



# Does remote work flexibility enhance organization performance? Moderating role of organization policy and top management support

Sheshadri Chatterjee<sup>a</sup>, Ranjan Chaudhuri<sup>b,\*</sup>, Demetris Vrontis<sup>c</sup>

<sup>a</sup> Department of Computer Science & Engineering, Indian Institute of Technology Kharagpur, West Bengal, India

<sup>b</sup> Department of Marketing, National Institute of Industrial Engineering (NITIE), Mumbai, India

<sup>c</sup> Strategic Management, School of Business, University of Nicosia, Cyprus

## ARTICLE INFO

### Keywords:

Remote work  
Top management  
Flexibility  
Satisfaction  
Productivity  
Performance

## ABSTRACT

With the advancement of information and communication technologies (ICTs), employees can work remotely without any hindrance. Moreover, remote work provides organizations an option to remain operationally active during turbulent situations. Remote work flexibility can be facilitated by the organizational top management team support. The objective of this study is to examine if remote work flexibility enhances organization performance, as few studies have explored this connection before. Also, this study investigates the moderating role of top management team support and organization policy towards remote work flexibility. With the help of existing literature and theory, we have developed a model conceptually and then validated it using the PLS-SEM technique on data from 307 respondents. The study finds that remote work flexibility enhances organizational performance significantly, and organization policy and top management support play crucial roles in implementing organizations' remote work policies.

## 1. Introduction

Advancement of digital technology and the rapid development of information and communication technology (ICT) have given rise to the concept of remote work (Olson & Olson, 2000). This concept has ignited organizations to adopt online remote work for its employees (Daniels, Lamond, & Standen, 2001; Jonsson, 2007; Carnevale & Hatak, 2020). An employee who arranges to work away from the normally allocated place of work by using digital technology can be construed as working remotely. Not only has the accelerated development of ICT and digital technology forced organizations to think about remote work but the lockdown measures consequent to the outbreak of the COVID-19 pandemic have also fueled the idea of remote work with digital technology (Mariani & Castaldo, 2020). A recent report stated that almost 70% of organizations are trying to provide their employees options to work remotely. In another report, even after COVID-19 pandemic, 77% executives expect that the remote work trend will continue (Accenture Report, 2021; Report, 2021). In April 2020, the UK Parliament convened "Zoom-parliament" for the first time, deviating from a face-to-face session, which was the age-old tradition of British democracy (Lau, Yang, & Dasgupta, 2020). Many universities worldwide have started using Zoom, Microsoft Teams, and so on for online teaching (Azar, Khan, & Van

Eerde, 2018). Many financial firms have also introduced work from home (WFH) culture (Hodgson & Wigglesworth, 2020). Remote work flexibility is concerned with the concept of organizations' flexible work policy. Such policy allows the employees of the organizations to perform their duties from their homes or from any place outside their office settings. They can work at any time if they can get access to the internet and official systems to complete their allocated assignments (Carnevale & Hatak, 2020; Mariani & Wamba, 2020; Hodgson & Wigglesworth, 2020).

Financial and technology organizations have already introduced the WFH culture (Hodgson & Wigglesworth, 2020). The remote work system provides an organization an option to remain operationally active during any turbulent situation when employees cannot easily travel to their offices. Implementation of the remote work system, which could be regarded as environmentally friendly, is perceived to ensure beneficial results for the organizations if top management support is there along with flexible organization policy (Pattnaik & Jena, 2020; Carnevale & Hatak, 2020). Úbeda-García, Claver-Cortés, Marco-Lajara, Zaragoza-Sáez, and García-Lillo (2018), and Matli (2020) have observed that the remote work concept is associated with workplace, work time, and infrastructural flexibility, which might help or impede the process of remote working.

\* Corresponding author.

E-mail addresses: [ranjan@nitie.ac.in](mailto:ranjan@nitie.ac.in) (R. Chaudhuri), [vrontis.d@unic.ac.cy](mailto:vrontis.d@unic.ac.cy) (D. Vrontis).

<https://doi.org/10.1016/j.jbusres.2021.10.069>

Received 27 April 2021; Received in revised form 22 October 2021; Accepted 25 October 2021

Available online 15 November 2021

0148-2963/© 2021 Elsevier Inc. All rights reserved.

However, not many studies have theorized or modeled what drives the acceptance and use of remote work. Nevertheless, organizations have abruptly embraced remote work to remain operationally active and to be more flexible in addressing the COVID-19 situation (Matli, 2020). But the way in which organizations have taken recourse to remote work has invited many questions and challenges in the context of their existing processes, procedures, capabilities, and infrastructures. The extant literature has already dealt with remote work flexibility to address any unforeseen situation (Hodgson & Wigglesworth, 2020; Matli, 2020). However, the abrupt outbreak of COVID-19 pandemic has forced organizations to adopt remote work systems. Organizations had to embrace remote work to remain operationally active during such a critical situation. However, the sudden adoption of remote work systems has raised many questions. There are no studies on how the organizations should ready themselves to address critical situations by flawlessly adopting a remote work system. With this background, the aim of this study is to address the following research questions (RQs).

*RQ1: How could remote work flexibility improve organization performance?*

*RQ2: Could organization policy and top management support moderate the relationships between remote work flexibility and its predictors?*

We observed in this study that some salient factors impact remote work flexibility. To achieve this, we took help from the literature review and two theories, flexibility firm theory (Rodgers, 1992) and perceived organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986), and developed a conceptual model. This model has been validated by the partial least squares (PLS) – structural equation modelling (SEM) approach with a survey considering inputs of 307 usable respondents. The results helped to validate the model.

The remaining parts of this study are arranged as follows. Section 2 presents the literature review followed by the theoretical background and development of hypotheses in Section 3. After that, Section 4 presents the research methodology followed by an analysis of the results in Section 5. Next, in Section 6, discussion and implications have been presented, followed by limitations. At the end, in Section 7, a conclusion has been drawn.

### 1.1. Digital technologies and platforms for remote working

The development of digital technology and the consequent lockdown measures during the COVID-19 pandemic have accelerated the organizations to make use of digital platforms to ameliorate remote work (Mariani & Castaldo, 2020). As employees now work remotely because of lockdowns, many organizations had to scramble to provide them with the necessary tools for their full-time work in the virtual environment (Hung, Cheng, Hou, & Chen, 2021). To work remotely, employees want to use their organization's software, including the databases they had access to, but in the context of virtual office settings (Choudhary & Mishra, 2021). Some of the platforms through which employees could conduct conference calls and virtual meetings are Teams from Microsoft, Google's Meet, WebEx from Cisco, and Zoom meeting platform. In the context of accepting and using such remote work platforms, the roles of users' trust and privacy issues are needed to be acknowledged (Arpaci, 2017; Song, Kim, & Sohn, 2020). The situation is not clear, as few studies have been conducted in this respect (Acquisti, Brandimarte, & Loewenstein, 2015). In such context, this study has taken an attempt to investigate these issues.

## 2. Literature review

Flexibility is a catchword for employers (Sanchez, Perez, de Luis Carnicer, & Jimenez, 2007), and it is related to work (Clarke, Koch, & Hill, 2004; Chatterjee, Chaudhuri, & Vrontis, 2020), to productivity and commitment at work (Golden, Veiga, & Simsek, 2006), and to creativity

(Galinsky, Bond, & Hill, 2004). When workplace flexibility is considered, one needs to discuss it from both the organizations and employees' angles (Grzywacz & Bass, 2003; Dimitropoulos, Koronios, Thrassou, & Vrontis, 2019; Arfaoui, Hofaidhllaoui, & Chawla, 2019). The term "workplace flexibility" has been interpreted as "the ability of workers to make choices that influence when, where, and for how long they engage in work-related tasks" (Hill et al., 2008, p.152). Workplace and work time flexibility concepts are instrumental when an organization opts for a remote work system using digital technologies (Campanella, Del Giudice, Thrassou, & Vrontis, 2020; Chatterjee, Chaudhuri, Vrontis, et al., 2020; Mariani & Matarazzo, 2020). Many organizations in the public, private, and non-profit sectors have already switched over to an online remote work system. As remote work has become practically relevant, researchers of several disciplines are trying to come up with different roadmaps for conducting in-depth studies of flexible working practices, especially in the context of remote work (Chebbi, Yahiaoui, Vrontis, & Thrassou, 2015; Vrontis, Sakka, et al., 2015; Chatterjee, Chaudhuri, Thrassou, et al., 2020; Mariani, Ek Styven, & Teulon, 2021). These disciplines include, among others, sociology (Wellman et al., 1996); organizations (Spreitzer, Cameron, & Garrett, 2017; Campanella et al., 2020); information systems (Majchrzak, Rice, Malhotra, King, & Ba, 2000; Song et al., 2020; Belyaeva, Shams, Santoro, & Grandhi, 2020); and psychology (Allen, Golden, & Shockley, 2015; Mariani & Castaldo, 2020). Several challenges, as well as opportunities, are associated with the adoption of remote work using digital platforms. No studies have created adoption models or theories to deal with organizations' adoption of technology for remote work in these circumstances (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989; Venkatesh & Davis, 2000). Although a few studies have focused on the adoption of cloud computing, none has investigated the role of users' privacy concerns and trust in using digital platforms, especially in the context of remote work (Mariani & Castaldo, 2020). Moreover, to improve workers' flexibility and to address the lockdown situation due to the COVID-19 pandemic, some organizations have quickly adopted remote work systems, inviting some challenges in sorting out how the existing infrastructure could ensure the smooth operation of a technology-oriented remote work system (Metiu, 2006; Fenner & Renn, 2010; Vrontis, Weber, et al., 2015; Arpaci, 2017; Dimitropoulos et al., 2019). In this context, this study has attempted to determine the antecedents of remote work flexibility, examine whether work flexibility would enhance performance of the organizations, and investigate the moderating role of organization policy and top management support towards remote work flexibility. The above discussion reveals that since remote work has become a necessity to address the unforeseen situation, researchers in different fields have come forward to provide effective roadmaps to address it. However, how such process can be acted upon quickly and smoothly without any flaw is needed to be investigated, which is a gap in the extant literature.

## 3. Theoretical background and development of hypotheses

### 3.1. Theoretical background

Remote work is considered a special arrangement for employees of organizations, in which they are not required to travel or commute to a particular location of work, like an office, store, or warehouse. With the help of advanced ICT and developed digital technology, employees can work from any location at any time. That is why WFH has become so popular. This system helps an organization remain operationally active during any situation, including in the lockdowns during the COVID-19 pandemic, when employees were forced to stay home. Thus, flexibility in the workplace (Hill et al., 2008) has provided various benefits to the employees as well as to the organizations. Remote work flexibility is referred to such a flexible work policy of the organizations that allows the employees to work from any place at any time. Employees can use the organizational infrastructure with internet to perform their work (Pattnaik & Jena, 2020; Carnevale & Hatak, 2020). Employees can work

from home and can look after their family, while the organizations can keep their operations active during the crisis. This is the core idea behind the flexibility firm theory (Rodgers, 1992). This theory highlights that flexibility at the workplace enhances the efficiency of the workers, since they can work from home where they can do their personal things, and the organizations also get the best potential from employees' work. Employees are also more satisfied (Dickens, 2005). Flexibility firm theory has been extended so that the concept of flexibility includes the remote work scenario. It is envisaged that remote work flexibility is impacted by workplace flexibility, work time flexibility, and organizational infrastructure flexibility. These also impact productivity as well as employee satisfaction, ultimately impacting organizational performance (Dickens, 1999, 2005; Whyman & Petrescu, 2014). Flexibility firm theory suggests that organizational structures need enhanced plasticity for addressing any unpredictable situation like COVID-19. An organization that includes flexibility in its policy will allow its employees to be flexible. The responsibility of the leadership is to extend appropriate support to their employees so that they can work from home or from any location during such an apocalyptic situation.

Besides, the best results of remote-work flexibility can be extracted if the top management actively supports the system by articulating appropriate and adaptable organization policy. This is in conformity with perceived organizational support (POS) theory (Eisenberger et al., 1986). POS theory has argued that leadership support of any organization has considerable influence on the employees that motivates them to be more engaged in their jobs with commitment for achieving the goal of the organization (Eisenberger et al., 1986). This idea has also been subscribed by Bond, Galinsky, Kim, and Brownfield (2005). Thus, these discussions make it clear that both these theories (flexibility firm theory and perceived organizational support theory) supplement the effectiveness of leadership support, which is calculated to motivate employees to be more flexible in their working style, to work uninterrupted from any convenient location to keep the organization operationally active during a crisis and afterwards.

### 3.2. Formulation of hypotheses and development of the conceptual model

From the theories as well as the literature review, some endogenous and exogenous antecedents in the perspective of remote work have been identified. We explain these antecedents to formulate the hypotheses and to develop a model conceptually. An attempt has been taken to explain the effects of the two moderators, TMT support and organizational policy, on remote work flexibility.

#### 3.2.1. Workplace flexibility (WPF)

Workplace flexibility (WPF) can be seen from both the employee perspective and the organization perspective. Hill et al. (2008) considered WPF as "the ability of workers to make choices that influence when, where, and from how long day engage in work-related tasks" (p. 152). They also stated that WPF is a beneficial option for employees and employers (Hill et al., 2008). Employees want to avail themselves of workplace flexibility, as they are not troubled to go to the workplace every day but can work from home or any location that helps them attend to their personal obligations. Again, when employees enjoy WPF, the organizations can keep their operations active even when the employees cannot reach their workplace for various reasons (Mariani & Castaldo, 2020). This concept conforms with flexibility firm theory (Rodgers, 1992). This theory highlights that the employees always demand for more flexibility in workplace though resisted by the supervisors. The employee demands WPF because they do not get enough time for discharging their family responsibilities. Accordingly, WPF is perceived to be a predictive factor to impact remote work flexibility. Accordingly, the following hypothesis is formulated.

**H1a:** Workplace flexibility (WPF) positively impacts remote work flexibility (RWF).

#### 3.2.2. Work time flexibility (WTF)

The development of ICT and the advent of digital technology have consolidated the concept of remote work (Golden, 1999). This has promoted the practices covering online remote work in many organizations (Mellner, Kecklund, Kompier, Sariaslan, & Aronsson, 2016; Lemos Lourenço & Neres Lourenço, 2016). Remote work has been facilitated during the COVID-19 pandemic, when different governments decreed lockdowns, forcing people to stay home. Organizations had to manage the turbulent situation by introducing the practice of employees working from home to keep their operations alive. Multinational organizations had to carry out their operations during the time, and the workers had to work at home or in other countries in different time zones. As such, this raised the concept of work time flexibility (Jonsson, 2007). Work time flexibility is when workers can work at any time outside of conventional working hours to carry on with remote work practices (Matli, 2020). Accordingly, it is hypothesized as follows.

**H1b:** Work time flexibility (WTF) positively impacts remote work flexibility.

#### 3.2.3. Infrastructure flexibility (INF)

Remote work depends on the extent of the development of ICT and the rapid advancement of digital technology. It has already been stated that remote work practices help employees to be flexible with work and time, thus helping organizations to keep their operations active in such special circumstances (Sanchez, Vicente-Oliva, & Perez-Perez, 2020). But the benefits of working remotely can be enjoyed by the organizations and the employees if the available technology is in place. Employees cannot perform online activities if the available infrastructure does not support them to work from home (WFH) (Wong, Cheung, & Chen, 2020; Sridhar & Bhattacharya, 2020). For example, in the context of educational organizations, online teaching cannot be augmented if the students do not have laptops at home (Loi, Lin, & Tan, 2019; Wong et al., 2020). Thus, infrastructural flexibility is perceived to help employees', organizations', as well as students' and teachers' remote work flexibility. Accordingly, it is hypothesized as follows.

**H1c:** Infrastructure flexibility (INF) positively impacts remote work flexibility (RWF).

#### 3.2.4. Remote work flexibility (RWF)

The emergence of digital technology and the rapid development of information and communication technology (ICT) have helped several organizations adopt and use online remote work (Daniels et al., 2001). In this context, several authors have attempted to explain remote work. However, most scholars agreed that the concept of remote working is associated with such a work arrangement where employees of an organization can work at any convenient location besides their allocated workplace, and they can work at any time by using digital technologies (Spreitzer et al., 2017). Thus, people can work at home and at any time to complete their assignments within the scheduled time. This concept is in consonance with flexibility firm theory (Rodgers, 1992), which posits that worker always enjoy more flexibility when they work from their homes. This helps workers to discharge their family responsibilities simultaneously. Such an advantageous situation has a considerable impact on the satisfaction level of the workers, and they can work with more enthusiasm (Kaur, Malhotra, & Sharma, 2020). Accordingly, it is hypothesized as follows.

**H2a:** Remote work flexibility (RWF) positively impacts employee satisfaction (EMS).

Again, remote work is conceptualized as a "virtual operation that consists of individuals working towards a common goal, but without centralized buildings, physical plant, or other characteristics of a traditional organization" (Staples, Hulland, & Higgins, 1999, p.758).

Remote work flexibility is considered to have posed a challenge on the traditional management thinking. Work flexibility motivates people to exert their best potential and complete their assigned tasks much earlier than scheduled. Therefore, employees can deliver more outputs in a specific time (Ashraf, 2020). Thus, remote work flexibility helps the employees to work more productively from their homes, which benefits the organizations (Pattnaik & Jena, 2020). Worker efficiency is perceived to have increased with the adoption of remote work due to its flexibility, and therefore it is perceived that remote work flexibility would have an impact on organizations' overall performance. Accordingly, it is hypothesized as follows.

**H2b:** Remote work flexibility (RWF) positively impacts employee productivity (EMP).

### 3.2.5. Employee satisfaction (EMS) and employee productivity (EMP)

Remote work is associated with the conception of flexible strategies, which are perceived to be essential parts of an organization. Research shows that remote work flexibility impacts productivity, profitability, and satisfaction (Dickens, 2005). Kaur et al.'s (2020) study on the business process outsourcing (BPO) employees of Indian organizations observed that internal branding, effective commitment, as well as employee engagement with the organizations are closely related to employees' job satisfaction. In another study (Ashraf, 2020) conducted in private universities in Bangladesh, it has been found that demographic factors and employee compensation are closely related to employee job satisfaction and improved employee productivity in terms of the organizational commitment. From these studies, it emerged that employee satisfaction and employee productivity are perceived to have effective impacts on the performance of the organizations. In the context of our study, in the remote work environment, employees are not restricted to work at a particular time, and they are not compelled to be at the workplace. Employees have the flexibility to arrange their own workplace and can work when it is convenient, which can meet the organization's goal (Millmore, Simon, & Lewis, 2007). This process of work enhances the level of satisfaction that employees feel while working. Obviously, this is perceived to improve productivity of the organization (Dickens, 2005). Accordingly, it is hypothesized as follows.

**H3a:** Employee satisfaction (EMS) positively impacts organization performance (ORP).

**H3b:** Employee productivity (EMP) positively impacts organization performance (ORP).

### 3.2.6. Moderating effects of top management team support (TMS) and organization policy (OGP)

To enhance work flexibility, which could improve the organization's productivity, profitability, and performance, especially during the COVID-19 pandemic lockdown, organizations should implement a remote work system with digital technologies (Nambisan, 2017). In such a situation, the organization's top management team support (TMS) is considered vital. TMS has three components: transitional leadership, involving hierarchical decision structure; empowerment leadership, involving participating digital structure; and laissez-faire leadership, which is concerned with specialized design structure (Cohen, March, & Olsen, 1972; van Knippenberg, 2013). Since top management takes decision in policy matters, it is important for them to decide to give employees the flexibility to work from any place during the pandemic situation. Accordingly, it is hypothesized as follows.

**H4a:** Top management team support (TMS) moderates the relationship between workplace flexibility (WPF) and remote work flexibility (RWF).

During COVID-19 period, organizations should change their decisions about employees' work practices, and the part played by the top

management is critical. Top management support is comprised of three components, which are empowerment leadership, including participating digital structure; transitional leadership, which involves hierarchical decision structure; and laissez-faire leadership, which can be conceptualized with specialized design structure (Cohen et al., 1972). In a crisis, such as the pandemic, the top management is expected to decide to give their employees the option to work at any time to complete their allocated tasks. Accordingly, it is hypothesized as follows.

**H4b:** Top management team support (TMS) moderates the relationship between work time flexibility (WTF) and remote work flexibility (RWF).

Cohen et al. (1972) developed a model that describes the major steps in the decision-making process, which a leadership team can use for successful decision-making. van Knippenberg (2013) observed that leadership support is important when an organization needs to take a concrete decision. Organizations also need to develop flexible infrastructure to help their employees work anywhere and at any time in a pandemic situation. Accordingly, it is hypothesized as follows.

**H4c:** Top management team support (TMS) moderates the relationship between infrastructure flexibility (INF) and remote work flexibility (RWF).

The organization policy (OGP) is perceived to play a crucial role in adopting and using digital technology and advanced ICT for remote work flexibility. Organizations need to formulate and adopt an appropriate policy so as not to impede their employees from having the options to work from home with flexible time by using online platforms (Sridhar & Bhattacharya, 2020). Hofäcker and König (2013) suggested that the policy should be conducive to allow employees to enjoy flexibility in the context of workplace and work time by using advanced ICT and digital platforms. Workplace flexibility is explained as the ability of the workers for making choices as to where, when, and how long the workers are to work for completion of the work-related tasks (Hill et al., 2008). Thus, organizational policy is perceived to influence the correlation between workplace flexibility and remote work flexibility. Accordingly, it is hypothesized as follows.

**H5a:** Organization policy (OGP) moderates the relationships between workplace flexibility (WPF) and remote work flexibility (RWF).

It is known that online remote work practices have already been promoted in many organizations. These practices have been facilitated by the organizations during COVID-19 pandemic period when different governments had to promulgate lockdowns (Mariani & Castaldo, 2020). In such situation, employees of multinational companies had to work from home or from any other secured places in their respective countries with varied time zones. This working system had to import the concept of worktime flexibility (Jonsson, 2007). Worktime flexibility is conceptualized when the employees enjoy the option to work at any time beyond the conventional work hours for carrying on with the work practices (Malti, 2020). The time flexibility perceived to impact remote work as already hypothesized. But the organizational policy (OGP) in such context must be flexible and conducive not to cause any impediment towards the workers to work beyond the traditional conventional hours. Accordingly, it is hypothesized as follows.

**H5b:** Organization policy (OGP) moderates the relationships between work time flexibility (WTF) and remote work flexibility (RWF).

From the earlier discussion, it is perceived that workplace flexibility and work time flexibility have an impact on remote work flexibility. This

impact is perceived to be influenced by the organizational policy (Hofäcker & König, 2013). It is also perceived that the organizational policy takes a critical role in the relationship between organizational infrastructure and remote work flexibility. Employees can hardly perform their online activities in the virtual environment provided the employees can avail and use the appropriate technology for remote working (Sridhar & Bhattacharya, 2020). In the educational establishments, the online teaching cannot be augmented without the students having computers, or laptops, or smartphones at home (Wong et al., 2020). The organizations must help the employees to utilize the organizational software and databases to continue their remote works (Loi et al., 2019). If the organizational norms do not allow to help the employees by permitting them to use organizational infrastructure, it is hardly possible by the employees to working remotely. Thus, organizational policy must be flexible in this context (Sanchez et al., 2020). Accordingly, it is hypothesized as follows.

**H5c:** Organization policy (OGP) moderates the relationships between infrastructure flexibility (INF) and remote work flexibility (RWF).

Different studies suggested that some features of organizations can impact their performance (Porter & Donthu, 2006; Vrontis, Christofi, Battisti, & Graziano, 2020). To strengthen the relationships among the constructs and to delineate the model better, three features of organization performance have been considered that would develop a rigorous synthesis of the theoretical linkages (Dimitropoulos et al., 2019). The features so considered are organization size, organization age, and organization type.

With these inputs, a model is developed conceptually and shown in Fig. 1.

#### 4. Research methodology

To test the hypotheses and validate the model, the partial least squares (PLS) structural equation modeling (SEM) technique has been adopted. In this study, the PLS-SEM technique was preferred since it can easily analyze any complex model (Hair et al., 2017, 2018). The PLS-SEM analysis does not require the data to be normally distributed, which is an indispensable prerequisite for applying CB-SEM (Ringle, Sarstedt, & Straub, 2012). Besides, this technique can be applied without any sample restriction (Willaby, Costa, Burns, MacCann, & Roberts,

2015). The respondents' replies to the survey are quantified with a standard, five-point Likert scale. The survey was conducted through a set of questions in the form of statements and a response sheet, which has five options for each question, ranging from *Strongly Disagree* (SD), marked as 1, to *Strongly Agree* (SA), marked as 5.

##### 4.1. Measurement instruments

We prepared the questions with inputs from the literature review and the constructs. All the instruments were made from the existing validated scales after we made slight modification in terms of the research context. The instruments were written in English. Since the respondents were employees of different ranks at MNEs and large Indian organization, as well as small and medium enterprises (SMEs), they were knowledgeable of the English language. A pre-test was conducted with some employees who had been working from home. The inputs from the respondents in this pre-test helped to develop the readability of the questionnaire. Then, we asked five experts in the domain of this study for their opinions regarding the questionnaire's readability and comprehensiveness. Initially we prepared 31 questions. And from the inputs of the pre-test and experts' opinion, the wordings of some of those questions have been modified. In this way, after all these corrections, the set of 31 questions was finally fine-tuned. The details of the items with their sources are provided in the Appendix.

##### 4.2. Collection of samples

The issue of the present study was to assess if remote work flexibility could improve organization performance under the moderating effects of organization policy and top management support. To achieve better inputs, the authors targeted respondents who possessed knowledge about the subject matter of this study. Hence, purposive sampling, which is otherwise subjective and judgmental sampling, was applied (Apostolopoulos & Liargovas, 2016). Moreover, since the majority of the authors of the present study are based in India, the authors collected data from respondents there, which is convenience sampling methodology (Garg, 2019). Hence, both purposive and convenience sampling were used.

To collect the sample, two different approaches were taken. Through the authors' contacts, we contacted some executives of multinational enterprises (MNEs) functioning in India and of large Indian enterprises and SMEs who allowed their employees to work from home. In this way,

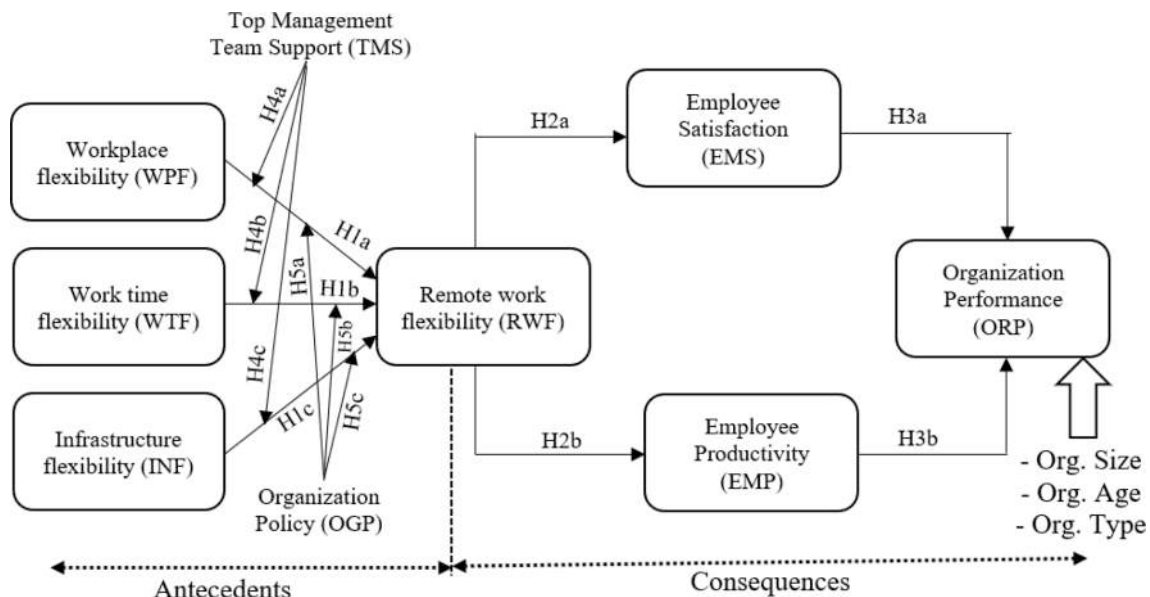


Fig. 1. The conceptual model.

three MNEs and 14 Indian large enterprises and SMEs were selected. From these 17 enterprises, employees having different ranks and working from home were chosen. In total, 397 employees were selected as prospective respondents. Contacts were made during August and September 2020 with these 17 organizations. Three were MNEs and 14 were Indian organizations, of which two were conglomerates, four were large IT organizations, three belonged to telecommunication sector, and five were SMEs (three were from the manufacturing sector and two were from the service sector).

We then conducted a web-based survey to obtain responses from employees of enterprises functioning in India who had been working from home. A survey hyperlink was placed on social networking sites like Facebook and LinkedIn for one month (October 2020). To confirm that the respondents were working from home, we asked the respondents to provide some screenshots when they used online meeting platforms like Teams (Microsoft), Google Meet (Google), WebEx (Cisco), Skype (Microsoft), and Zoom. Therefore, we were able to collect 301 employees' details. The employees had different ranks.

Through the two collection methods, we were able to target 698 prospective respondents. We informed them that the aim of this study was purely academic, and their confidentiality and anonymity would be strictly preserved. They were provided with the questionnaire and the response sheet with the five options for each question. We told each respondent to put one tick mark in one option out of the five for each instrument. There was also a guideline explaining to the respondents how to fill in the response sheet. These 698 potential respondents were requested to reply within two months (November to December 2020). Within the stipulated time, 321 responses were returned, which is a response rate of 45.98%. On scrutiny, it was found that, out of 321 responses, 14 responses were incomplete. Out of these 14 responses, we noticed that some of the respondents left the response sheet completely blank and some of the respondents put tick marks in more than one option against each question. That is why these 14 responses were considered as incomplete and excluded from the analysis. Analysis of 307 responses against 31 instruments was carried out using the PLS-SEM technique. This is within the permissible range (Deb & David, 2014). The demographic statistics of 307 respondents is provided in Table 1.

## 5. Results with analysis

### 5.1. Measurement properties and discriminant validity test

To estimate the convergent validity of all the items, the loading factor (LF) of each item was assessed. It was observed that estimated values of all the loading factors were more than 0.70 (Chin, 2010). To measure the reliability and validity of the constructs, composite reliability (CR) and average variance extracted (AVE) of all the constructs were estimated. All the estimated values of CRs and AVEs were found to be greater than 0.80 and 0.50, respectively (Hair, Sarstedt, Ringle, & Gudergan, 2017). To measure the multicollinearity defect, variance inflation factor (VIF) of all the constructs was estimated, and the

**Table 1**  
Demographic statistics (N = 307).

Category	Item	Frequency	Percentage (%)
Gender	Male	196	63.84
	Female	111	36.16
Age	20–40 years	203	66.12
	Above 40 years	104	33.88
Education	Undergraduate	97	31.59
	Graduate	152	49.51
	Postgraduate	58	18.90
Hierarchical rank	Junior manager	91	29.64
	Mid-level manager	162	52.77
	Senior manager	54	17.59

estimated values were found to be within the allowable range (Kock & Lynn, 2012). The results are shown in the Table 2.

Also, it has been observed that the square root of each AVE is greater than the bi-factor correlation coefficients. This satisfies Fornell's and Larcker's criterion (Fornell & Larcker, 1981) confirming discriminant validity. The results are shown in Table 3.

### 5.2. Moderator analysis

If a relationship between two constructs is not fixed, a third variable may either strengthen, weaken, or even, sometimes, alter the direction of the relationship. This third variable is considered as a moderating variable. The study has considered TMS and OGP as two moderators acting on the three linkages H1a, H1b, and H1c. The effects of TMS have been considered by dividing it into two categories: Strong TMS and Weak TMS. Similarly, the other moderator OGP has been divided into Strong OGP and Weak OGP. To verify the effects of these two moderators in respect of the two categories for each, multigroup analysis (MGA) has been performed. It is known that if the p-value difference for the effect of the two categories of a moderator on a linkage is less than 0.05 or more than 0.95, it is considered to be significant (Hair, Hult, Ringle, & Sarstedt, 2016). The MGA has been conducted with the bootstrapping procedure considering 5000 resamples. The results are shown in Table 4.

### 5.3. Hypotheses testing (SEM)

Using the PLS-SEM technique, we have tested the hypotheses with the blindfolding process of the bootstrapping procedure considering

**Table 2**  
Measurement properties.

Constructs/ Item	LF	AVE	CR	$\alpha$	VIF	t- Value	No. of Items
WPF		0.78	0.82	0.86	4.7		5
WPF1	0.89					22.17	
WPF2	0.90					24.07	
WPF3	0.96					26.98	
WPF4	0.86					31.76	
WPF5	0.88					19.81	
WTF		0.83	0.86	0.89	3.9		5
WTF1	0.85					32.68	
WTF2	0.87					37.11	
WTF3	0.96					34.06	
WTF4	0.92					22.17	
WTF5	0.85					29.99	
INF		0.86	0.89	0.93	3.6		5
INF1	0.90					30.04	
INF2	0.93					36.14	
INF3	0.95					25.52	
INF4	0.91					26.11	
INF5	0.94					24.17	
RWF		0.85	0.88	0.94	4.2		5
RWF1	0.90					26.08	
RWF2	0.85					29.11	
RWF3	0.96					24.47	
RWF4	0.92					30.48	
RWF5	0.88					24.92	
EMS		0.88	0.92	0.95	4.1		4
EMS1	0.95					22.77	
EMS2	0.90					28.11	
EMS3	0.90					32.02	
EMS4	0.95					34.11	
EMP		0.82	0.86	0.89	3.9		4
EMP1	0.88					28.17	
EMP2	0.91					29.25	
EMP3	0.98					26.27	
EMP4	0.84					38.83	
ORP		0.84	0.88	0.91	4.4		3
ORP1	0.88					31.77	
ORP2	0.96					36.49	
ORP3	0.91					31.22	

**Table 3**

Discriminant validity test (Fornell and Larcker criterion).

Construct	WPF	WTF	INF	RWF	EMS	EMP	ORP	AVE
WPF	0.88							0.78
WTF	0.31	0.91						0.83
INF	0.37	0.24	0.93					0.86
RWF	0.36*	0.32	0.23*	0.92				0.85
EMS	0.30**	0.28***	0.32	0.27	0.94			0.88
EMP	0.19	0.37	0.28**	0.25	0.22	0.90		0.82
ORP	0.21	0.31	0.24	0.21*	0.24**	0.28***	0.92	0.84

Note:  $p < 0.05$ (\*);  $p < 0.001$ (\*\*);  $p < 0.001$ (\*\*\*).**Table 4**

Moderation Analysis (MGA).

Linkage	Hypothesis	p-Value difference	Remarks
(WPF → RWF) × TMS	H4a	0.02	Significant
(WTF → RWF) × TMS	H4b	0.04	Significant
(INF → RWF) × TMS	H4c	0.01	Significant
(WPF → RWF) × OGP	H5a	0.03	Significant
(WTF → RWF) × OGP	H5b	0.03	Significant
(INF → RWF) × OGP	H5c	0.02	Significant

5000 resamples. The process is useful because it helps to avoid parametric test (Chin, 2010). With this process, we were able to find the path coefficients of different linkages, the p-values, and  $R^2$  values. The validated model is shown in Fig. 2.

The results are also shown in Table 5.

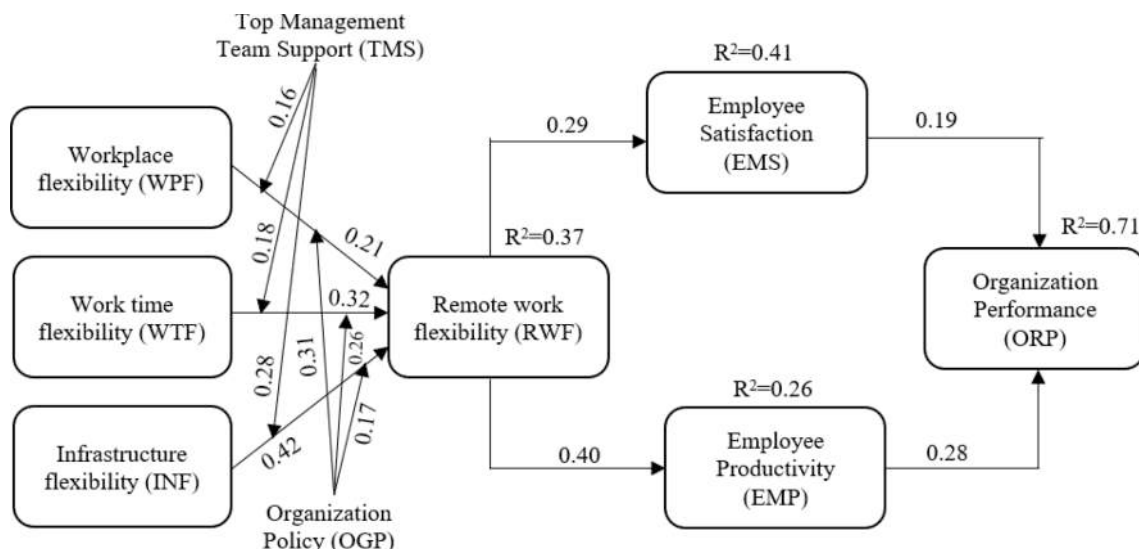
#### 5.4. Results

This study has formulated 13 hypotheses, out of which six belong to the effects of two moderators, TMS and OGP, on the linkages H1a, H1b, and H1c. The results show that out of three impacts of WPF, WTF, and INF on RWF (H1a, H1b, and H1c), the impact of INF on RWF (H1c) is the maximum, as the concerned path coefficient is 0.42, with a level of significance of  $p < 0.001$ (\*\*\*). The effect of RWF on EMS and EMP (H2a and H2b) is significant, as the path coefficients are 0.29 and 0.40, with levels of significance  $p < 0.05$ (\*) and  $p < 0.001$ (\*\*\*), respectively. EMP has a greater impact on ORP (H3b) than EMS has on it (H3a), as the path coefficient of the former is 0.26, with a level of significance of  $p < 0.001$ (\*\*\*). The results also highlight that the moderating effects of TMS and OGP on the linkages H1a, H1b, and H1c are all significant.

In terms of the values of  $R^2$  (coefficients of determinants), it appears

**Table 5**Path coefficients, p-values,  $R^2$  values with remarks.

Linkages	Hypotheses	$R^2$ values/Path coefficients	p-Values	Remarks
Effects on RWF		$R^2 = 0.37$		
By WPF	H1a	0.21	$P < 0.01$ (**)	Supported
By WTF	H1b	0.32	$P < 0.05$ (*)	Supported
By INF	H1c	0.42	$P < 0.001$ (***)	Supported
Effects on EMS		$R^2 = 0.41$		
By RWF	H2a	0.29	$P < 0.05$ (*)	Supported
Effects on EMP		$R^2 = 0.26$		
By RWF	H2b	0.40	$P < 0.001$ (***)	Supported
Effects on ORP		$R^2 = 0.71$		
By EMS	H3a	0.19	$P < 0.001$ (***)	Supported
By EMP	H3b	0.28	$P < 0.001$ (***)	Supported
(WPF → RWF) × TMS	H4a	0.16	$P < 0.05$ (*)	Supported
(WTF → RWF) × TMS	H4b	0.18	$P < 0.05$ (*)	Supported
(INF → RWF) × TMS	H4c	0.28	$P < 0.01$ (**)	Supported
(WPF → RWF) × OGP	H5a	0.31	$P < 0.001$ (***)	Supported
(WTF → RWF) × OGP	H5b	0.26	$P < 0.05$ (*)	Supported
(INF → RWF) × OGP	H5c	0.17	$P < 0.05$ (*)	Supported

**Fig. 2.** Model after validation (SEM).

that WPF, WTF, and INF can explain RWF to the extent of 37%. EMS and EMP could be explained by RWF to the tune of 41% and 26%, respectively. Again, EMS and EMP could explain ORP to the tune of 71%, which is the predictive power of the model. As such, PLS-SEM analysis indicates that all the hypotheses are supported.

## 6. Discussion

This study has aimed to investigate remote work, which entails a better understanding of the opportunities, challenges, processes, and consequences of the phenomenon. This study has highlighted that, to achieve better remote work flexibility, an organization's employees should have options for workplace flexibility and work time flexibility, and they must have support from organizations for infrastructural flexibilities. These results correspond to hypotheses H1a, H1b, and H1c, which have been supported through the PLS-SEM analysis and align with other studies (Hill et al., 2008; Jonsson, 2007; Whyman & Petrescu, 2014). This study has shown that, if organizations adopt and use a remote work system, employees' satisfaction and productivity will be impacted. This is in consonance with validated hypotheses H2a and H2b and has already been supported by an earlier study (Dickens, 2005). Also, the studies of Kaur et al. (2020) and Ashraf (2020), which dealt with employee satisfaction and productivity, also supported the hypotheses H2a and H2b of this study. All these hypotheses also conform with flexibility firm theory (Rodgers, 1992). The study has also highlighted that top management team support and organization policy have effective moderating impacts on remote work flexibility. These hypotheses are in conformity with Eisenberger et al. (1986) POS theory, which argues that leadership support has a considerable impact on the employees of organizations, motivating them to be more engaged in their jobs to achieve the goal. This argument has also been supplemented by Bond et al. (2005). However, the effects of the two moderators, TMS and OGP, on the relationships H1a, H1b, and H1c have been found significant in terms of MGA. Now these moderating effects on the concerned linkages are illustrated with graphs in Fig. 3, which describe the effects of Strong and Weak TMS on the linkages H1a, H1b, and H1c.

In these three graphs, the continuous and dotted lines show the effects of Strong and Weak TMS, respectively. In each case, as WPF (for H1a), WTF (for H1b), and INF (for H1c) increase, the rate of increase of RWF is more for the effects of Strong TMS compared to the effects of Weak TMS, as, in all the graphs, the gradients of the continuous lines are greater than the gradients of the dotted lines.

Fig. 4 shows three graphs that describe the effects of Strong OGP (continuous lines) and Weak OGP (dotted lines) on the three linkages H1a, H1b, and H1c.

In each case, as WPF (for H1a), WTF (for H1b), and INF (for H1c) increase, the rate of increase of RWF is more for the effects of Strong OGP than for Weak OGP, as the gradients of all three continuous lines are greater than the gradients of the three dotted lines.

## 6.1. Theoretical contributions

The study has provided several theoretical contributions to the extant literature. This study has investigated how the confluence of two factors, rapid development of digital technology and abrupt introduction of lockdown measures during the COVID-19 pandemic, could dramatically force the organizations to use ICT and digital technology for remote work (Mariani & Castaldo, 2020). No other studies appear to have investigated different predictors of remote work in such a context. We claim this to be a theoretical contribution of this study to the extant literature. This study has highlighted how workplace and work time flexibility, supported by organizations' flexible infrastructure, could help organizations to adopt and use remote work flexibility to improve employee satisfaction and productivity, thus improving organization performance (Hodgson & Wigglesworth, 2020; Mariani & Castaldo, 2020). The study has also shown how effective and implementable organization policy and top management support could act as positive catalysts for adopting remote work flexibilities in the organizations, especially in unforeseen situations, thereby keeping the organizations' operations active. This is construed to be a unique theoretical contribution of this study.

Our study has effectively used the concept of flexibility firm theory (Rodgers, 1992) which highlights that the employees have the tendency to avail more flexibility in the workplace. This concept of this theory has been extended to interpret remote work flexibility as a situation where workers can work from any location at any time to accomplish the organization's goal. This is also claimed to be another theoretical contribution of this study.

The flexible firm theory is associated with a flexible staffing strategy, which utilizes employees depending on volume of business, ensuring sustainable competitive edge and improved customer service. However, in the present context of the COVID-19 pandemic and thereafter, the applicability of this theory has been extended to understand how to keep organizations operationally active during any crisis. First, firms should articulate policy that allows employees to enjoy workplace, work time, and infrastructural flexibility, so that there is no hindrance of the firms' workforce during a crisis. Second, it is necessary for leadership to support the staff in taking all appropriate measures to keep the organizations operationally active during and after any crisis by adopting flexible procedures.

By amplifying POS theory (Eisenberger et al., 1986), this study has interpreted how top management team support (TMS) and organization policy (OGP) could help in the adoption of a remote work system by using advanced ICT and digital technology. This is also another theoretical contribution of this study. The perceived operational support theory envisages that if employees perceive that they have supervisory support in all affairs, the organizations will perform better (Dawley, Houghton, & Bucklew, 2010). This idea of perceived organizational support theory has been extended in the present study to emphasize that the support of top management is essential so employees can freely work from any location at any time with the help of their organizations'

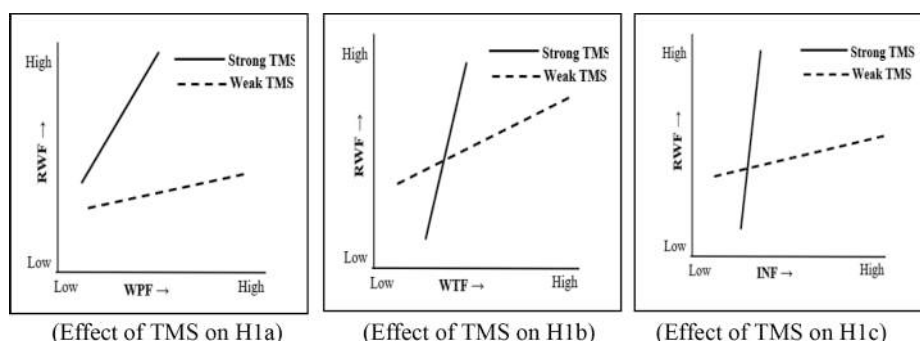


Fig. 3. Effects of TMS on H1a, H1b, and H1c.

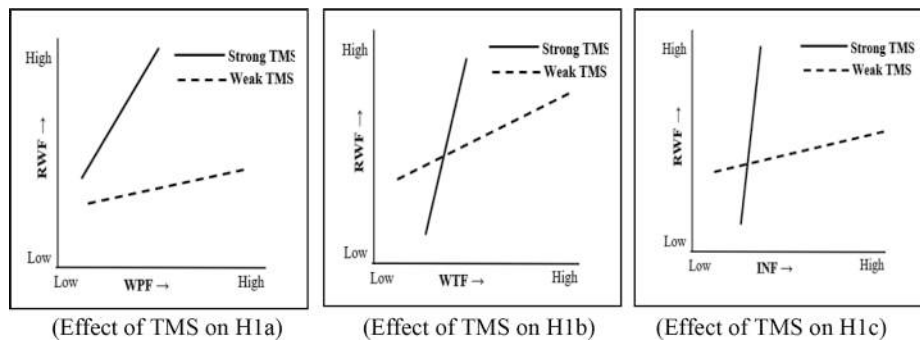


Fig. 4. Effects of OGP on H1a, H1b, and H1c.

appropriate infrastructures to keep the workflow uninterrupted during and after any crisis.

Millmore et al. (2007) observed that, by adopting workplace flexibility, IBM was able to ensure profitability, productivity, job satisfaction and other benefits. We extended this concept (Millmore et al., 2007) in this study by considering that work time and infrastructure flexibility, along with workplace flexibility, help organizations to adopt remote work flexibility. We have therefore shown that, when an organization adopts a remote work system, it enhances employees' satisfaction and productivity thus improving organizational performance. Several studies show that employee satisfaction is closely related with employee productivity (Kaur et al., 2020; Ashraf, 2020). Also, other studies highlight that employee satisfaction and productivity are closely associated with performance of the organizations (Arfaoui et al., 2019; Dimitropoulos et al., 2019; Campanella et al., 2020). Our study has extended the concepts of employee satisfaction, employee productivity, as well as organization performance, in terms of remote work flexibility, organizational remote work policy, and proactive support of the top management. In this respect, this study is deemed to have contributed substantial inputs to the extant literature. This may also be considered as a special contribution of this study.

## 6.2. Practical implications

This study has provided several practical implications that organizations' practitioners and managers could apply. This study implies that organizations need to develop flexible work policies to facilitate employees to work from remote locations. In this context, organizations should enable their employees to use digital remote work platforms, such as Microsoft Teams, Zoom, Cisco WebEx, and other digital platforms for virtual meetings, conferences, and so on. This study's findings imply that an organization's employees must have the option of work time flexibility, but they need to ensure that the organization's goal is accomplished and that they complete their work on schedule. The results of the present study suggest that organizations must ensure that their employees can use laptops, PCs, tablets, smartphones, and so on, which belong to the organizations. Managers should allow employees to choose any device and work from any location at any time on the organization's projects. Information technology (IT) administrators and the chief information officer (CIO) must ensure that the employees can use different devices easily. In this context, it is important for the project team managers to offer employees 24 × 7 IT service support when they work from remote locations. The study findings suggest that managers should fully support employees to work to their best potential.

Further, this study highlights that top management team support and organization policy significantly impact and moderate remote work flexibility. Therefore, policy needs to be framed in such a way so that it can easily be implemented with good governance, allowing employees to work from any location at any time using the organization's virtual infrastructure. This will help employees enjoy 24 × 7 support to ensure unhindered workflow to accomplish the goals of the organizations

within a tight schedule.

This study also highlights that it is easier for large organizations, especially for the service sector or knowledge-intensive organizations, to provide remote work options to their employees, as they have adequate resources in terms of funds, manpower, and technology. But the same is not applicable to small and medium enterprises (SMEs), especially in the manufacturing sector. Manufacturing SMEs have different work conditions for their employees, and they also suffer from a lack of trained manpower, funds, technology, and other resources, which pose challenges to their ability to provide remote work flexibility to their employees.

## 6.3. Limitations and future scope for research

This study is based on cross-sectional data. Future researchers should conduct this study longitudinally to eliminate the defects. The results are based on the analysis of responses from organizations functioning in India. Thus, the results obtained in this study may not be generalizable to other countries. Future researchers may conduct the study in other geographic locations to improve its generalizability. This study was conducted with the replies of 307 usable respondents. It may not project the entire society, and, as such, it lacks again in generalizability. Future researchers may address this point. This study highlights that the predictive power of the model is 71%. Future researchers may consider other boundary conditions to examine if including them may improve the predictive power of the model. For example, the model did not consider trust and privacy factors as predictors of a remote work system, which could make the model more attractive and pragmatic (Castaldo, Premazzi, & Zerbin, 2010; Acquisti et al., 2015).

## 7. Conclusion

In the context of the rapid advancement of ICT and digital technology, many organizations worldwide have adopted the remote work system to enhance flexibility as well as to keep the organizations' operations active during the lockdowns because of the COVID-19 pandemic. In this situation, this study has investigated the opportunities and challenges concerned with remote work with the assistance of digital platforms. This study has nurtured the processes, drivers, and consequences of adopting a remote work system. It has shown that workplace, work time, and infrastructural flexibility could impact the remote work system to maintain the organization's operations even in a turbulent situation. The remote work system is perceived to have impacted employees' satisfaction and productivity, triggering improvement in organizational performance. This study has provided a successful model showing how different factors could impact the flexibility of organizations in the context of using remote work systems. This theoretical model is expected to yield effective results if it is applied to other emerging economies after modifying the model according to the prevailing situation. As such, this model is perceived to be accepted as a baseline for future researchers to further extend to fit their specific

geographic locations where they conduct a similar study.

interests or personal relationships that could have appeared to influence the work reported in this paper.

### Declaration of Competing Interest

The authors declare that they have no known competing financial

### Appendix. Summary of questionnaire

Items	Source	Statements	Response [SD][D][N][A] [SA]
WPF1	Hill et al., 2008; Rodgers, 1992; Mariani & Castaldo, 2020	Workplace flexibility helps me to improve my productivity.	[1][2][3][4][5]
WPF2		I like to work as per my choice of location	[1][2][3][4][5]
WPF3		Workplace flexibility helps me optimize my work-life balance.	[1][2][3][4][5]
WPF4		I believe that workplace flexibility is an essential component for remote working.	[1][2][3][4][5]
WPF5		Given a choice, I would like to work from my preferred locations.	[1][2][3][4][5]
WTF1	GOLDEN, 1999; Jonsson, 2007; Mellner et al., 2016; Lemos Lourenço & Neres Lourenço, 2016; Matli, 2020	I like to work as per my preferred time zone.	[1][2][3][4][5]
WTF2		I believe that work time flexibility improves my working efficiency.	[1][2][3][4][5]
WTF3		Work time flexibility helps me to work-life balance.	[1][2][3][4][5]
WTF4		I think work time flexibility is an essential component for remote working.	[1][2][3][4][5]
WTF5		I believe that work time flexibility helps in improving individual productivity.	[1][2][3][4][5]
INF1	Loi et al., 2019; Sanchez et al., 2020; Wong et al., 2020; Sridhar & Bhattacharya, 2020	Infrastructure is an essential ingredient for remote working.	[1][2][3][4][5]
INF2		I believe all the organizations should appropriately invest to improve their infrastructure.	[1][2][3][4][5]
INF3		I have a good infrastructure for remote working.	[1][2][3][4][5]
INF4		I think that organizations should have a flexible infrastructure usage policy to support remote working.	[1][2][3][4][5]
INF5		My organization provides me adequate infrastructural support for remote working.	[1][2][3][4][5]
RWF1	Rodgers, 1992; Daniels et al., 2001; Spreitzer et al., 2017; Kaur et al., 2020	I like remote working	[1][2][3][4][5]
RWF2		I feel more satisfaction in working remotely	[1][2][3][4][5]
RWF3		I think remote working improves productivity	[1][2][3][4][5]
RWF4		I enjoy remote working	[1][2][3][4][5]
RWF5		I think remote working option provides better flexibility to employees.	[1][2][3][4][5]
EMS1	Dickens, 2005; Millmore et al., 2007; Kaur et al., 2020; Ashraf, 2020	Remote work is a fun.	[1][2][3][4][5]
EMS2		Satisfied employees can work efficiently.	[1][2][3][4][5]
EMS3		I believe that improving employee satisfaction is an important objective for providing remote working option.	[1][2][3][4][5]
EMS4		I believe most of my friends and colleagues are satisfied while working remotely.	[1][2][3][4][5]
EMP1	Millmore et al., 2007; Kaur et al., 2020; Ashraf, 2020	I believe employees become more productive while working remotely.	[1][2][3][4][5]
EMP2		Improvement of employee productivity enhances the performance of the organization.	[1][2][3][4][5]
EMP3		One of the main objectives of remote work flexibility is to enhance employee productivity.	[1][2][3][4][5]
EMP4		I believe organizations having better employee productivity will perform better.	[1][2][3][4][5]
ORP1	Loi et al., 2019; Sanchez et al., 2020; Wong et al., 2020; Sridhar & Bhattacharya, 2020	I believe remote working option can improve the performance of the organization.	[1][2][3][4][5]
ORP2		Improvement of organization performance led to better competitive advantage.	[1][2][3][4][5]
ORP3		Flexible working condition improves organization productivity.	[1][2][3][4][5]

### References

- Accenture Report (2021). Technology Vision 2021. Available at: <https://www.accenture.com/us-en/insights/technology/technology-trends-2021>. (Accessed on 14 March 2021).
- Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science*, 347(6221), 509–514.
- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40–68.
- Apostolopoulos, N., & Liargovas, P. (2016). Regional parameters and solar energy enterprises: Purposive sampling and group AHP approach. *International Journal of Energy Sector Management*, 10(1), 19–37.
- Arfaoui, N., Hofaidhlaoui, M., & Chawla, G. (2019). Social performance of the company: An explanation centralized on the social and technological factors. *EuroMed Journal of Business*, 15(1), 102–126.
- Arpaci, I. (2017). Antecedents and consequences of cloud computing adoption in education to achieve knowledge management. *Computers in Human Behavior*, 70, 382–390.
- Ashraf, M. A. (2020). Demographic factors, compensation, job satisfaction and organizational commitment in private university: An analysis using SEM. *Journal of Global Responsibility*, 11(4), 407–436.
- Azar, S., Khan, A., & Van Eerde, W. (2018). Modelling linkages between flexible work arrangements' use and organizational outcomes. *Journal of Business Research*, 91, 134–143.
- Belyaeva, Z., Shams, S. M. R., Santoro, G., & Grandhi, B. (2020). Unpacking stakeholder relationship management in the public and private sectors: the comparative insights. *EuroMed Journal of Business*, 15(3), 269–281.
- Bond, J. T., Galinsky, E., Kim, S. S., & Brownfield, K. (2005). *National Study of Employers. Families and Work Institute* (accessed 12/11/20) <https://cdn.sanity.io/files/ow8us/u72/production/76a24485db48a419a54c840047068aa60bcabd6a.pdf>.
- Campanella, F., Del Giudice, M., Thrassou, A., & Vrontis, D. (2020). Ambidextrous organizations in the banking sector: An empirical verification on banks' performance

- and conceptual development. *International Journal of Human Resource Management*, 31(2), 272–302.
- Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183–187.
- Castaldo, S., Premazzi, K., & Zerbini, F. (2010). The meaning (s) of trust: A content analysis on the diverse conceptualizations of trust in scholarly research on business relationships. *Journal of Business Ethics*, 96(4), 657–668.
- Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2020c). Does data-driven culture impact innovation and performance of a firm? An empirical examination. *Annals of Operational Research*. <https://doi.org/10.1007/s10479-020-03887-z> (in press).
- Chatterjee, S., Chaudhuri, R., Vrontis, D., Thrassou, A., & Ghosh, S. K. (2021). ICT-enabled CRM system adoption: A dual Indian qualitative case study and conceptual framework development. *Journal of Asia Business Studies*, 15(2), 257–277. <https://doi.org/10.1108/JABS-05-2020-0198> (in press).
- Chatterjee, S., Chaudhuri, R., Thrassou, A., Vrontis, D., Ghosh, S., & Chaudhuri, S. (2020b). Social customer relationship management factors and business benefits. *International Journal of Organizational Analysis*, 29(1), 35–58. <https://doi.org/10.1108/IJOA-11-2019-1933>
- Chebbi, H., Yahiaoui, D., Vrontis, D., & Thrassou, A. (2015). Building multi-unit ambidextrous organizations – A transformative framework. *Human Resource Management*, 54, 155–177.
- Chin, W. W. (2010). In *Handbook of Partial Least Squares* (pp. 655–690). Berlin, Heidelberg: Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-540-32827-8\\_29](https://doi.org/10.1007/978-3-540-32827-8_29)
- Choudhary, S., & Mishra, K. (2021). Understanding knowledge hiding in the context of virtual workplaces. *VINE Journal of Information and Knowledge Management Systems*. <https://doi.org/10.1108/VJKMS-10-2020-0185> (in press, ahead-of-print).
- Clarke, M. C., Koch, L. C., & Hill, E. J. (2004). The work-family interface: Differentiating balance and fit. Family and Consumer. *Sciences Research Journal*, 33, 121–140.
- Cohen, M. D., March, J. G., & Olsen, J. P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly*, 17(1), 1–25.
- Conference Board Report (2021). Even after COVID-19, execs expect remote work trend to continue. Available at [businessfacilities.com](https://businessfacilities.com) (accessed 10 April 2021).
- Daniels, K., Lamond, D., & Standen, P. (2001). Teleworking: Frameworks for organizational research. *Journal of Management Studies*, 38(8), 1151–1185.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003.
- Dawley, D., Houghton, J. D., & Bucklew, N. S. (2010). Perceived organizational support and turnover intention: The mediating effects of personal sacrifice and job fit. *The Journal of Social Psychology*, 150(3), 238–257.
- Deb, M., & David, E. L. (2014). An empirical examination of customers' adoption of m-banking in India. *Journal of Marketing Intelligence & Planning*, 32(4), 475–494.
- Dickens, L. (1999). Beyond the business case: A three-pronged approach to equality action. *Human Resource Management Journal*, 9(1), 9–19.
- Dickens, L. (2005). Walking the talk? Equality and diversity in employment. In S. Bach (Ed.), *Managing Human Resources* (pp. 178–208). Oxford: Blackwell.
- Dimitropoulos, P., Koronios, K., Thrassou, A., & Vrontis, D. (2019). Cash holdings, corporate performance and viability of Greek SMEs: Implications for stakeholder relationship management. *EuroMed Journal of Business*, 15(3), 333–348.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507.
- Fenner, G. H., & Renn, R. W. (2010). Technology-assisted supplemental work and work-to-family conflict: The role of instrumentality beliefs, organizational expectations and time management. *Human Relations*, 63(1), 63–82.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Galinsky, E., Bond, J. T., & Hill, E. J. (2004). *When work works: A status report on workplace flexibility. Who has it? Who wants it? What difference does it make?* New York: Families and Work Institute.
- Garg, S. (2019). Research Methodology. In S. Garg (Ed.), *HR Initiatives in Building Inclusive and Accessible Workplaces* (pp. 61–83). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83867-611-720191004>
- Golden, L. (1999). Good times in America? Work schedule flexibility among U.S. workers. *Journal of Human Resource Costing & Accounting*, 4(2), 73–99.
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: Is there no place like home? *Journal of Applied Psychology*, 91(6), 1340–1350.
- Grzywacz, J. G., & Bass, B. L. (2003). Work, family, and mental health: Testing different models of work-family fit. *Journal of Marriage and Family*, 65(1), 248–261.
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.
- Hair, J. F., Jr., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.
- Hair, J. F., Sarstedt, M., Ringle, C., & Gudergan, S. (2017). *Advanced Issues in Partial Least Squares Structural Equation Modeling*. Thousand Oaks, CA: Sage Publications.
- Hill, E. J., Grzywacz, J. G., Allen, S., Blanchard, V. L., Matz-Costa, C., Shulkin, S., & Pitt-Catsofphes, M. (2008). Defining and conceptualizing workplace flexibility. *Community, Work, & Family*, 11(2), 149–163.
- Hodgson, C., & Wigglesworth, R. (2020). An ETF called WFH offers new way to ride remote working trend. *Financial Times*, 26 (accessed on 11 October 2020) <http://www.ft.com/content/b99e2f22-01a2-4334-98e9-91967c0c548f>.
- Hofäcker, D., & König, S. (2013). Flexibility and work-life conflict in times of crisis: A gender perspective. *International Journal of Sociology and Social Policy*, 33(9/10), 613–635.
- Hung, S.-W., Cheng, M.-J., Hou, C.-E., & Chen, N.-R. (2021). Inclusion in global virtual teams: Exploring non-spatial proximity and knowledge sharing on innovation. *Journal of Business Research*, 128, 599–610.
- Jonsson, D. (2007). Time-related flexibility and stability for employees. In B. Furåker, K. Håkansson, & J. C. Karlsson (Eds.), *Flexibility and Stability in Working Life* (pp. 197–217). London: Palgrave Macmillan. [https://doi.org/10.1057/9780230235380\\_11](https://doi.org/10.1057/9780230235380_11).
- Kaur, P., Malhotra, K., & Sharma, S. K. (2020). Moderation-mediation framework connecting internal branding, affective commitment, employee engagement and job satisfaction: an empirical study of BPO employees in Indian context. *Asia-Pacific Journal of Business Administration*, 12(3/4), 327–348.
- Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of Association of Information Systems*, 13(7), 546–580.
- Lau, J., Yang, B., & Dasgupta, R. (2020). To Zoom or not to Zoom? That is the question. *Times Higher Education* (accessed 12 September 2020) <https://www.timeshighereducation.com/news/zoom-or-not-zoom-question>.
- Lemos Lourenço, M., & Neres Lourenço, C. E. (2016). Women workers, social sustainability and working time: A study in a cooperative guided by the principles of solidarity economy. *Social Responsibility Journal*, 12(3), 571–583.
- Loi, R., Lin, X., & Tan, A. J. M. (2019). Powered to craft? The roles of flexibility and perceived organizational support. *Journal of Business Research*, 104, 61–68.
- Majchrzak, A., Rice, R. E., Malhotra, A., King, N., & Ba, S. (2000). Technology adaptation: The case of a computer-supported inter-organizational virtual team. *MIS Quarterly*, 24(4), 569–600.
- Mariani, M. M., & Castaldo, S. (2020). *The consolidation of digital platforms for remote working (DP4ReW) after the COVID-19 pandemic lockdown: Antecedents of acceptance, privacy concerns and implications for users, employers, and policy makers*. Working paper. Henley Business School, University of Reading.
- Mariani, M. M., & Matarazzo, M. (2020). Does cultural distance affect online review ratings? Measuring international customers' satisfaction with services leveraging digital platforms and big data. *Journal of Management and Governance*, 1–22.
- Mariani, M. M., & Wamba, S. F. (2020). Exploring how consumer goods companies innovate in the digital age: The role of big data analytics companies. *Journal of Business Research*, 121, 338–352.
- Mariani, M. M., Ek Styven, M., & Teulon, F. (2021). Explaining the intention to use digital personal data stores: An empirical study. *Technological Forecasting and Social Change*, 166, 120657. <https://doi.org/10.1016/j.techfore.2021.120657>
- Matli, W. (2020). The changing work landscape as a result of the COVID-19 pandemic: Insights from remote workers life situations in South Africa. *International Journal of Sociology and Social Policy*, 40(9/10), 1237–1256.
- Mellner, C., Kecklund, G., Kompier, M., Sariaslan, A., & Aronsson, G. (2016). Boundaryless work, psychological detachment and sleep: Does working “anytime – anywhere” equal employees are “always on”? In J. De Leede (Ed.), *New ways of working practices* (pp. 29–47). Bingley, UK: Emerald Group Publishing. <https://doi.org/10.1108/S1877-636120160000016003>.
- Metiu, A. (2006). Owning the code: Status closure in distributed groups. *Organization Science*, 17(4), 418–435.
- Millmore, M., Simon, P., & Lewis, C. (2007). *Strategic Human Resource Management: Contemporary Issues*. Harlow, UK: Pearson Education.
- Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6), 1029–1055.
- Olson, G. M., & Olson, J. S. (2000). Distance matters. *Human-Computer Interaction*, 15(2–3), 139–178.
- Pattnaik, L., & Jena, L. K. (2021). Mindfulness, remote engagement and employee morale: Conceptual analysis to address the “new normal”. *International Journal of Organizational Analysis*, 29(4), 873–890. <https://doi.org/10.1108/IJOA-06-2020-2267> (in press).
- Porter, C. E., & Donthu, N. (2006). Using the technology acceptance model to explain how attitudes determine internet usage: The role of perceived access barriers and demographics. *Journal of Business Research*, 59(9), 999–1007.
- Ringle, C., Sarstedt, M., & Straub, D. (2012). Editor's comments: A critical look at the use of PLSEM in MIS quarterly. *MIS Quarterly*, 36(1), 3–14.
- Rodgers, C. S. (1992). The flexible workplace: What have we learned? *Human Resource Management*, 31(3), 183–199.
- Sanchez, A. M., Perez, M. P., de Luis Carnicer, P., & Jimenez, M. J. V. (2007). Teleworking and workplace flexibility: A study of impact of firm performance. *Personnel Review*, 36, 42–64.
- Sanchez, A. M., Vicente-Oliva, S., & Perez-Perez, M. (2020). The relationship between R&D, the absorptive capacity of knowledge, human resource flexibility and innovation: Mediator effects on industrial firms. *Journal of Business Research*, 118, 431–440.
- Song, C.-H., Kim, S. W., & Sohn, Y.-W. (2020). Acceptance of public cloud storage services in South Korea: A multi-group analysis. *International Journal of Information Management*, 51, 102035. <https://doi.org/10.1016/j.ijinfomgt.2019.11.003>
- Spreitzer, G. M., Cameron, L., & Garrett, L. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 473–499.

- Sridhar, V., & Bhattacharya, S. (2020). Significant household factors that influence an IT employees' job effectiveness while on work from home. *International Journal of Innovation Science*, 13(1), 105–117.
- Staples, D. S., Hulland, J. S., & Higgins, C. A. (1999). A self-efficacy theory explanation for the management of remote workers in virtual organizations. *Organization Science*, 10(6), 758–776.
- Úbeda-García, M., Claver-Cortés, E., Marco-Lajara, B., Zaragoza-Sáez, P., & García-Lillo, F. (2018). High performance work system and performance: Opening the black box through the organizational ambidexterity and human resource flexibility. *Journal of Business Research*, 88, 397–406.
- van Knippenberg, D. (2013). Leadership and decision making: Defining a field. In S. Highhouse, R. S. Dalal, & E. Salas (Eds.), *SIOP organizational frontiers series. Judgment and decision making at work* (pp. 140–158). Hove: Routledge.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204.
- Vrontis, D., Christofi, M., Battisti, E., & Graziano, E. A. (2020). Intellectual capital, knowledge sharing and equity crowdfunding. <https://doi.org/10.1108/JIC-11-2019-0258> (in press).
- Vrontis, D., Sakka, G., & Amirkhanpour, M. (2015). *Management innovation, entrepreneurship and human resource management practices: A global perspective*. Newcastle-upon-Tyne, UK: Cambridge Scholars Publishing.
- Vrontis, D., Weber, Y., & Chebbi, H. (2015). *Human resource practices, strategic and entrepreneurial challenges: Academic and practitioners views*. Nicosia: EuroMed Press.
- Wellman, B., Salaff, J., Dimitrova, D., Garton, L., Gulia, M., & Haythornthwaite, C. (1996). Computer networks as social networks: Collaborative work, telework, and virtual community. *Annual Review of Sociology*, 22(1), 213–238.
- Whyman, P. B., & Petrescu, A. I. (2014). Partnership, flexible workplace practices and the realisation of mutual gains: Evidence from the British WERS 2004 dataset. *The International Journal of Human Resource Management*, 25(6), 829–851.
- Willaby, H. W., Costa, D. S. J., Burns, B. D., MacCann, C., & Roberts, R. D. (2015). Testing complex models with small sample sizes: A historical overview and empirical demonstration of what partial least squares (PLS) can offer differential psychology. *Personality and Individual Differences*, 84, 73–78.
- Wong, A. H. K., Cheung, J. O., & Chen, Z. (2020). Promoting effectiveness of “working from home”: Findings from Hong Kong working population under COVID-19. *Asian Education and Development Studies*. <https://doi.org/10.1108/AEDS-06-2020-0139> (in press).

## Further reading

- Bowser, G. (2020). Remote assistive technology services: Many things are remotely possible. In D. Chambers (Ed.), *Assistive Technology to Support Inclusive Education* (pp. 195–216). Bingley: Emerald Publishing.
- Grant, C. A., Wallace, L. M., Spurgeon, P. C., Tramontano, C., & Charalampous, M. (2019). Construction and initial validation of the E-Work Life Scale to measure remote e-working. *Employee Relations*, 41(1), 16–33.
- Peasley, M. C., Hochstein, B., Britton, B. P., Srivastava, R. V., & Stewart, G. T. (2020). Can't leave it at home? The effects of personal stress on burnout and salesperson performance. *Journal of Business Research*, 117, 58–70.
- Spivack, A. J., & Woodside, A. G. (2019). Applying complexity theory for modeling human resource outcomes: Antecedent configurations indicating perceived location autonomy and work environment choice. *Journal of Business Research*, 102, 109–119.

- Turner, J. R., & Müller, R. (2005). The project manager's leadership style as a success factor on projects: A literature review. *Project Management Journal*, 36(2), 49–61.



**Dr. Sheshadri Chatterjee** is a post-doctoral research scholar at Indian Institute of Technology Kharagpur, India. He has completed PhD from Indian Institute of Technology Delhi, India. He is having work experience in different multinational organizations such as Microsoft Corporation, Hewlett Packard Company, IBM and so on. Sheshadri has published research articles in several reputed journals such as Government Information Quarterly, Information Technology & People, Journal of Digital Policy, Regulation and Governance and so on. Sheshadri is also a certified project management professional, PMP from Project Management Institute (PMI), USA and completed PRINCE2, OGC, UK and ITIL v3 UK. He can be contacted at: [sheshadri.academic@gmail.com](mailto:sheshadri.academic@gmail.com).



**Dr Ranjan Chaudhuri** is an Associate Professor in Marketing at National Institute of Industrial Engineering, Mumbai. He was a Fulbright Fellow to USA in 2012. Dr. Chaudhuri also served as a Associate Professor at Vinod Gupta School of Management, Indian Institute of Technology, Kharagpur and at the Department of Management Studies, Indian Institute of Technology Delhi. Dr Chaudhuri has over eighteen years of industrial, teaching and research experience. Dr Chaudhuri's teaching and research interests are in the areas of Business to Business Marketing, Global Marketing and Retail Management.



**Demetris Vrontis** is the Vice Rector for Faculty and Research and a Professor of Strategic Marketing Management at the University of Nicosia, Cyprus. He is the Founder and Editor in Chief of the EuroMed Journal of Business, an Associate Editor of the International Marketing Review, an Associate Editor of the Journal of Business Research and a Consulting Editor of the Journal of International Management. He is the President of the EuroMed Academy of Business, which serves as an important and influential regional academy in the area of Business and Management and the Managing Director of Gnosis: Mediterranean Institute for Management Science. He has widely published in about 300 refereed journal articles, 45 books and 60 chapters in books, and has presented papers to over 80 conferences around the globe.