



# Remote Working and Task Innovativeness – an Integrated Resource Based View and Antecedent-Behaviour-Consequence Perspective

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## Abstract

In response to the COVID-19 pandemic, organisations across the world have been adopting different strategies, including remote working (RW), to continue with their normal routines. However, little is known about the impact of RW strategy on task innovativeness, organisational performance, and employees' continuance intention to remote work post-COVID-19. Using a variant of the resource-based view and the antecedent-behaviour-consequence models, data was collected from a total of 643 employees in the United Kingdom (UK) and Ghana; and analysed using structural equation modelling (Study 1). The results showed and confirmed a positive effect of RW strategy, information systems (IS) resource availability and capabilities on employees' task innovativeness leading to improved organisational performance. Further, interviews were then conducted with 22 participants from Ghana and the UK (Study 2) to understand the reasons for the outcomes in Study 1. These provided a basis for employees' continuance intention to remote work. The need to upgrade the current levels of IS resources to support job redesign and responsive workaround in times of uncertainty is highlighted for the consideration of businesses, organisations, and policymakers.

**Keywords** Remote working · Information systems · Resource-based view · Task innovativeness · Employee performance · COVID-19

## 1 Introduction

Remote working is “a work practice that involves members of an organization substituting a portion of their typical work hours (ranging from a few hours per week to nearly full-time) to work away from a central workplace-typically principally from home-using technology to interact with others as needed to conduct work tasks” (Allen et al., 2015, p. 44). Several different definitions of the concept have been proffered but the underlying idea remains the same working from

home (Bosch-Sijtsema & Sivunen, 2013; Mokhtarian, 1991; Shockley & Allen, 2007). In simple terms, therefore, remote working is working away from the office either from home or from other locations (Lal et al., 2021; Dwivedi et al., 2020). It is the use of information and communication technology tools to get work tasks done from anywhere and everywhere, provided it is not at the office.

Working from home, as a concept, was coined in the 1970s (Allen et al., 2015; Avery & Zabel, 2001). At the time, ‘telecommuting’ was the phraseology used to capture it. The term, ‘telecommuting’ was originally brought into being by a National Aeronautics and Space Administration (NASA) employee, Jack Nilles, and was done in response to the then oil crisis (Allen et al., 2015; Avery & Zabel, 2001). The concept is embodied also in terms such as telework, virtual work, remote work, distributed work, and flexible work arrangement. The initial understanding behind the term was that instead of employees coming from their homes through the long commutes to work, why not move the work to the homes of those employees, and by so doing avoid traffic and lessen fuel usage during the oil crisis (Allen et al., 2015). The combined effect of the proliferation of digitation

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technologies especially productivity tools (Dwivedi et al., 2020; Singh, et al., 2022) and digital transformation of enterprises due to the pandemic (Battisti et al., 2022) have enhanced the adoption of remote work arrangements. However, the current primary consideration of remote working has been in response to the COVID-19 pandemic.

Studies show there is growing evidence linking remote working to outcomes of prime concern to organizations such as employee productivity and retention (Gajendran & Harrison, 2007; Martin & MacDonnell, 2012). According to Miebaka et al. (2018), a lot remains unknown about the effect of remote working especially as it pertains to organizational performance. For example, there is a lack of studies that explicitly explores how organisational resources mobilised in response to the pandemic impacted on tasks innovativeness of employees. In addition, whilst there are calls for organisations to make remote working a permanent possibility for workers, little evidence has been adduced to justify this. This study therefore aims to contribute to understanding the justification for remote working in a post-COVID-19 world of work from the perspective of task innovativeness and employee performance during the COVID-19 pandemic. To achieve this, the study draws on survey data from a developing (Ghana) and a developed (UK) country context to provide a multi-country perspective of:

- 1) the relationship between organisational resources and tasks innovativeness as a result of remote working during the COVID-19 pandemic
- 2) the impact of task innovativeness of employees as a result of remote working on employee performance and intention to continue remote working post-COVID-19.

This paper, therefore, explores the critical dimensions of remote working and task innovativeness, aiming to push the boundaries of Information Systems (IS) research. As a frontier IS topic, we integrate the Resource-Based View (R-B-V) with the Antecedent-Behaviour-Consequence (A-B-C) framework to offer a novel perspective on remote work effectiveness. This novel approach provides a unique theoretical lens to evaluate how organizations can leverage their IS resources for innovative tasks in remote work settings. This study is a frontier IS contribution as it takes a multi-theoretical and multi-methodological approach to explore the relationship between RW as an IS strategy, resources, and capabilities (upskilling and deskilling) task innovativeness and employee performance. There are very few frontier IS studies on IS upskilling such as Li (2022) whose study was at best a perspective article. This study therefore makes a unique contribution to IS literature by providing perhaps the only empirical study thus far on IS capabilities specifically deskilling and upskilling in the context of remote working with cross-cultural evidence from Ghana and the UK.

Methodologically, whilst Lal et al. (2023) and Venumuddala and Kamath (2023) approached their study on remote working from a qualitative and Cho and Park (2022) and Gittens (2021) did so from a quantitative perspective. To the best of our knowledge and as of the time of writing this article, very few studies may have used a mixed-method approach. This study thus offers a robust sequential explanatory multi-method approach to first establish the relationship between the key constructs and in addition, explore explanations for the observed relationships.

The next section of the paper reviews the literature on the resource-based view, remote working, tasks innovativeness and employee performance. This will lead to the development of a conceptual framework to underpin the study. The methodology adopted is then discussed by highlighting the context of the study, method of data collection and analysis of data. The penultimate section of the study discusses the findings and highlights implications for theory, management, and policy. The study ends with the conclusions, limitations, and future research directions.

## 2 Literature Review and Conceptual Framework

### 2.1 Resource-based View and A-B-C Model

The resource-based view (RBV) was proposed by Wernerfelt (1984) to investigate the utility of analysing organisations from a resource-based perspective rather than a product-based one. A resource is something that might be considered a firm's strength or weakness. For the corporation, resources and goods are opposites. Different goods demand different resources, and most resources may be applied to multiple products. By stating the magnitude of the firm's engagement in various product markets, one may deduce the minimal resource commitments required. On the other hand, by defining a firm's resource profile, it is possible to determine the ideal product-market actions.

Wernerfelt (1984) presented three critical assertions in his study, among others: (1) Assessing firms through the lens of their resources generates insights that are immediate when compared to the conventional product perspective; (2) Strategy formulation by larger firms requires finding the right balance between utilization of existing resources and the design of new ones, such as remote working in the post-COVID era; and (3) Acquisitions can be viewed as buying a bundle of resources in a highly imperfect market. However, resource acquisition based solely on a scarce resource might increase resource imperfection and the chances of maximizing the resource mobilization for productivity.

According to Barney (2001), RBV presupposes that resources and competencies may be allocated differently amongst competing organisations, that these disparities can persist over time, and that they can help explain why certain firms regularly outperform others. It is widely accepted that for a firm's resources to contribute to the company's competitive advantage, such resources must be valuable, scarce, difficult to replicate, and backed by the whole organisation (Cardeal & Antonio, 2012; Kabue & Kilika, 2016). The resource may be physical or intangible. By itself, a resource does not give a business a competitive edge; innovation is necessary. As a result of the above, the resource-based approach seems to argue that the longevity of competitive advantage is contingent on a firm's capacity to innovate. This paper takes a resource-based approach to analysing remote working as a strategy for an enterprises' competitive advantage. In other words, remote working will be understood in this research as a resource that contributes value to a firm's competitive advantage. However, the addition of such value is context-dependent, a result of the market's prevailing dynamics, one that is highly driven by the pandemic. The value of a business's resources and competencies is decided by the market environment in which the organisation operates (Barney, 2001).

But then resources are not always rare. Because resources are more often common than rare, homogeneous than heterogeneous, and mobile than static, enterprises must combine resources to generate unusual and difficult to replicate processes that provide a durable competitive advantage (Kabue & Kilika, 2016). In an industry where resources are widespread and mobile, a business must develop competencies to turn these abundant and mobile resources into scarce and dynamic processes, so creating a source of sustained competitive advantage for the firm. Thus, enterprises in a homogeneous sector have a challenge in developing sources of sustained competitive advantage since resources are shared and neither scarce nor diverse among firms in the industry. To build sources of competitive advantage using the resources available to them, these organisations would need to develop core capabilities capable of transforming non-rare homogeneous resources into rare and diverse processes that rivals cannot replicate. For example, information and communication technology (ICT) tools abound but it is the putting them together to create a unique remote working environment to serve a firm's business goals that create a competitive advantage.

In the post-COVID era, remote working is a game-changer. The advantages of remote work have prompted businesses to seek novel resources and skills to refocus their efforts on virtual office operations. This has generated strategic difficulties for remote-working businesses seeking to use creative skills to maintain a competitive edge (Karia & Asaari, 2016). One significant benefit of remote work is the power it provides businesses with to adapt to changes in their innovation capabilities, dynamic business environment, and

holistic business environment. Remote working is an innovation many firms may not be willing to embrace, though it seems to be gaining momentum in a post-COVID world (Amankwah-Amoah et al., 2021; John & Thakur, 2021; Verma & Kumar, 2021). The negative impact of remote working is well noted in extant literature. These includes disruptions to workflows (Venumuddala & Kamath, 2023), decreased social interaction among employees (Virtanen, 2020; Lal et al., 2021); effect on employees' psychological well-being (Ioannou, et al., 2022), and increased technostress (Prasad et al., 2020) among others. However, the pandemic and advancements of digital technologies has made remote working a significant source of competitive advantage; firms resisting remote working or refusing to innovate may suffer from performance and productivity.

Numerous empirical studies (e.g. Henderson & Cockburn, 1994; Makadok, 1999; Robins & Wiersema, 1995) have sought to quantify the characteristics of a firm's resources and capabilities and then link them with the firm's success (Wang et al., 2012). For example, Barney (2001) discovered that businesses whose strategies are built on path-dependent, causally ambiguous, socially complicated, and intangible assets beat firms whose strategies are built entirely on physical assets. Briefly, the resource-based approach focuses on how organisations earn economic rents by using their valuable, scarce, and difficult to replicate resources and skills for organisational performance.

This study also draws on and integrates the RBV with the Antecedent-Behaviour-Consequent (A-B-C) model (Webster, 2020) to understand the outcomes of the resource mobilisation effort to support remote working in response to the COVID-19 pandemic. The A-B-C model of Attitude Ostrom (1969) identifies the three dimensions of attitudes namely A (affect), B (behavior), and C (cognition). The model posits that there are antecedents to behaviours, and behaviours have consequences (Webster, 2020). The A-B-C model was originally a social psychology model but has since been used in other disciplines. For example, it has been applied in human resources management specifically in organisation health and safety behaviour of employees (Fitriani, 2014; Sinha & Muduli, 2021; Yuliani et al., 2021), clinical practice (Griffiths & Wilcox, 2013), or behaviour therapy (James & Jackman, 2017), educational interventions (Montgomery, et al., 2013) and in the Library and Information Science (LIS) domain (Chi et al., 2018). The use of the A-B-C model and its variants to understand technology and IS adoption and use is well documented (e.g., Lee & Lehto, 2013; Hsu & Lin, 2016; Verma & Sinha, 2018; Zolkepli et al., 2020; Dzandu, 2023). The choice of the A-B-C model for this study was therefore informed by its ability to help understand how employees feel about, think, and respond to a technology or digital solution such as remote working (Chi et al., 2018; Mizokawa & Hansen-Krening, 2000).

The proposed RBV and A-B-C framework, therefore, provide a suitable and relevant model to understand the impact of resources (RW strategy, IS resources, IS upskilling and deskilling) on task innovativeness; and employee performance and the employee's continuance intention to remote work post-COVID-19.

## 2.2 Remote Working

Remote working does not have a standalone definition. In the literature, different definitions and conceptualizations of remote working are presented. Allen et al. (2015) in reviewing different definitions of telecommuting observed that to be a considerable problem. The rationale behind their observation stem from the fact that the absence of a universally acceptable definition and conceptualization has drastically impaired an understanding of this type of work mode since findings on remote working are usually not comparable between studies (Allen et al., 2015).

The differences in the definitions and conceptualizations of remote working are epitomized by the various alternative terms for remote working. Bosch-Sijtsema and Sivunen (2013) described remote working as distributed work, whereby workers perform their tasks over geographical borders and to a certain extent work with computer-mediated communication to realize a common objective. Elsewhere, Shockley and Allen (2007) termed remote working as flexible work arrangements, where alternate work choices permit work to be done outside of the conventional 9–5 work time and/or four-corner boundaries of the office of a typical workday. On the other hand, Kossek et al. (2006) described remote working as telecommuting where working from home is carried out with the aid of telecommunications technology. In all these various definitions and descriptions of remote working, one thing is clear – remote working is unconventional and adaptable.

Prevalence rates for remote working are not the same across the board. They vary significantly, depending on several factors namely, how the concept of working from home has been operationalized within a firm (working from home full-time versus working part-time), differences in the samples investigated, and the deployment of varying sampling strategies (as in focusing on small vs. large firms) (Choo et al., 2005). In reporting prevalence rates for remote working, two data types are primarily used – (1) the percentage or number of companies that offer remote working, and (2) the percentage or number of workers who perform their work tasks remotely. Thus, it would not be appropriate to compare studies that have prevalence rates rooted in different data types.

In a 2014 survey by the Society for Human Resources Management, it was found that 59% of firms in the United States permitted some form of remote working. A drill-down

into that finding revealed that 54% of the firms offered remote working on an off-the-cuff or unplanned basis (i.e., erratically through the whole year or as a one-off incident); meanwhile, 29% of the firms offered remote working on a part-time basis, with 20% on a full-time basis (Society for Human Resources Management, 2014). Elsewhere, a 2013 survey by WorldatWork (2013) found that 88% of firms offered remote working in some shape and form. The study found that remote working on an unplanned basis was most prevalent (83%); with 34% of the firms permitting full-time remote working. According to an Ipsos/Reuters survey spanning 24 nations, around 20% of employees indicated engaging in remote work regularly, and almost 10% showed they work from home daily (Reaney, 2012). The findings from the survey further revealed that remote working was most prevalent in India, home to more than 50% of individuals who work from home. This is followed by Indonesia, Mexico, Argentina, South Africa, and Turkey. Countries where remote working was least prevalent, according to the survey, were Hungary, Germany, Sweden, France, Italy, and Canada. In those countries, as of 2012, only 10% of workers were engaged in remote work. But with COVID-19 everything has changed. Organizations have no choice but to embrace remote working (Lal et al., 2021), which has considerable implications for their performance.

## 2.3 Remote Working, Task Innovativeness and Organisational Performance

### 2.3.1 Remote Working and Task Innovativeness

Remote working influences the performance of organizations by influencing employee performance (Miebaka et al., 2018; Thorstenson, 2020). After all, every organization is as good as its employees. This section provides an empirical review of studies touching on the effect of remote working on organizational performance. Thorstenson (2020) carried out a study to investigate the influence of remote working on employee productivity. To achieve that objective, secondary data from publications in the year 2000 and those from 2019 to 2020 were reviewed for information on factors affecting the productivity of work-from-home employees. A total of 10 articles were reviewed – five sampled for each period. The study concluded that remote working does influence employee productivity and for that matter organizational performance. Virtanen (2020), on the other hand, looked at the impact of remote working on the motivation and ability to work by employees of an organization. The study used a survey research design relying on a sample size of 250 employees, out of which 180 people responded. The findings of the study revealed that employees were largely very content with remote working and many of them hope to maintain that form of work arrangement long into the future. Respondents indicated a few advantages derived



from remote working vis-à-vis efficiency, increased concentration, improved work-life balance, better work motivation and task innovativeness. The phrase "task innovativeness" refers to a collection of task qualities, including novelty, complexity, and unpredictability (Adler, 1995; Stewart & Barrick, 2000). A well-motivated workforce is good for an organization's bottom line. In response to the pandemic, it is anticipated that organisations that adopted RW as a strategy would achieve positive outcomes including motivated employees with dexterity to deliver on work tasks. It is therefore hypothesised as follow:

**H1:** *There will be a significant and positive relationship between RM strategy and task innovativeness.*

### 2.3.2 IS Resources and Task Innovativeness

The term "information systems" (IS) refers to a collection of systems, people, and procedures that are used to produce, store, alter, distribute, and disseminate data. The fact that IS incorporates people and processes substantially distinguishes it from IT, which focuses only on the design and execution of information, or data, inside the information system. In operating an information system, teamwork between and among people is inevitable. Hoegl et al. (2003) discovered that teamwork quality relates to team efficiency (i.e., commitment to time and budget) only in high-innovative task projects. It is usual practice to use teams, and information systems resources, to combine cross-functional skills to achieve greater performance in innovative initiatives. Projects are simply a collection of defined tasks scheduled to be performed within a specific timeframe, and so by extension, an innovative project can be considered a collection of innovative tasks. In that regard, task innovativeness can be described as characteristics of tasks that elicit innovation from task owners (Stewart & Barrick, 2000). Therefore, organisations providing the necessary IS resources for employees to support their remote working activities would benefit from better work outcomes such as creativity (Cho et al., 2022). In this regard, it is hypothesised that:

**H2:** *There will be a significant and positive relationship between IS resource availability and task innovativeness.*

### 2.3.3 Deskilling and Task Innovativeness

Automation and restructuring of labour sparked debate on the reality of 'deskilling' under capitalism, the process by which skill levels decline continuously across a national economy, eventually resulting in an untrained proletariat (Gamst, 2015). Implementing a new information system alters work characteristics such as task autonomy, skill diversity, task identity, task relevance, and task feedback through de-skilling and/or upgrading positions (Kim &

Lee, 2019). According to Braverman (1998), the 'logic' of capitalist production necessitates ongoing alteration of production practices. This entails an increase in mechanisation and automation, as well as the displacement of skilled labour. As a result, the workforce continues to deteriorate and becomes more deskilled. According to Braverman, labour deskilling is part of a broader trend among capitalist managements to employ scientific knowledge to partition labour and consolidate their control over all aspects of the profit-making process. Deskilling is a neo-Marxist term for social control of employees via a minute division of labour, which further organises employment into basic, repetitive activities requiring little cerebral thought. Although deskilling has occurred in a handful of trades and certain professions so far, no deskilling has occurred throughout the whole industrial sector (Bravo, 2015). Professions, which are often protected by gatekeepers, need specific knowledge and substantial education and professional training to perform their power-wielding functions (Gamst, 2015). It is anticipated that because of remote working, employees lost certain office based IS skills which are not applicable in remote work settings. Consequently, there is employee deskilling because of automation and mechanization of work activities through the increased availability of productivity tools for remote working. It is, therefore, hypothesised that:

**H3:** *There will be a significant and positive relationship between IS deskilling due to remote working and task innovativeness.*

### 2.3.4 IS Upskilling and Task Innovativeness

Today, businesses must make every effort to maximise performance; people and skills are a critical component of this success. Top-performing firms understand not just the value of their employees, but also the need to equip them with the necessary skills. According to a poll, 71% of CEOs recognise human capital as the primary source of sustainable economic value, ahead of goods, customer relationships, and brands (IBM Training, 2014). Sustaining economic value needs upskilling; specifically, it needs upskilling for the post-COVID-19 era, in which remote working is progressively becoming the norm. Upskilling is training and equipping workers with new, advanced abilities to address talent shortages (Li, 2022; Moritz & Zahidi, 2021), which has implications for task innovativeness. It consists of integrating team members into ongoing education to assist them in progressing along their present professional path. It is expected that; organisations would upskill their employees IS skill for them to function effectively in remote work settings. It is, therefore, hypothesised as follows:

**H4:** *There will be a significant and positive relationship between IS upskilling and task innovativeness.*

### 2.3.5 Task Innovativeness and Organisational Performance

Elsewhere, Miebaka et al. (2018) investigated the relationship between remote working and organizational performance of Mobile telecommunication firms in Port Harcourt in Nigeria. Remote working was conceptualized as the independent variable while profitability, timeliness and efficiency were used as measures of the dependent variables. The primary source of data was generated through a self-administered questionnaire. The population of the study was 134 employees of 4 Mobile (GSM) telecommunication companies in Port Harcourt. A sample of one hundred (100) respondents. The findings showed a positive and significant relationship between remote working and organizational performance of Mobile (GSM) telecommunication companies in Port Harcourt. Additionally, improved team cooperation (that is, teamwork strength) is not always related to increased team effectiveness, since this connection may be modified by task characteristics such as novelty or uniqueness, complexity, and unpredictability (Stewart & Barrick, 2000). It is anticipated that due to the level of flexibility offered by remote working (Venmuddala & Kamath, 2023), employees should be able leverage on their task innovativeness to achieve positive organisational outcomes (Gaskin et al., 2018). It is, therefore, hypothesised that:

**H5:** *There will be a significant and positive relationship between task innovativeness and employee performance.*

### 2.3.6 Task Innovativeness and Intention to Remote Work

Dettmers and Plückhahn (2021) conducted a systematic examination of which core task characteristics changed because of the transition from an office to remote working in Germany while controlling for general changes in job characteristics that occurred during the first six weeks of the COVID-19 pandemic. Changes in fundamental task characteristics have ramifications for task innovativeness since it is a phrase that refers to a group of task characteristics (Adler, 1995; Stewart & Barrick, 2000). According to the findings of Dettmers and Plückhahn (2021), despite numerous changes in job characteristics as a result of COVID-19, remote working changes contributed to substantial changes in communication opportunities and physical job demands as dimensions of task innovativeness. Shamsi et al. (2021) found that technology acceptance slightly mediates the association between task characteristics and job engagement in Norwegian universities, but completely mediates the relationship between technology-related perceptions and work engagement. Additionally, the structural model

demonstrated a substantial relationship between mental load, a measure of task innovativeness, and technology adoption (a proxy for the intention to use technology, information systems, or work systems) (Parthasarathy & Bhattacharjee, 1998). It is, therefore hypothesised that:

**H6:** *There will be a significant and positive relationship between task innovativeness and intention to remote work post-COVID-19.*

### 2.3.7 Employee Performance and Intention to use IS/ Remote work systems

As firms prepare for the post-COVID-19 era, many are considering a hybrid virtual model that incorporates remote work with in-office time. This prudent move comes on the heels of significant productivity gains during the epidemic (Alexander et al., 2021). While employee performance may have increased, many workers report feelings of anxiety and exhaustion. Without addressing the root causes of employee fear, further pandemic-style productivity improvements may prove unsustainable (Alexander et al., 2020). This is because anxiety has been shown to lower job satisfaction, impair interpersonal interactions with co-workers, and impair work performance. Thus, decreased social interaction was found to be one disadvantage of remote work mode (Virtanen, 2020; Lal et al., 2021). In another research, Alexander et al. (2021) discovered that the root of employee worry is a sense of not hearing enough about their companies' intentions for post-COVID-19 work arrangements. While organisations have expressed a broad willingness to accept hybrid virtual work in the future, workers report that far too few have offered clear guidelines, rules, expectations, and procedures. Additionally, the absence of remote-related information is causing staff anxiety. Based on the advantages offered by remote working such as improved employee performance, task innovativeness, it is anticipated that employees would like to continue working in remote mode in a post pandemic world. It is, therefore, hypothesised that:

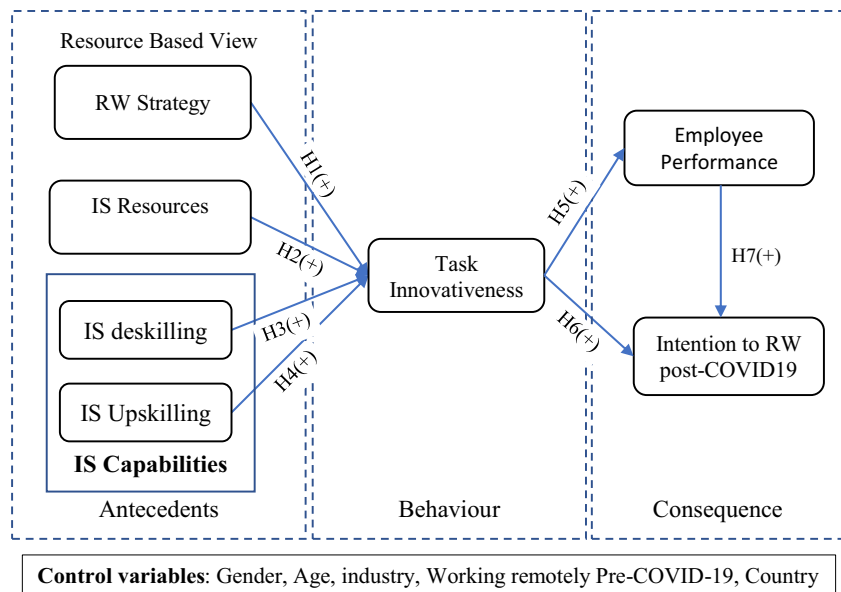
**H7:** *There will be a significant and positive relationship between employee performance and intention to remote work post COVID-19.*

## 2.4 Conceptual Framework

This study is underpinned by a variant of the resource-based view theory and set within the antecedent, behaviour, and response framework (Fig. 1).

The study assumes that when organisations have the necessary IS resources, and the necessary IS capabilities (i.e., IS upskills, and IS deskilling due to the pandemic), employees would be able to respond positively to a strategy such as

**Fig. 1** An RBV and Antecedents-Behaviour-Consequence framework for remote working



remote working (RW). For this study, IS capabilities is defined as the skills, knowledge, human resources, and administrative capabilities required to carry out organisational activities (Aydiner et al., 2019; Yoshikuni et al., 2022) as IS capabilities are known to impact performance (Thambusamy & Palvia, 2020; Wang et al., 2012). The researchers anticipate that the employees would show dexterity through tasks innovativeness to enhance their job performance. The positive work behaviour (tasks innovativeness) is also expected to trigger employees' intention to remote work post-COVID-19.

### 3 Research Methods

#### 3.1 Research Context

The literature on remote working has focused mostly on developed countries (e.g., Espitia et al., 2022; Tajaddini et al., 2023). However, at the height of the COVID-19 pandemic, most countries both developing and developed countries adopted remote working, especially during the national lockdowns. To contribute to understanding the impact of remote working on employee performance, from a multi-country perspective. The selected countries are the United Kingdom (UK) and Ghana. The UK is one of the worst affected countries by the COVID-19 pandemic (Albonico et al., 2020; Flynn et al., 2020; Rakha et al., 2021). Remote working put considerable strain on workers in the various sectors such as education (Walker et al., 2020), affected the productivity of small and medium scale enterprises or SMEs (Espitia et al., 2022; Jallow et al., 2021). However, in all these studies on remote working in the UK, none so far has explicitly explored the antecedents, employee behaviour and

consequence of remote working from the perspectives of the RBV and the A-B-C framework. In addition, there are few studies on how these antecedents (RW strategy, IS capabilities and IS resources), behaviour (task innovativeness) and consequences (employee performance) justify employees' intentions to continue with remote working post-COVID-19. This study will thus provide empirical evidence and justification for remote working in response to calls for policy formulation on hybrid working.

In Ghana, the concept of remote working is not popular. A year before the outbreak of the COVID-19 pandemic, Ansong and Boateng (2018) published a study advocating for the adoption of remote working in Ghana. During the COVID-19 pandemic, corporate institutions have been compelled to embrace remote working (Agyeman-Prempeh, 2020; Ansong & Boateng, 2018; Arthur, 2020; Avoronyo, 2020). That development was not only limited to the private sector. Under the Smart Workplace Project launched by the Ghana Government, 300,000 public workers have been scheduled to work from home during the pandemic (Ngwenya, 2020). Since working from home has not been a big part of Ghana's corporate environment, the new development of working from home, during the COVID-19 pandemic, is sure to affect the organizational performance of corporate institutions in Ghana.

In the context of Ghana, virtually little or no empirical data is available that speaks to the direction of the effect of remote working on organizational performance. The only notable study in the area in Ghana, to the best of the researchers' knowledge, is that of Ansong and Boateng (2018). Hence, the need to conduct this study to fill the gap in knowledge in remote working, as far as the effect of working from home on the organizational performance of corporate institutions in Ghana is concerned.

### 3.2 Data Collection and Method of Analysis

The study adopts a mixed method approach, specifically the explanatory sequential mixed method. Study 1 is the quantitative approach using a survey, followed by Study 2 or the qualitative approach using interviews to collect and analyse data from Ghana and the UK.

In Study 1, a questionnaire with items adapted from extant literature is developed and administered to a total of 500 employees each in Ghana and the UK. All the items for the key constructs were measured on a 7-point Likert scale. The seven key constructs were IS resources, IS capability (IS upskilling and IS deskilling), IS strategy (RW), employee performance and innovativeness, and intention to remote work post-COVID-19. IS resource was measured with 4 items (Taylor & Todd, 1995); and IS capability was measured with six items (Aydiner et al., 2019). Remote working was used as a proxy for IS strategy and measured with 4 items (Tanriverdi, 2006). Employee performance was measured with five items (Koopmans et al., 2014), innovativeness was measured with five items (Parthasarathy & Bhattacharjee, 1998), and intention to continue remote working post-COVID 19 was measured with three items adapted from Teo (2012).

**Table 1** Characteristics of the respondents

| Gender                       | Ghana ( <i>N</i> =310) | UK ( <i>N</i> =333) | Total ( <i>N</i> =643) |
|------------------------------|------------------------|---------------------|------------------------|
| Male                         | 142 (45.8%)            | 93 (27.9%)          | 235 (36.5%)            |
| Female                       | 167 (53.9%)            | 240 (72.1%)         | 407 (63.3%)            |
| Prefer not to say            | 1(0.3%)                | -                   | 1(0.2%)                |
| Age (years)                  |                        |                     |                        |
| 20 – 29                      | 46 (14.8%)             | 93 (27.9%)          | 139 (21.6%)            |
| 30 – 39                      | 110 (35.5%)            | 112 (33.6%)         | 222 (34.5%)            |
| 40 – 49                      | 135 (43.5%)            | 75 (22.5%)          | 210 (32.7%)            |
| 50 – 59                      | 19 (6.1%)              | 42(12.6%)           | 61 (9.5%)              |
| 60+                          | -                      | 11 (3.3%)           | 11 (1.7%)              |
| Remote working pre- COVID-19 |                        |                     |                        |
| Yes                          | 40 (12.9%)             | 107 (32.1%)         | 147 (22.9%)            |
| No                           | 270 (87.1%)            | 226 (67.9%)         | 496 (77.1%)            |

*NB* See Table 6 in the Appendix 1 for data on the “Industry” in which the respondents work

**Table 2** Construct reliability and validity

| Constructs                    | Cronbach's Alpha |       | Composite reliability |       | Average variance extracted (AVE) |       |
|-------------------------------|------------------|-------|-----------------------|-------|----------------------------------|-------|
|                               | Ghana            | UK    | Ghana                 | UK    | Ghana                            | UK    |
| Employee performance          | 0.949            | 0.953 | 0.959                 | 0.962 | 0.798                            | 0.810 |
| IS deskilling                 | 0.841            | 0.758 | 0.892                 | 0.855 | 0.734                            | 0.663 |
| IS resources                  | 0.959            | 0.956 | 0.967                 | 0.965 | 0.830                            | 0.821 |
| IS upskilling                 | 0.971            | 0.906 | 0.977                 | 0.930 | 0.895                            | 0.726 |
| Intention to RW post-COVID-19 | 0.953            | 0.959 | 0.962                 | 0.967 | 0.810                            | 0.831 |
| RW strategy                   | 0.918            | 0.887 | 0.936                 | 0.914 | 0.711                            | 0.641 |
| Task innovativeness           | 0.951            | 0.872 | 0.969                 | 0.921 | 0.911                            | 0.796 |

A total of 310 and 333 employees from various sectors/ industries in Ghana and the UK respectively responded to the questionnaire (Appendix 1). The overall response rate was thus 64.3%. The demographic characteristics of the respondents (Table 1) show a fair distribution by gender and age. However, the majority (77.1%) of the respondents were not remote working before the COVID-19 pandemic.

The proposed seven hypotheses based on the RBV, and A-B-C are tested through structural modelling (Saunders et al., 2012). The main method of data analysis was using partial least squares—structural equation modelling (PLS-SEM) software, SmartPLS. The choice of SmartPLS was informed by its popularity and robustness in developing structural models (Ringle et al., 2015; Hair et al., 2017).

## 4 Results and Discussion

### 4.1 Results of the Survey (Study 1)—Model assessment

The measurement model was assessed for the two sub-samples (Ghana and UK). This was because there was no baseline to compare the two countries due to differences in approach to handling the pandemic such as the length of national lockdown, and the impact of the COVID-19 pandemic. An examination of the data for reliability, convergent validity and discriminant validity shows that the measures were all within acceptable thresholds. For example, all the items loaded very well on their respective constructs as the loading were all above the recommended threshold of 0.7 (Hair et al., 2014) as shown in Appendix 1. In addition, the AVE (Table 2) for all the constructs exceeded the 0.5 thresholds further confirming convergent validity.

Construct reliability was checked by examining the Cronbach's Alpha ( $\alpha$ ) and composite reliability (CR) for the sub-samples. The results showed that both measures exceeded the 0.7 thresholds for Ghana and the UK. Therefore, the measurement items showed high reliability.



The measurement items were evaluated for discriminant validity using the Fornell-Larcker criterion (Table 3). The result shows that the square root of the Average Variance Extracted (AVE) in the diagonal cells was more than the correlations of the corresponding row and column values of the key constructs to confirm discriminant validity (Fornell & Larcker, 1981; Hair et al., 2011).

In addition, discriminant validity of the constructs was assessed using the heterotrait-monotrait ratio of correlations (HTMT). The results (Table 4) show that the HTMT ratios for both the Ghana and UK sub-samples were less than the recommended threshold of 1 (Henseler et al., 2015) to further confirm discriminant validity.

### 4.2 Structural Model

The structural model was first assessed by examining the coefficient of determination ( $R^2$ ) against a meaningful threshold of 0.20 (Chin, 2010, 1998). The result showed  $R^2$  values of 0.769, 0.746 and 0.769 for employee performance, intention to remote work post-COVID-19 and task innovativeness respectively for the Ghana sub-sample. Similarly, for the UK sub-sample,  $R^2$  values obtained were 0.763, 0.738 and 0.684 respectively for employee performance, intention to remote work post- COVID-19 and task innovativeness. Therefore, the model had high explanatory power. The predictive relevance of the model was also

**Table 3** Discriminant validity – Fornell-Larcker criterion (Ghana)

| Constructs                         | (1)    | (2)    | (3)   | (4)   | (5)   | (6)   | (7)   |
|------------------------------------|--------|--------|-------|-------|-------|-------|-------|
| Ghana sub-sample                   |        |        |       |       |       |       |       |
| Employee Performance (1)           | 0.893  |        |       |       |       |       |       |
| IS Deskillling (2)                 | -0.138 | 0.857  |       |       |       |       |       |
| IS Resources (3)                   | 0.819  | 0.155  | 0.911 |       |       |       |       |
| IS Upskilling (4)                  | 0.853  | 0.070  | 0.947 | 0.946 |       |       |       |
| Intention to RW Post- COVID-19 (5) | 0.783  | -0.148 | 0.626 | 0.712 | 0.900 |       |       |
| RW Strategy (6)                    | 0.941  | 0.097  | 0.908 | 0.932 | 0.815 | 0.843 |       |
| Task Innovativeness (7)            | 0.840  | 0.233  | 0.850 | 0.866 | 0.773 | 0.947 | 0.955 |
| UK sub-sample                      |        |        |       |       |       |       |       |
| Employee Performance (1)           | 0.900  |        |       |       |       |       |       |
| IS Deskillling (2)                 | 0.259  | 0.814  |       |       |       |       |       |
| IS Resources (3)                   | 0.723  | 0.375  | 0.906 |       |       |       |       |
| IS Upskilling (4)                  | 0.526  | 0.580  | 0.663 | 0.852 |       |       |       |
| Intention to RW Post- COVID-19 (5) | 0.853  | 0.256  | 0.698 | 0.476 | 0.912 |       |       |
| RW Strategy (6)                    | 0.808  | 0.362  | 0.846 | 0.627 | 0.763 | 0.800 |       |
| Task Innovativeness (7)            | 0.874  | 0.325  | 0.757 | 0.579 | 0.795 | 0.816 | 0.892 |

**Table 4** Heterotrait-Monotrait ratio (HTMT)

| Constructs                          | (1)   | (2)   | (3)   | (4)   | (5)   | (6)   | (7) |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-----|
| Ghana sub-sample                    |       |       |       |       |       |       |     |
| Employee Performance (1)            |       |       |       |       |       |       |     |
| IS Deskillling (2)                  | 0.294 |       |       |       |       |       |     |
| IS Resources (3)                    | 0.843 | 0.263 |       |       |       |       |     |
| IS Upskilling (4)                   | 0.875 | 0.152 | 0.985 |       |       |       |     |
| Intention to RW Post- COVID -19 (5) | 0.794 | 0.259 | 0.640 | 0.713 |       |       |     |
| RW Strategy (6)                     | 0.990 | 0.392 | 0.962 | 0.982 | 0.854 |       |     |
| Task Innovativeness (7)             | 0.852 | 0.246 | 0.881 | 0.888 | 0.794 | 0.991 |     |
| UK sub-sample                       |       |       |       |       |       |       |     |
| Employee Performance (1)            |       |       |       |       |       |       |     |
| IS Deskillling (2)                  | 0.267 |       |       |       |       |       |     |
| IS Resources (3)                    | 0.757 | 0.399 |       |       |       |       |     |
| IS Upskilling (4)                   | 0.558 | 0.671 | 0.708 |       |       |       |     |
| Intention to RW Post- COVID -19 (5) | 0.890 | 0.270 | 0.728 | 0.503 |       |       |     |
| RW Strategy (6)                     | 0.869 | 0.415 | 0.924 | 0.700 | 0.820 |       |     |
| Task Innovativeness (7)             | 0.957 | 0.375 | 0.829 | 0.647 | 0.867 | 0.920 |     |

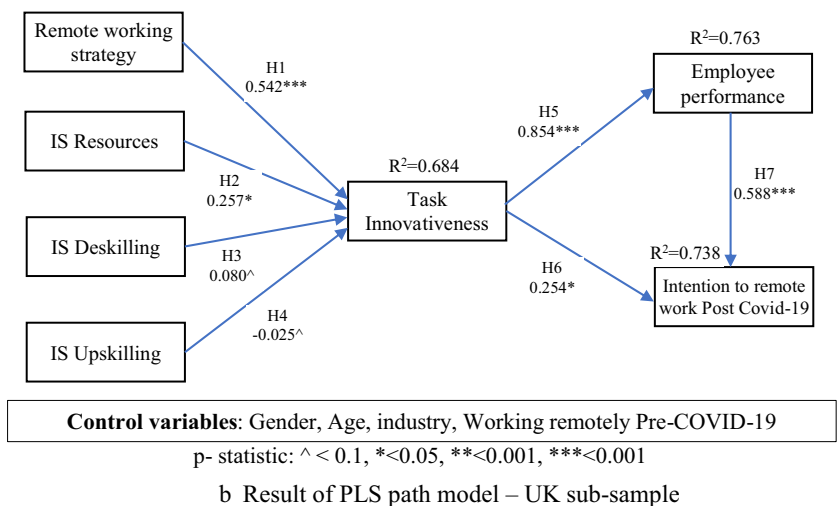
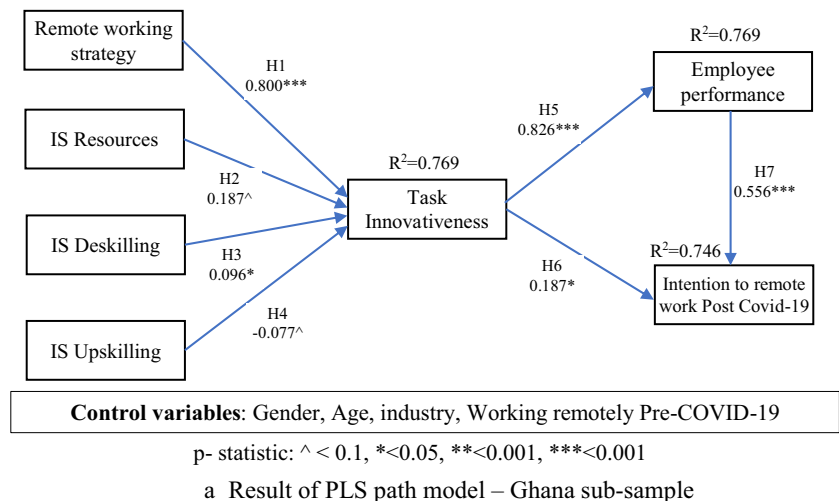
assessed using the  $Q^2$  (Geisser, 1975; Hair et al., 2014). For the Ghana sub-sample,  $Q^2$  values of 0.517, 0.459 and 0.768 for employee performance, intention to remote work post-COVID-19 and task innovativeness. The  $Q^2$  values for the UK sub-samples were 0.568, 0.533, and 0.496 for employee performance, intention to remote work post-COVID-19 and task innovativeness, respectively. These confirmed that the model had high predictive relevance.

The structural model was evaluated for the direction, magnitude, and significance of the path coefficients for the key constructs in testing the hypotheses (Hair et al., 2010, 2011). For the Ghana sub-sample, there was a significant and positive relationship between RW strategy and task innovativeness ( $\beta = 0.800$ ;  $t_{stat} = 5.346$ ;  $p = 0.000$ ); and between IS deskillling and task innovativeness ( $\beta = 0.800$ ;  $t_{stat} = 2.484$ ;  $p = 0.013$ ) to confirm H1 and H3 (see Fig. 2a and Table 5). The relationship between IS resources and task innovativeness ( $\beta = 0.187$ ;  $t_{stat} = 1.089$ ;  $p = 0.276$ ) and between IS upskilling and task innovativeness ( $\beta = -0.077$ ;  $t_{stat} = 0.303$ ;  $p = 0.762$ ) were not significant. Thus, H2 and

H4 were not supported. Furthermore, task innovativeness showed significant and positive relationship with employee performance ( $\beta = 0.826$ ;  $t_{stat} = 25.310$ ;  $p = 0.000$ ); and, with intention to remote work post-COVID-19 ( $\beta = 0.187$ ;  $t_{stat} = 3.082$ ;  $p = 0.002$ ) to confirm H5 and H6. And finally, employee performance showed a significant and positive relationship with intention to remote work post-COVID-19 ( $\beta = -0.556$ ;  $t_{stat} = 8.666$ ;  $p = 0.000$ ); thereby confirming H7.

The assessment of the structural model for the UK sub-sample revealed similar relationships between the key constructs (see Fig. 2b and Table 5). The results showed a significant and positive relationship between RW strategy and task innovativeness ( $\beta = 0.800$ ;  $t_{stat} = 5.346$ ;  $p = 0.000$ ); and between IS resources and task innovativeness ( $\beta = 0.257$ ;  $t_{stat} = 2.921$ ;  $p = 0.004$ ) to confirm H1 and H2. The relationship between IS deskillling and task innovativeness ( $\beta = -0.026$ ;  $t_{stat} = 0.706$ ;  $p = 0.480$ ) and between IS upskilling and task innovativeness ( $\beta = 0.080$ ;  $t_{stat} = 1.479$ ;  $p = 0.139$ ) were not significant. Thus, H3 and H4 were not supported. On the other hand, task innovativeness showed

**Fig. 2** a Result of PLS path model – Ghana sub-sample. b Result of PLS path model – UK sub-sample



**Table 5** Test of significance of the path co-efficient and outcome of the hypotheses

| Paths   | Country | $\beta$ | T <sub>statistics</sub> | p Values | Decision         |
|---|---------|---------|-------------------------|----------|------------------|
| RW strategy -> Task innovativeness                    | Ghana   | 0.800   | 5.346                   | 0.000    | H1 supported     |
|   | UK      | 0.543   | 6.458                   | 0.000    | H1 supported     |
| IS resources -> Task innovativeness                   | Ghana   | 0.187   | 1.089                   | 0.276    | H2 not supported |
|   | UK      | 0.257   | 2.921                   | 0.004    | H2 supported     |
| IS deskilling -> Task innovativeness                  | Ghana   | 0.096   | 2.484                   | 0.013    | H3 supported     |
|   | UK      | -0.026  | 0.706                   | 0.480    | H3 not supported |
| IS upskilling -> Task innovativeness                  | Ghana   | -0.077  | 0.303                   | 0.762    | H4 not supported |
|   | UK      | 0.080   | 1.479                   | 0.139    | H4 not supported |
| Task innovativeness -> Employee performance           | Ghana   | 0.826   | 25.310                  | 0.000    | H5 supported     |
|   | UK      | 0.855   | 39.225                  | 0.000    | H5 supported     |
| Task innovativeness—> Intention to RW post-COVID-19   | Ghana   | 0.187   | 3.082                   | 0.002    | H6—supported     |
|   | UK      | 0.255   | 3.076                   | 0.002    | H6—supported     |
| Employee performance -> Intention to RW post-COVID-19 | Ghana   | 0.556   | 8.666                   | 0.000    | H7—supported     |
|   | UK      | 0.587   | 7.237                   | 0.000    | H7—supported     |

significant and positive relationship with employee performance ( $\beta = 0.855$ ;  $t_{\text{stat}} = 39.225$ ;  $p = 0.000$ ); and also, with intention to remote work post-COVID-19 ( $\beta = 0.254$ ;  $t_{\text{stat}} = 3.076$ ;  $p = 0.002$ ). In addition, employee performance showed a significant and positive relationship with intention to remote work post-COVID-19 ( $\beta = 0.587$ ;  $t_{\text{stat}} = 7.237$ ;  $p = 0.000$ ). These confirm H5, H6 and. H7.

Ghana and the UK are culturally distinct, hence a comparative analysis of the results by country (Ghana Vs UK) is implicitly a post-hoc cultural analysis. Culture is broad and to measure culture for the purpose of carrying out a post-hoc analysis requires a new research effort. It is therefore recommended that future studies explore the effects of culture (employee culture, organisational culture, or individual cultural orientation) on remote working. In this study, country (UK and Ghana) is used as a measure of national culture or a proxy for culture as it is only a moderator. However, summary Table 5 implicitly (a post hoc analysis) allows for the comparative assessment of the strength ( $\beta$ ) and significance (p-values) of the relationship between the key constructs of the RBV, task innovativeness, employee performance and intention to continue working remotely.

Whilst studies (e.g. Ahluwalia & Merhi, 2020; Dzandu et al., 2022; Lee et al., 2013) have explored the role of culture in technology and information system use or continuous intentions, to the best of our knowledge and as at the time of writing this paper, no study has explicitly looked into the moderating effect of country (culture) on the relationship between the dynamic capabilities constructs and remote working outcomes. This study is therefore a frontier paper in the IS space examining the antecedents and outcomes of remote working as an information systems solution in two different cultural contexts.

### 4.3 Study 2 – Responses from the Interview (Qualitative Study)

In this study, a total of 22 semi-structured interviews were conducted with employees to understand the reasons for relationships between the constructs or the outcomes in Study 1. The interviewees were made up of 10 participants from the UK and 12 from Ghana (Table 7 in Appendix 2). The semi-structured interview protocol was designed based on the key constructs in the research model with the focus on remote working as a strategy, infrastructure capacity to support remote working, upskilling, or skills training for remote working, deskilling, or loss of certain skills because of remote working, task innovativeness, employee performance in remote working environments and intentions to continue remote working (See Appendix 2). Open invitations were sent out inviting potential participants to be interviewed for the study with a focus only on those who have worked remotely either before, during or after the COVID-19 pandemic. In the end, 22 working adults, aged 18 years and over, and residents in the UK and Ghana who consented to participate in the study were interviewed.

The interviews were conducted by two of the lead authors and with the help of trained research assistants either face-to-face, via MS Teams, Zoom or over telephone calls lasting between 30 min and 1 h and 15 min. The recorded interviews or transcripts were analysed qualitatively using NVivo software based on the template analysis technique. The aim of the interview was to validate the findings from the large survey (Study 1) and be able to explain the reasons for the observed outcomes of the relationship between remote working and the dynamic capabilities constructs, innovativeness, employee performance and intentions to continue remote working.

The data for the study showed that among the UK participants (Table 7 – Appendix 2), only 3 out of 10 started working remotely in the last 3 years primarily due to the COVID-19 pandemic. However, the majority (that is 7 out of 10) of the UK participants indicated that they had been working remotely before the onset of the pandemic and continue to do so. In the case of the participants from Ghana, most interviewees (i.e., 8 out of 12) indicated that they only started working remotely during the COVID-19 pandemic. Thus, whereas the remote working concept has long been a working style in the UK, the concept is relatively new in Ghana necessitated and accelerated by the COVID-19 pandemic.

The views of the participants were sought on their intentions for working remotely. The data for the study shows that the intentions of the participants from the UK to remote work were driven by a desire for work-life balance and flexibility of being able to work from anywhere, whilst achieving the same results. The reasons given were varied. For example, a Business Analyst in the UK had this to say:

“I wanted to achieve a certain lifestyle and being able to have the privilege of supporting my home, maintaining a good work-life balance” (#4, UK).

“It is the nature of the work; the opportunity has always been there. We are self-employed, so all the equipment and tools are based here. Companies give us a time frame and set targets, and we then make on-site visits, or if there is an issue, we make an on-site visit.” (#6, UK).

On the other hand, the intentions of the participants from Ghana to remote work were mainly in response to the COVID-19 pandemic as a way of reducing the spread of the virus, but more so to reduce the cost of travel or commuting and avoiding traffic congestion to and from the office.

“Well, due to the tech work, these days it is easy to send information wherever you are, helps beat traffic especially when late for a meeting, or you are in a different location meaning no need to travel for meeting” (#3 Ghana).

“It is convenient for the staff, in terms of resources, energy bills, easier working.” (#5 Ghana).

Many of the interviewees from both Ghana and the UK were unanimous in their decisions and affirmed that remote working is a good strategy to enable their employees to work from anywhere. Whilst all the interviewees agreed that COVID-19 accelerated the remote working concepts, the reasons given in support of remote working as a good strategy by organisations for their staff include flexible work, motivation, bad weather conditions, increased productivity, and cost savings amongst others. Here are some of their reasons:

“it is a good strategy for businesses to consider, you know – 1) that is a flexible option for their employees that increases motivation and .... it increases their productivity. 2) On their part they will save a lot of

money .....I'm saving so much money to my employer yeah so, therefore, I think it's a win-win proposition for both parties involved” (#8 UK).

“Remote working is an effective strategy for organizations to allow their employees to work from anywhere. It not only boosts flexibility and job satisfaction but also widens the talent pool by enabling hiring from various locations, ultimately contributing to improved productivity”, (#10 UK).

A Freelancer in the IT Industry in Ghana put it this way,

“It gives me a high level of comfort because it makes it possible for me to work and interact with my clients with distance not being a barrier. (#9 Ghana).

Another interviewee, an IT Instructor had this to say:

“Well, it is very good, and it helps the organisation to reduce costs and it increases productivity and that is if you really educate your staff on how to do remote working effectively” (#12 Ghana).

Thus, the interviewees perceived remote working as a useful strategy for organisations to deal with emergencies, and employees to achieve work-life balance whilst delivering the same or better results compared to working in an office.

The data for the study revealed that access to relevant data information and technological resources to support remote working was not an issue with the UK interviewees. Generally, their employers have provided them with laptops, additional large monitors, and secure and reliable access to work systems. The interviewees were, however, quick to add that they pay for their own internet connectivity and not their employers, but the internet connections have been largely reliable to enable them smoothly without any difficulties. A Solutions Analyst had this to say,

“Yeah, my company has provided all the technology and the resources to support remote working, for example, I have a laptop, two monitors, and access to all the software, and I can work from anywhere as long as there is Internet connectivity” (#5 UK).

On the other hand, most of the interviewees from Ghana indicated that their organisations did not have all, or the necessary information and technological resources to support remote working. For example, some interviewees indicated that they use their personal laptops or desktop computers when working remotely usually from home, however, their organisations usually pay for their Internet data cost. In addition to these, Internet connectivity is sometimes unreliable thereby affecting their ability to work efficiently from home. A Graphic and Web Designer who works for an international company had this to say:



“In Africa, you might have your money or get you those robust resources you need to be online, so what they do, is provide you with equipment and those resources just to be online sure, and do your work easily, they have things easy we have it difficult” (#10 Ghana).

Thus, whilst infrastructural resources to support remote working were readily available and reliable for the UK interviewees, their counterparts from Ghana expressed reservations about the lack of robust resources as well as the unreliable Internet connectivity to support their remote working activities.

On the question of upskilling, many of the interviewees from the UK and a few from Ghana indicated that their organisations did not provide skills training for them to be able to work remotely.

“In my case, they were not in support of remote working and so no skills training has been provided at all, and I can say that they were even against it so why should they provide training, they're not in favour” (#1 UK).

“They don't really provide training on remote working, it is basically you training yourself in terms of remote working, they don't really provide any training” (#6 Ghana).

Conversely, most of the interviewees from Ghana and a few from the UK, indicated that they received training from their employers to prepare them for remote working. Thus, upskilling in the UK was employee-driven whilst upskilling in Ghana was employer. This could be because employees in the UK are tech-savvy more than their counterparts from Ghana. It should be noted that the UK has a high ICT penetration compared to Ghana.

On the question of deskilling, the responses from both Ghana and the UK were mixed. Some interviewees, mostly from the UK, indicated that remote working is not so different from working face-to-face, and therefore they have not lost any skills. For example, a Consultant in the IT industry had this to say:

“Not really, it has cut out time wasting, were not sitting around chatting and socialising. If anything, we hone skills of time management; learn new techniques and ways when we hit a problem. We self-study to learn new software's, each project brings with it new challenges and different requirements” (#6, UK).

On the other hand, some UK interviewees indicated that working remotely has had a negative impact on their skill set, leading to the loss of social, interpersonal and communication skills. A Business Associate explained as follows:

“I think when I look back is just the mere fact that I couldn't always mingle with people as I would in the office because it is harder to do so virtually, so I would

say yeah I have probably lost out which I guess has affects your interpersonal relationship skills and maybe communication if I could put it that way” (#2 UK).

Interestingly, all the interviewees from Ghana, were unanimous in their assertion that remote working has helped them to upskill and enhance their knowledge and experience in digital technologies. Here is an excerpt from one of the interviewees:

“No, not all, it gives you more experience, how to connect with people, how to communicate and have patience for people” (#4 Ghana).

Thus, deskilling was somewhat more evident among the UK employees than their counterparts from Ghana.

In response to the question on the capabilities of their organisations to support remote working, many of the interviewees in the UK affirmed that their companies have both the technology and human capabilities to support remote working. However, although their organisations had these capabilities, the COVID-19 pandemic accelerated the provision of technological and logistical support for remote working leading to improvements in systems, user support systems, and the development of training resources to support remote workers. A University Lecturer shared the following view.

“In terms of technological capabilities, I would say yes, but not for the human side such as remote workers' mental health and wellbeing, use of personal time for work, overworking, and so on. I would say, most organisations are now developing training and resources in these aspects to support their employees working remotely” (#9 UK).

Further on the human resources capabilities, a Project Manager in the health sector had this to say,

“My organisation has some initiatives to support remote working, such as online mentoring. Some are none related works meetings as well as some team bonding meetings in a weekly or monthly. I believe that is aiming to support remote working and the loneliness that comes with it” (#7 UK).

Similarly, most of the interviewees from Ghana indicated that their organisations have capacities to support remote working. Some of the views expressed are:

“Yes, usually they have facilities or features which enable us to communicate effectively so that working remotely can go on” (#11 Ghana).

It must be noted that some interviewees complained about the unreliability of Internet connectivity when working remotely.

The effect of remote working on task innovativeness of the participants was assessed by asking interviewees how remote

working has helped them in carrying out their work activities. These include flexibility, being more organised by using the electronic calendar/outlook, and getting this done without distraction, being more independent and able to carry out research and get work done at my pace without compromising on set targets. A Project Manager in the health sector had this to say:

“Time management and effective workarounds to get work done. The flexibility of a remote working environment enables creativity, independence, and personal learning and development opportunities devoid of distractions typical in the office environment” (#10 UK).  
 “Because I am all by myself, I am able to conduct research and find the answers to challenges and solve given business problems on my own” (#1 Ghana).

Interestingly, although many of the interviewees believe that their performance or productivity is better when they work remotely, a few indicated that there was no difference. Those who reported improved performance whilst working remotely compared to working from the office cited reasons such as greater work-life balance, no commute time and therefore no loss of productive hours due to traffic.

“...so far in the past ten years, every party has been happy with my work, so I think my performance is good. Working remotely takes me away from commute time, office distractions and provides me with really very high concentration and some good level of comfortability” (#1 UK).  
 “Comparing in-office and remote working, I tend to do better when I work remotely” (#2 Ghana).

It is worth noting that, a few interviewees felt that they work better face-to-face, for example:

“I do well when I work remotely on my own thing on my feet, and you know, and I do a lot more than when I go to the office” (#2 UK).

In response to the question as to whether the participants would like to continue with remote working, many of the interviewees answered in the affirmative. For example, a Project Manager in the health sector, explains:

“I would like that to continue as I see many benefits in working from home. Which are efficiency and productivity levels go up within my team. I get way more being on my own than in an office environment. The only downside is that I do miss the warm side of the people aspect” (#7 UK).

Interestingly, although some interviewees were not against remote working, they would prefer not to work remotely.

“I prefer going to the office to work doing more exploring, and because when you are home working the kids will be distracting you, so I prefer working in the office”, (#1 Ghana).

It is worth noting that a few participants expressed indifference to the concept of remote working, arguing that it is more about competencies or ability to get the work done.

“I don't mind whether we have to work remotely or work from the office, so far as the work gets done. It's all about outputs, if you cannot get the work done, it doesn't matter whether you work remotely or from the office” (#5 UK).

#### 4.4 Discussion of Findings

This study examines the effect of remote working strategy on employee task innovativeness and performance in response to the pandemic. Specifically, whether the organisation's response to the pandemic by mobilisation of IS resources and capabilities to implement remote working strategies had an impact on employees' task innovativeness and intention to continue remote working post-COVID-19. The evidence is presented from a developed (UK) and developing (Ghana) countries context. Drawing on the resource-based view within the context of the A-B-C framework, the proposed model (Fig. 1) is developed and evaluated. The findings not only confirmed the impact of IS deskilling and Upskilling, resources and RW strategy on employee task innovativeness but on their intention to continue working remotely in a post-COVID-19 pandemic world.

In support of H1, the findings confirmed that RW strategy indeed had a significant and positive effect on employee tasks innovativeness (Gajendran & Harrison, 2007; Martin & MacDonnell, 2012) in both the developed (UK) and developing (Ghana) countries context. This is due to the flexibility of remote working (Venmuddala & Kamath, 2023), reduced stress of commuting to and from the office, and the freedom to pursue workarounds in their remote work settings to get work done. However, whilst the UK data confirmed H1, that is showing a significant and positive relationship between IS resources and task innovativeness (Cho et al., 2022; Trivellas et al., 2013); the case of the Ghana data did. This could be due to the fact whilst the employees in the UK were well resourced in terms of IS equipment and solutions to facilitate their remote working activities, their counterparts in Ghana were resource-challenged. Thus, unlike in a developed country like the UK, where IS resources are readily put at the disposal of employees; in developing countries like Ghana, employees are inadequately resourced due to inadequate access to or low ICT penetration, lack of access to the Internet, and computing tools, appropriate software, and connectivity problems. However, despite the seeming lack of IS resources for remote working, the employees from Ghana seem to demonstrate resilience and were able to task innovative to get their jobs done. It is, therefore, imperative that governments and organisations in developing countries like Ghana, take the necessary steps to invest in and provide employees with the necessary IS resources, especially during critical moments like national lockdowns or pandemics to help them to achieve the required productivity.

The relationship between IS capabilities (deskilling and upskilling) and task innovativeness was also explored. However, whilst the data for Ghana support H3, to confirm that IS deskilling will have a significant and positive relationship with task innovativeness (Bravo, 2015; Bravo et al., 2015), the UK data did not support H3. With the data from the UK, it appears that since employees were adequately IS-resourced and tech-savvy, losing those IS skills they normally relied upon in the office environment (i.e., IS deskilling) did not limit their ability to task innovate and get work done in their remote work settings. In the Ghana case, it is interesting to note that, rather when the employees lost those IS skills, they normally relied on the office environment (i.e., IS deskilling), they developed the appropriate resilience, showed adaptability and the necessary workaround to circumvent any constraints and task innovate to get work done in their remote work settings. In their remote work settings, employees have the room to try out new things and the flexibility to seek support, when necessary, from their larger networks to get their jobs done (Venmuddala & Kamath, 2023). It could also be that the absence of in-person supervisors and the scrutinising eyes of colleague workers, the highly routinised office environment allowed the employees to freely express themselves, unleash their creativity and task innovate to get work done. Surprisingly, the findings for both Ghana and UK did not support H4, that IS upskilling did not have a significant and positive impact on task innovativeness. Whilst this finding contradicts studies by (Trivellas & Santouridis, 2013); it is due to the swiftness with which employees had to learn those IS skills in response to the national lockdown and unexpected global effect of the COVID-19 pandemic. In addition, the upskilling was not based on workforce audit or work demands due to remote working. Consequently, employees had to rely on sources of knowledge and skills to cope with the demands of the sudden switch to remote working by task innovating to get work done. Thus, there probably was no time for their newly acquired IS skills to mature before putting those skills into use. Moreover, the new skills were mainly about teleconferencing.

In addition to our survey findings, we also explored the phenomena of upskilling and deskilling in both countries using qualitatively by way of interviews. For comparison, we adopted the same concepts of upskilling and deskilling in both Ghana. Conceptually, upskilling and deskilling in the UK and Ghana are not different and were found to be the same based on the operational definition adopted from the IS capabilities studies by Yoshikuni et al., (2022) and Aydiner et al. (2019). Interestingly, upskilling in Ghana was primarily driven by organisational initiatives, whereas in the UK, individual efforts played a more significant role. This difference is vital for IS research as it suggests that the effectiveness of IS resources may be contextually bound by cultural factors and capability readiness. In addition, deskilling was somewhat more evident among the UK employees than their counterparts from Ghana.

The study also explored the consequences of task innovativeness as an employee behaviour based on the behaviour-consequence (B-C) aspect as the conceptual framework for the study. The findings clearly confirmed H5, H6 and H7 in both the UK and Ghana contexts. Thus, task innovativeness as a result of remote working had a positive and significant impact on employee performance retention (Gajendran & Harrison, 2007; Martin & MacDonnell, 2012) and also on employees' intention to continue remote working post-COVID-19. There are indications remote working indeed allowed employees the flexibility to try new ways of conducting their tasks, discover better ways to use information systems resources remotely to perform their task, deliver better results and achieved work targets (Venmuddala & Kamath, 2023; Tanriverdi, 2006; Parthasarathy & Bhattacharjee, 1998; Gaskin et al., 2018). Remote working also allows employees to save time on commuting and thereby able to make of carry out more tasks and achieve high performance. There are also chances that remote working allows employees to multi-task by being able to seamlessly carry out some basic household tasks alongside their organisational tasks especially when working from home. It is however, noted that there could be distractions to remote working such as unfamiliarity of the remote work environment, too many distractions, and tendency to procrastinate. The findings provide evidence in support of employees' intentions to continue with remote working (if possible) post-COVID-19 because working remotely during the pandemic enhanced employee task innovativeness and performance.

This study not only offers valuable insights into remote working and task innovativeness but also contributes to a frontier IS topic on remote working by shedding light on how IS resources are leveraged differently across cultures in response to societal changes. This enriches the IS narrative by revealing that IS resources are not just facilitators but also strategic assets that can be optimized differently depending on cultural contexts. UK as a developed country is technologically resourced whilst Ghana, a developing country is resource-constrained technologically (Boateng et al., 2014). For example, Ghana is a developing economy where ICT penetration remains low (Adjasi et al., 2023; Kandpal et al., 2023), whilst the UK is a developed economy with a high ICT ranking of 2<sup>nd</sup> in the world only after the US (International Trade Administration, 2020). The comparative analysis of the two countries or cultures, therefore, provides an understanding of the workarounds in using remote working in both technology-resourced and technology-constrained environments. The choice of the UK and Ghana offers the authors a unique opportunity to provide cross-cultural perspectives and empirical evidence from their countries of residence instead of a mono-country outlook on a seemingly important and topical issue of remote working.

## 5 Theoretical Implications

This study contextualises the RBV in the information systems literature and extends the dimensions of the RBV model to the remote working context. Theoretically, the findings offer a comparative view and empirical perspectives of the application of the proposed integrated RBV and A-B-C framework in both developing and developed countries context. This study specifically develops and assesses an integrated framework that combines the resource-based view theory with the A-B-C model to understand the antecedents, behaviour, and consequences of remote working. Apart from providing an integrated theoretical perspective, this study uniquely extends the RBV to include IS deskilling as a new construct arising from the loss of skill because of remote working during the COVID-19 pandemic. The implications of the results point to the need for a multi-theoretical approach to understanding the antecedents and consequences of remote working in future studies. For example, future studies on remote working can consider theories such as the normalisation process theory (May et al., 2011), to help understand how remote working can be normalised in current and future work settings. The study also provides empirical evidence in understanding the link between remote working employee's performance whilst contributing empirical evidence to decisioning for potential policy formalisation on remote working.

## 6 Policy Implications

The findings of the study have policy implications. First, for countries in developing economies like Ghana, government policy and initiatives to invest in digital technologies for development must be given a priority. In addition, the result of this study justifies the need to plan and mobilise appropriate resources and capabilities before implementing such policies as remote working in response to pandemics such as COVID-19. The study also more than emphasised the need for developing countries to raise the ICT penetration and digital readiness of the citizens especially workers across all sectors to be able to respond effectively to emergencies in times of pandemics. The need for a legal policy to back national response to pandemics must guarantee that employers provide the necessary IS resources and capabilities for employees to respond to not only to the pandemic but to be well equipped to deliver on their work mandates. The findings also provide considerable justification for national governments to review employment policies that incorporates and support remote working. It is expected that such a policy could help unleash the creativity and innovativeness in employees for improved productivity, organisational performance, and national development.

## 7 Practical Implications

The study has demonstrated that with the right IS resources and capabilities, employees in both developed and developing countries can adapt to emergencies and responding to new work demands without comprising on their work outputs. Therefore, continuous training and development of IS capabilities employees are key to task innovativeness and creativity to enhance productivity. Practically, the findings imply that in the developing country context, the loss of IS skills because of remote working during the pandemic (IS deskilling) triggered innovativeness in the employees for positive work outputs. Another implication of the results for practice is the proof that remote working promotes flexibility and lifts the pressure of the strict routinised face-to-face office work environment off the shoulders of employees (Venumuddala & Kamath, 2023). The results thus offer evidence of the need for flexible work patterns, arrangements and mode that enhances employee productivity and organisational performance. Furthermore, the results of the study justify the employees' desire and intentions to continue to remote in a post-COVID-19 era.

## 8 Conclusions, Limitations, and Future Research

This study develops and assesses an integrated framework of the resource-based view and antecedent-behaviour-consequence model. The aim was to understand the antecedent of employees' intentions to continue remote working in a post-COVID-19 world of work is explored with data from a developing (Ghana) and a developed (UK) country context. This study specifically examined the relationships between remote working strategy, IS resources, IS upskilling and IS deskilling (as antecedents) and employee task innovativeness (as behaviour). Subsequently, the impact of task innovativeness (behaviour) on outcomes (or consequences) namely employee performance and employees' intention to continue with remote working in the post-COVID-19 era are examined. The study provides an understanding of how IS resources and capabilities were mobilised to support remote working as a strategy in response to the pandemic. Whilst the results provide employers and policymakers on what IS resources and capabilities are necessary to support remote working, researchers can further extend the IS resources and capabilities constructs beyond the IS deskilling and IS upskilling to those other contextual factors in remote work settings.

To address the cultural differences between Ghana and the UK, we conducted and reported interviews with 22 participants (Study 2). Future studies should consider measuring and testing the effect of cultural variables such as power distance, individualism, and uncertainty avoidance on remote working. It is hoped that this would help provide a more nuanced understanding of remote working across different cultural settings.



It must be noted that the primary focus of this study was not on the effect of culture on remote working. Notwithstanding, the study makes a significant contribution to scholarship on remote working from the perspectives of developed and developing countries, whilst extending the resource-based view and the A-B-C model. Some limitations of the study are, however, worth noting. First, the study uses only cross-sectional data from only two countries (Ghana and UK), therefore

future studies can extend the model to cover more countries to provide a multi-country perspective. Secondly, the study focused only on remote working during the pandemic or in crisis, therefore future studies can assess the model in non-crisis situations. In addition, future studies can extend the proposed R-B-V and A-B-C framework to include other theories to provide a multi-theoretical perspective to understanding the remote working and other such phenomena.

## Appendix 1: Questionnaire

Please tick a single box for each statement using the following keys: 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neutral, 5 = Somewhat Agree, 6 = Agree, 7 = Strongly agree.

### Section A:

|  |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|
| Intention to continue remote working (after COVID-19)  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) I intend to continue with remote working (after COVID-19)                                   |   |   |   |   |   |   |   |
| 2) I desire to continue with remote working (after COVID-19)                                   |   |   |   |   |   |   |   |
| 3) I would willingly continue with remote working (after COVID-19)                             |   |   |   |   |   |   |   |
| Employee productivity  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) I was able to get more work done whilst working remotely                                    |   |   |   |   |   |   |   |
| 2) I was able to meet my work targets whilst working remotely                                  |   |   |   |   |   |   |   |
| 3) I can achieve more within a short time whilst working remotely                              |   |   |   |   |   |   |   |
| 4) I am more efficient working remotely  |   |   |   |   |   |   |   |
| Task innovativeness  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) I found new ways to deliver better results  |   |   |   |   |   |   |   |
| 2) I discovered better use of IS resources to achieve better results                           |   |   |   |   |   |   |   |
| 3) I was able to use new methods to achieve my work target                                     |   |   |   |   |   |   |   |
| 4) I found better ways to get more work done whilst working remotely                           |   |   |   |   |   |   |   |
| RW strategy  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) Remote working was timely in response to the pandemic                                       |   |   |   |   |   |   |   |
| 2) Remote working is a good strategy during pandemics like COVID-19                            |   |   |   |   |   |   |   |
| 3) Remote working has been helpful to continue to meet my work target                          |   |   |   |   |   |   |   |
| 4) My company has a strategic rationale for investing in remote working                        |   |   |   |   |   |   |   |
| 5) My company has clear processes for formulating remote working strategy                      |   |   |   |   |   |   |   |
| IS resources   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) There are enough IS/IT tools for working remotely   |   |   |   |   |   |   |   |
| 2) We had easy access to IS tools for working remotely   |   |   |   |   |   |   |   |
| 3) There were convenient IS/IT tools for working remotely                                      |   |   |   |   |   |   |   |
| 4) My company provided appropriate IS/IT tools for working remotely                            |   |   |   |   |   |   |   |
| 5) It is easy to get support to help resolve any IS/IT issues that come up                     |   |   |   |   |   |   |   |
| Upskilling due to COVID-19   |   |   |   |   |   |   |   |
| 1) I have pursued training in IS/IT on my own after the coronavirus outbreak                   |   |   |   |   |   |   |   |
| 2) My company trained us in IS/IT to help us work remotely during the pandemic                 |   |   |   |   |   |   |   |
| 3) I received communication/collaboration skills training in working remotely                  |   |   |   |   |   |   |   |
| 4) I received new training on how to work independently and asynchronously                     |   |   |   |   |   |   |   |
| 5) I have acquired new technical knowledge to be able to work remotely                         |   |   |   |   |   |   |   |
| Deskilling due to COVID-19   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1) I have lost touch with the personal face-to-face interaction with customers                 |   |   |   |   |   |   |   |
| 2) Most of our office tasks have been automated  |   |   |   |   |   |   |   |
| 3) My company outsourced some of our operational activities to semi-skilled or unskilled staff |   |   |   |   |   |   |   |
| 4) I feel I have lost some skills in face-to-face operations before COVID-19                   |   |   |   |   |   |   |   |

## Section D: Demographics

- i) Gender: a) Male [ ] b) Female [ ] c) Prefer not to say d) Other (specify).....
- ii) Age (years): a) <20 b) 20 – 29 c) 30 – 39 d) 40 – 49 e) 50 – 59 f) 60+
- iii) What industry do you work in?
- iv) Before COVID-19, did you sometimes work remotely from home? a) Yes b) No
- v) Country of current residence: a) UK b) Ghana

**Table 6** Industry in which respondents work (Industry \* Country Crosstabulation)

| Industry                   | Country    |            | Total       |
|----------------------------|------------|------------|-------------|
|                            | Ghana      | UK         |             |
| Accountant                 | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Agriculture                | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Automotive                 | 0          | 2 (0.6%)   | 2 (0.3%)    |
| Banking/finance            | 21 (6.8%)  | 46 (13.8%) | 67 (10.4%)  |
| Construction               | 0          | 20 (6.0%)  | 20 (3.1%)   |
| Consultancy                | 5 (1.6%)   | 19 (5.7%)  | 24 (3.7%)   |
| Education                  | 51 (16.5%) | 56 (16.8%) | 107 (16.6%) |
| Energy                     | 5 (1.6%)   | 1 (0.3%)   | 6 (0.9%)    |
| Environment                | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Food                       | 0          | 3 (0.9%)   | 3 (0.5%)    |
| Health                     | 0          | 57 (17.1%) | 57 (8.9%)   |
| Hospitality                | 0          | 10 (3.0%)  | 10 (1.6%)   |
| Housing and social care    | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Information technology     | 50 (16.1%) | 8 (2.4%)   | 58 (9.0%)   |
| Insurance                  | 38 (12.3%) | 1 (0.3%)   | 39 (6.1%)   |
| Legal                      | 0          | 4 (1.2%)   | 4 (0.6%)    |
| Logistics                  | 0          | 3 (0.9%)   | 3 (0.5%)    |
| Manufacturing              | 0          | 5 (1.5%)   | 5 (0.8%)    |
| Maritime enforcement       | 1 (0.3%)   | 0          | 1 (0.2%)    |
| Marketing                  | 15 (4.8%)  | 2 (0.6%)   | 17 (2.6%)   |
| Media and communications   | 9 (2.9%)   | 3 (0.9%)   | 12 (1.9%)   |
| Music                      | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Not for-profit charity/NGO | 0          | 4 (1.2%)   | 4 (0.6%)    |
| Other (specify)            | 0          | 8 (2.4%)   | 8 (1.25)    |
| Policing                   | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Property/estate management | 0          | 4 (1.2%)   | 4 (0.6%)    |
| Public service             | 5 (1.6%)   | 20 (6.0%)  | 25 (3.9%)   |
| Retail                     | 0          | 22 (6.6%)  | 22 (3.4%)   |
| Self employed              | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Services                   | 0          | 17 (5.1%)  | 17 (2.6%)   |
| Sport                      | 0          | 1 (0.3%)   | 1 (0.2%)    |
| Telecommunications         | 88 (28.4%) | 2 (0.6%)   | 90 (14.0%)  |
| Trade and Industry         | 22 (7.1%)  | 0          | 22 (3.4%)   |
| Transportation             | 0          | 2 (0.6%)   | 2 (0.3%)    |
| Utilities management       | 0          | 3 (0.9%)   | 3 (0.5%)    |
| Wholesale/warehouse        | 0          | 3 (0.9%)   | 3 (0.5%)    |
| Total                      | 310 (100%) | 333 (100%) | 643 (100%)  |

## Appendix 2

## Semi-structured Interview Protocol on Remote Working in the UK and Ghana

**Aim:** Validate the findings from a large survey on remote working and innovative task performance among employees in the UK and Ghana.

**Subjects:** Working adult, aged 18 years and over, and resident in the UK and Ghana.

Profile of the interviewee – what do you do in terms of work? Position at work, industry/sector of work? Work experience?

1. How long have you been remote working (RW); what is your motivation for RW or intentions to RW?
2. How do you see RW as a strategy for organisations to enable their employees to be able to work from anywhere?
3. Does your organisation have information system (IS) and/or information technology (IT) resources to support RW? How reliable are these resources?
4. How have you and your organisation prepared for RW regarding skills training or courses?
5. Do you feel RW has made you or will make you lose some skills? And why?
6. How does your organisation have the capabilities to support RW?
7. How has RW helped you innovate in carrying out your work tasks or activities?
8. How do you assess your work performance when you work remotely?
9. Would you like to continue RW? Why?

*Thank you for your time!!!!*

**Table 7** Profile of the interviewees

|     | UK participants  | Ghana participants   |
|-----|--|--|
| #1  | Health Data Scientist, 10 years of work experience, Senior Research Fellow, Academia & Industry  | Testing Bureau Proctor & Testing Admin Officer, Registering of Exams, 1-year, Professional Exams—Academia                        |
| #2  | Business Solutions team, 3 years work experience, Senior Associate, Consultancy, working across sectors  | Social Media Department, 1-year remote working experience, Social Media Team Member, IT industry                                 |
| #3  | Network Operating Centre Operative, 2.5 years of work experience, Data Analyst, Manufacturing IT Industry  | Sales and Marketing Manager for an institution, 8 years now and Marketing, Retail sector   |
| #4  | Business analysis, Project management and Workforce planning, 5 years of work experience, Workforce Planning Analyst, Health sector                            | Customer Relationship, Academic Training, School, 10 years, (both in and out)  |
| #5  | Business analysis and design, business intelligence, 5 years of work experience, Solutions Architect, Waste Recycling, and Recovery (Environmental Management) | Facility Management, 3 years working, 2 years remote working experience, Facility Manager, Academia                              |
| #6  | Software prototype design, outsourced solutions (Consultancy), 17 years of work experience, Director, Technology industry                                      | Content creation for music label, 7 years work experience, Web Programmer and Graphic Designer, Music industry—the media         |
| #7  | Intelligent Automation Programme, 6 years of work experience, Project Manager, Health Sector   | Teaching and training, Online and Remote, 10 years of work experience but remote working during the COVID -19, Trainer, Academia |
| #8  | Project implementation, 20 years work experience, Remote working for 3 years, Project Management Team Member, Academia   | IT Systems Administrator, 4 years remote working but 10 years working experience. IT industry                                    |
| #9  | Teaching & Research, 9 years of work experience, Senior Lecturer, Academia   | Freelancer, Web and Digital Services, 10 years, and have always worked remotely. IT Industry                                     |
| #10 | Project Management, 2 years work experience, Grants Project Manager, Health Sector   | IT industry as Graphic and Web, Counselling, 3 years remote working since 2020 – the onset of COVID                              |
| #11 |  | Technical support, 3 years work experience, IT Desk Support, IT Industry   |
| #12 |  | IT Instructor now, but has worked as a Systems Engineer, 8 years working remotely, IT Industry                                   |

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