm-level challenges

The challenges in teleworking at the firm level included reduced team interaction or synergy, difficulty in making work arrangements, especially for teams, difficulties in supervision, and challenges in meeting clients' deadlines as a company. Furthermore, companies have difficulties in allocating duties between office staff and telecommuters. Some of the responses that unearthed these findings include:

> "As a manager, it is difficult for me to track things done because the people are so far from you, and there are also network challenges and gadget failure that people use as an excuse anytime you are for deliverables." (Phyllis, manager)

Another response was:

> "Some of the employees have become lazy, hiding under the disguise of bad network and power outages to complete the task given to them." (Agatha, manager)

This finding is corroborated by Silva-C (2019) and Groen et al. (2018) who indicated that firms or employers are often constrained in terms of monitoring and measuring employee performance and productivity respectively since such employers are not physically present in the office to be seen as has been found in this study.

5 Conclusions and recommendations

5.1 Contribution to literature

This study has made a significant contribution by demonstrating how the rollout of teleworking practices benefits a firm as well as its associated challenges. This evidence underlines the significance of the practice to individuals as well as firms. The study also supported the conceptualisation of the perceived e-readiness model (PERM) by examining the different thematic areas, such as perceived organisational e-readiness (POER) factors and the perceived external e-readiness (PEER) factors.

The results of the study show that perceived organisational e-readiness – which includes factors of awareness, resources availability, commitment from the top managers and executives of the firm as well as the implementation of governance measures and policies were key drivers of smooth telework processes in the firm. However, in terms of environmental e-readiness, government e-readiness was identified as the main influential element, with market forces e-readiness as a result of consumer expectations and supporting industries e-readiness having no impact on the firm's decision to telework. The study also adds to what is already known in the literature about the benefits and results of teleworking for both individuals and businesses.

5.2 Implications for firms

The benefits connected with telework are critical in firms' organisational, operational, and financial transformation based on the findings of this study. With most businesses and institutions moving online recently working via virtual means, it is critical for firms to include virtual engagements and platforms in their operations. Telework practices' expanded reach will give firms access to larger market and physically inaccessible markets, increasing their income productivity. Furthermore, it will lower operational costs. However, firms must guarantee that employees continue to receive ongoing refresher training to keep them up to date on the ever-changing technical developments and improvements, particularly concerning new ways and methods of remote work. Adoption of new remote platforms and technologies will also guarantee that firms can meet up with evolving and emerging technologies that are used in remote work environments.

5.3 Implications for policymakers

The significance of the outcomes of telework practice should serve as a guide for policymakers, especially in the labour and employment sector in developing the labour policy regulatory framework that can better shape the practice. The directive from the government at the height of the coronavirus pandemic for organisations to resort to remote work practices is a step in the right direction. However, the execution of these restrictions becomes difficult. The capacity of supporting industries such as internet service providers to support the drive for remote work is also essential. Again, teleworking can help reduce the traffic situation in our major cities, especially Accra drastically. Therefore, the government must make it one of its development agendas to help develop the necessary infrastructure that will aid in teleworking.

5.4 Limitations and suggestions for future studies

In the same way that any other study has some limitations, this study has some as well. One main limiting aspect was the sample size. The study's capacity to discover a cause-effect link between the parameters of analysis and their actual influence on the subject under observation was restricted by the use of a qualitative methodology incorporating 20 employees from the same company. Thus, generalisation of the Ghanaian context is impossible.

Due to the study's shortcomings, the following recommendations for future research have been made. Instead of using just employees and managers of one company, future researchers might concentrate on a broader range of samples such as clients of the firm as well as surveying employees from different companies. Future research can also use a quantitative approach to establish a cause-effect relationship between the constructs to determine from a statistical point of view the true impact of these variables on telework practices.

5.5 Conclusions

The purpose of this study was to explore the perceived e-readiness factors that influenced an organisation to adopt telework practices in Ghana using CompA as a case study. This was accomplished using a qualitative technique of 20 respondents in the firm. Table 1 summarises the propositions developed out of the study and an updated conceptualised model based on the study is provided in Figure 2.

Figure 2 A revised conceptual model based on the study findings

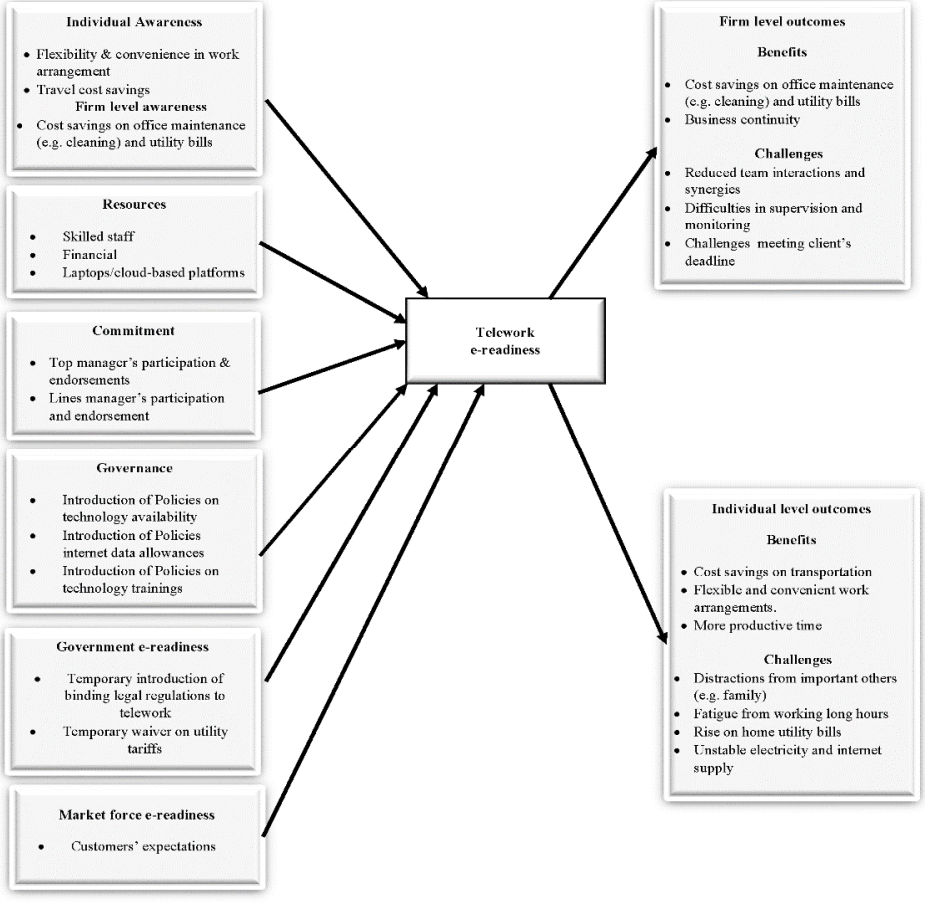


Table 1 Status of propositions after the data analysis and discussions

No	*Propositions*	*Status*
1	Awareness of the benefits and risks of telework will influence the readiness to telework.	✓
2	Resource availability and skills needed to telework will influence the readiness to telework.	✓
3	Commitment and support from top managers in the organisation will influence the readiness to telework.	✓
4	The governance of the organisation's business operations will influence the readiness to telework.	✓
5	Government involvement and support will influence the readiness to telework	✓
6	Market forces that interact with the firm will influence the decision to telework	×
7	The support of industry stakeholders of the firm will influence the decision to telework	×
8	Teleworking has a resultant positive and negative impact on workers and organisations.	✓

Notes: ✓ – the proposition was identified to be influential.
× – the proposition was not identified to be influential.

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