

**SRIWIJAYA INTERNATIONAL JOURNAL OF DYNAMIC  
ECONOMICS AND BUSINESS**

<http://ejournal.unsri.ac.id/index.php/sijdeb>

---

**Employee Satisfaction and Competitive Advantage of  
Virtual Organisations in Lagos State, Nigeria**

**Omorodion Omoregbe<sup>1</sup> and Joseph Azage<sup>2\*</sup>**

<sup>1,2</sup>Department of Business Administration, University of Benin

<sup>1</sup>omorodionomoregbe22@gmail.com; <sup>2</sup>azagejoseph@gmail.com

---

**Abstract:** This research study investigated the impact of employee satisfaction on the competitive advantage of selected virtual organisations in Lagos State, Nigeria. Specifically, it assessed the relationship between individual virtual competencies, motivation, organisational identity, autonomy, the nature of the work and the competitive advantage of virtual organisations in Lagos State, Nigeria. The population of interest in this study covered all staff in selected virtual organisations in Lagos State, Nigeria. A total of 400 copies of questionnaire were distributed to and retrieved from the respondents. Stratified random sampling procedure was used in administering/distributing the copies of questionnaire to a selection of virtual organisations in Lagos State, Nigeria. The data is analysed using OLS regression. The study discovered that there is a significant positive relationship between individual virtual competencies, motivation, organisational identity, the nature of the work and competitive advantage while revealing that there is a positive and non-significant relationship between autonomy and the competitive advantage of virtual organisations in Lagos State, Nigeria. The study recommends that virtual organisations employ individuals that have the required skills and competencies needed to perform the various organisational tasks, motivate their employees intrinsically and extrinsically, possess a strong brand image, allow employees experience freedom to do their tasks and duties at their own pace and take cognisance of employees that work in dispersed locations with peculiar difficulties in those varied locations so that they will be productive and contribute more to the competitive advantage of the virtual organisation.

**Keywords:** Employee Satisfaction; Competitive Advantage; Individual Virtual Competencies; Motivation; Organisational Identity; Autonomy; The Nature of the Work

---

\* Corresponding author

## **Introduction**

The world of work is constantly changing (Sousa & Wilks, 2018). Globally, Internet technology has improved rapidly and brought a lot of opportunities in all spheres of life (economically, socially and culturally among others) and has continually impacted the operations and lives of nations, institutions, businesses and individuals greatly resulting in new ideas like virtual governance, virtual learning and of course, virtual business amongst others being embraced by all, today (Ihenyen, 2015). This advancement in the area of information technologies is conceived as one of the major causes for the changing nature of work because work is no longer restricted to a certain time or place as it may even cross the traditional boundaries of organisations that is, people can work anywhere and anytime (Sousa & Wilks, 2018).

This places companies in a global playing field since information is available to everyone anywhere and organisations are forced to adapt to an ever-changing work environment as they need to find new ways to achieve organisational purpose like offshoring of activities, technological innovations among others to securely enable and optimize virtual work and knowledge sharing because the work that has to be performed has changed and will require higher demands on the skills and the knowledge levels of employees. The organisation's ability to address these changes will contribute greatly to their success and make them an attractive employer for the existing and new generations of workers: The Digital Natives or Net Generation, that are living lives immersed in technology (Vodanovich, Sundaram & Myers, 2010; Jones, 2011; Ollier-Malaterre, Jacobs & Rothbard, 2019).

Bryan and Joyce (2007) as cited in Dietz, Hoogervorst, Albani, *et al.* (2013) posited that when one tries to run a company in the 21st century with a model organized and designed for the 20th century, how well the company performs will be limited as this will create a massive, unnecessary and unproductive complexity; a condition that will frustrate workers and waste financial and non-financial resources. The challenges companies face in this 21st century thus forces them to act and work differently from the traditional, early 20th century, work principles of the Industrial Revolution thus as the world around us is rapidly changing, we realize the need to find new ways of working (De Kok, 2016).

The emergence of virtual businesses has greatly changed the traditional method of doing business as business can now be done virtually anytime online as goods can be delivered with either in-house or partner courier while service providers of electronic products like e-books, videos and audios are delivered electronically and this can be seen via the contribution of virtual businesses to the growth of the Nigeria economy in terms of increased competitive advantage, job creation, contribution to the increase in the country's economic Gross Domestic Product (GDP) and foreign investment among others (Ihenyen, 2015).

Competitive advantage is an organisation's ability to outperform others because it generates desired products or services more effectively and efficiently than its rivals (Ogunkoya, 2018). Ogreaan, Herciu and Belascu (2009) as cited in Nwabueze and Mileski (2018) noted that some of the important elements required for a global competitive advantage are efficiency, innovation, customer response, public relations employee satisfaction among others.

Employee satisfaction has emerged as a critical driver of business success in today's competitive marketplace. Furthermore, employee satisfaction can be a deciding factor in

organisational success. Not only does it have the potential to significantly affect employee retention, productivity and loyalty, it is also a key link to customer satisfaction, company reputation and overall stakeholder value. Thus, to gain a competitive edge, organisations are turning to the human resources departments to set the agenda for employee satisfaction, engagement and commitment (Ravikumar, 2013).

Employees in all organisations are considered to be a vital resource and represent a significant investment if they are satisfied and dedicated to their jobs (Rajput, Singhal & Tiwari, 2016). Based on the organisation's strategy, its' management develops its bonus packages, appraisal, work system and training programs. For this reason, present-day managers of organisations need to see it as a necessity to pay attention to the well-being and satisfaction of their employees and to increase their employees' output. These efforts are designed to gain their commitment to the organisation and potentially lead to satisfaction with their jobs (Waqas, Bashir, Sattar, *et al.* 2014). Thus, it is of utmost importance for employers to know the factors that can affect their employees' job satisfaction level since it affects the performance of the organisation and the level of employee satisfaction can also be associated with an increase in the output of the organisation (Vikram & Sayeeduzzafar, 2014). Considering these characteristics, the level of employees' work satisfaction can be affected by the intrinsic and extrinsic motivating factors like the quality of supervision, social relationships within the working group and the degree of success or failure which the individual experiences in their work (Alromaihi, Alshomali & George, 2017). Since virtual human resource management is a part of virtual management and can be said to be in its' infancy stage in Nigeria and a lot of academic research is still required in this area (Shekhar, 2016). This study therefore sets out to examine the impact of employee satisfaction on the competitive advantage of selected virtual organisations in Lagos State, Nigeria.

### ***Statement of the Research Problem***

The COVID 19 pandemic increased the need for modern literature to identify management challenges related to traditional organisational structure because organisations across the world suddenly have to work remotely from home and that has increased the number of employees who now engage in full-time virtual work (Mysirlaki & Paraskeva, 2020). This rapid transition from the traditional face to face work to virtual organisation may have some difficulties such as mental health issues, disconnectedness and isolation among others but majority of employees would prefer virtual/remote work or a blended mix of both.

Employee satisfaction is one of the most crucial factors that affect an organisation's competitive advantage and thus the overall performance of the organisation. Every employee in any organisation has needs, aspirations, motivations, desires and interests which influence their behaviour at work and increases their satisfaction with their work. Unfortunately, these objectives are sometimes in conflict with the corporate goals of these organisations which often time leads to employees' dissatisfaction in these organisations and thus results in negative consequences and impacts such as low morale, poor performance, lower productivity, higher costs of hiring, retention and training, lack of commitment, lack of proper salaries and wages administrations, poor decision-making process, high employee turnover intentions and absenteeism among other (Waqas *et al.*, 2014).

It is also of note that most traditional organisations have little or no understanding on how to satisfy their employees and how these employee satisfaction levels influence their intention

to leave the organisation (Waqas *et al.*, 2014). In fact, because of this limited understanding, efforts towards employee satisfaction can sometimes create more dissonance rather than cohesion between employees and management, leading to decreased loyalty and excessive employee turnover.

The costs of setup and maintenance of traditional organisations, the high office politicking, isolation and lack of trust between and among team members, alongside the cultural and political issues prevalent in the operations of traditional organisations which often leads to communication issues and productivity problems are also challenges that can hamper the successful running of most traditional organisations. The language barrier, national and company cultural differences that comes to play when using global vendors or consultants also affects traditional organisations' success and performance as in the case of large multinational corporations (MNCs) as the opportunities for information communication is reduced, contextual interpretation and perceptual differences during communication is created while increasing the perceived status differences amongst the organisation's members.

There is also the need for Nigerian organisations that use the traditional approach to adopt the virtual organisational structure/approach as this is a 21st century innovation and organisations in western countries already lead in this area. Due to the reality and intricacy of the topic, this study delves deeper into the discourse that surrounds virtual work, reduces the paucity of empirical research in the virtual area in Nigeria and tries to fill this current gap by investigating how satisfied employees are working full time in virtual organisations in Lagos State, Nigeria and how this affects the competitive advantage of the virtual organisations.

Against this backdrop, this study seeks to examine the relationship that exists between employee satisfaction and the competitive advantage of virtual organisations in Lagos State, Nigeria as the researchers intend to examine the effect of individual virtual competence, motivation, organisational identity, autonomy and the nature of work with the expectation that these identified sub-variables largely affect the satisfaction levels of employees that work in virtual organisations which in turns impacts the competitiveness of the organisation either positively or negatively.

### ***Objectives of the Study***

The broad objective of the study is to examine the impact of employee satisfaction on the competitive advantage of virtual organisations in Lagos State, Nigeria while the specific objectives of the research are to:

1. Determine the relationship between individual virtual competencies and the competitive advantage of virtual organisations in Lagos State, Nigeria;
2. Examine the relationship between motivation and the competitive advantage of virtual organisations in Lagos State, Nigeria;
3. Ascertain the relationship between organisational identity and the competitive advantage of virtual organisations in Lagos State, Nigeria;
4. Ascertain the relationship between autonomy and the competitive advantage of virtual organisations in Lagos State, Nigeria; and
5. Investigate the relationship between the nature of the work and the competitive advantage of virtual organisations in Lagos State, Nigeria.

### ***Research Hypotheses***

Based on the research objectives above, this study seeks to test the following stated null hypotheses:

1. There is no significant relationship between individual virtual competencies and the competitive advantage of virtual organisations in Lagos State, Nigeria;
2. There is no significant relationship between motivation and the competitive advantage of virtual organisations in Lagos State, Nigeria;
3. There is no significant relationship between organisational identity and the competitive advantage of virtual organisations in Lagos State, Nigeria;
4. There is no significant relationship between autonomy and the competitive advantage of virtual organisations in Lagos State, Nigeria; and
5. There is no significant relationship between the nature of the work and the competitive advantage of virtual organisations in Lagos State, Nigeria.

### **Literature Review**

#### ***Overview of Virtual Organisations***

The terms “virtual organisation, virtual enterprise or virtual corporation” were first used in the early 1990s as demonstrated in the works of Hopland (1989), Nagel and Dove (1991), Davidow and Malone (1992) (Boonda, 2018).

The advent and widespread use of work teams and the outsourcing of some business processes, the Total Quality Management (TQM) movement and quality circles, were used in the United States and other developed countries from the 1960s through the 1980s to eliminate the organisation’s unproductive internal services and shift the difficulties outside the company while increasing its’ effectiveness and efficiency via utilization of the organisation’s resources. Many firms introduced self-managed or motivated work teams so that line-level employees can take on decision-making and problem-solving responsibilities that were traditionally reserved for management in the late 1980s and early 1990s thus cutting bureaucracy, reducing cycle time and improving the quality of service. By the mid-1990s, more companies such as Goodyear, Motorola, Texas Instruments and General Electric had begun exporting the team concept to their foreign affiliates in Asia, Europe and Latin America and integrating global human resource practices to their operations (Badenhorst, 2012; Makino, 2013; Gaete Fica, 2016). Outsourcing strategy implies partnership as companies give some tasks and responsibilities to other establishments. This strategy was borne out of the need for collaborations and networking in amongst organisations and has caused a new and great interest in the management discipline. Indeed, this approach has significantly altered the way organisations view partners and increased their perception of the advantages that smart collaborations can deliver (Guido, Knudson, Gerlak, *et al.* 2022). Previously, the highly bureaucratic organisational structure (such as complicated, complex and slower decision-making) seemed sufficient to handle a large number of employees until the early 1980s (Leach, 2016). Currently, due to communication technology improvements and continued globalization, virtual teams have increased rapidly worldwide and there is a growing popularity for virtual team structures in many organisations (Acharya, 2018). Martins, Gilson and Maynard (2004) did a major review of the literature on virtual teams and

concluded that with rare exceptions all organisational teams are virtual to some extent as we have moved away from working with people who are in close visual proximity to us, to working with people around the globe via the internet (Raghuram, Hill, Gibbs & Maruping, 2019; Handke, Klonek, Parker & Kauffeld, 2020).

### ***Concept of Employee Satisfaction***

Employee satisfaction is a term used to describe an emotional state or the perception that occurs when an individual appraises certain aspects of their job (Bentley, Teo, McLeod, *et al.* 2016; Sageer, Rafat, & Agarwal, 2012). Employee satisfaction has been defined as the extent to which employees like their work and represents a positive orientation towards their job (Hajam & Sundar, 2022). It is about how an employee perceives his job based on the individual needs, values and expectations (Ahmad, Jasimuddin & Kee, 2018). It is an attitude that employees have about their job and the organisation in which they work (Zumrah, Ali & Mokhtar, 2022).

Employee satisfaction focuses on employees' attitudes towards their jobs and the degree to which individuals feel positively and negatively about their jobs as employees with high levels of employee satisfaction have positive attitudes toward their jobs, while those with job dissatisfaction have negative attitudes towards their job (Mbundu, 2011; Maan, Abid, Butt, *et al.* 2020).

Luthans (2008) specifies three general dimensions to employee satisfaction: First, it is an emotional response to a job situation; second, it is determined by the extent to which expectations are met; and third, employee satisfaction represents several related attitudes (Sudiardhita, Mukhtar, Hartono, *et al.* 2018). There are many facets of a job to which employees have affective responses, including the work itself; pay and promotion opportunities; leadership and co-workers (Luthans, 2008; Lumley, Coetzee, Tladinyane & Ferreira, 2011; Thabane, Radebe & Dhurup, 2017). The fulfilment of various needs of employees is vital because it will determine their behaviour in organisations (Maslow, 1954 as cited in Martin & Roodt, 2008 and Omoregbe & Eniola, 2017). Both extrinsic and intrinsic needs need to be fulfilled (Luthans, 2008; Supriyono & Susmonowati, 2022).

Employee satisfaction is a useful predictor of intentions or decisions of employees to leave a job (Mbundu, 2011). Information on employee satisfaction is valuable to an organisation because satisfied employees experience physical and psychological well-being, while dissatisfied employees are more likely to be associated with absenteeism, psychological withdrawal and employee turnover (Bowers, Wu, Lustig & Nemecek, 2022).

### ***Individual Virtual Competencies and Competitive Advantage of Virtual Organisations***

Wang and Haggerty (2011) defined the construct of individual virtual competencies as an individual's knowledge, skills and abilities (KSAs) to function and communicate with others in a virtual and technical capacity. Going further, Wang and Haggerty (2011) categorized the construct of virtual competency into the dimensions of virtual self-efficacy, virtual media skills and virtual social skills and argued that KSAs are determined by the measurement of these dimensions. Researchers have concluded that levels of virtual self-efficacy, virtual media skills and virtual social skills may be indicative of how well a virtual worker is

motivated, adapts to isolating environments and experiences long-term employee satisfaction (Busch *et al.*, 2011; Greer & Payne, 2014; Maher & Bedawy, 2015; Wang & Haggerty, 2011).

### ***Motivation and Competitive Advantage of Virtual Organisations***

Chen and Hew (2015) posits that the motivation to learn and the willingness to use technology has been linked to increased job performance, expertise and improved problem-solving skills among virtual workers. Motivation has been described as an instinctive perception driven by intrinsic and extrinsic forces that can affect an individual's behaviour, motives, energy and commitment to achieve specific goals (Aunger & Curtis, 2013; Toe, Murhadi, & Lin, 2013). Intrinsic forces of motivation are intangible and may include verbal recognition from others, inclusion and organisational identity, responsibility and autonomy, gained knowledge and expertise and increased self-efficacy among others. Extrinsic motivational forces have been described as things that can be assigned a monetary value and may include a home or automobile, financial compensation, awards, a promotion, or a vacation among others (Mafini & Dlodlo, 2014). Willis (2016) concluded that although extrinsic factors were important, workers cited intrinsic factors as having the most effect on employee satisfaction. Upon reflection, Toe *et al.* (2013) established that people are motivated differently, have varying needs and are at different levels in life. Therefore, it makes logical sense for managers to consider theoretical approaches such as Maslow's (1943) needs theory within the virtual workplace (Bridgman, Cummings & Ballard, 2019). In studying why individuals are motivated differently, Huang and Bargh (2014) established the principles of Maslow's needs theory as the basis to evaluate how individual needs and differences, situational factors, self-efficacy and goal attainment can affect an individual's level of motivation. Huang and Bargh (2014) posited that an individual's level of motivation is guided differently by conscious and unconscious perceptions and need attainment. Consequently, the pursuit of higher-order needs such as self-esteem and self-efficacy may follow upon the attainment of basic needs; mental wellbeing, security and socialization. Through the attainment of needs, an individual's level of motivation may increase and lead to a positive perception of employee satisfaction and goal-oriented behaviour (Jerome, 2013).

### ***Organisational Identity and Competitive Advantage of Virtual Organisations***

Although described as a perceptual response, organisational identity can be outwardly expressed through attitudes, behaviour and performance. Bartel *et al.* (2012) used a survey method in two field studies, to explore how working in an isolated environment can affect the organisational identity of virtual workers and concluded that organisational identity is a strong motivator and found that individuals who feel connected to the organisation experience a higher level of employee satisfaction and motivation. As virtual work arrangements have become a common workplace structure, Bartel *et al.* (2012) contributed to the literature with the following implications for managers of virtual workers and suggestions for future research.

Implications included the assessment in determining who is best suited to work in a virtual capacity, exploring ways to lessen virtual workplace isolation and providing virtual workers with opportunities to establish organisational identity. Future research was suggested to explore how virtual workplace isolation affects employee behaviours and attitudes toward management, job responsibilities and other workers. Drawing upon current literature, Loi, Chan and Lam (2014) hypothesized that perceptions of organisational identity and employee satisfaction can be closely associated. Through the theoretical lens' of social identity theory

and leader-member exchange theory, they explored the concept in two Chinese companies within the garment industry and found out that workers experience a higher level of employee satisfaction when they identify with an organisation. Loi *et al.* (2014) put forth the claim that an employee strives to establish the perception of self-worth through the process of organisational identity. In establishing self-worth, Loi *et al.* (2014) argued that self-efficacy and job security are enhanced, which in turn leads to employee satisfaction and a sense of belonging. The implication for the field of management was for managers to explore opportunities to enhance the richness of social interaction among workers. The frequency and quality of communication exchanges between managers and workers could also be explored. Loi *et al.* (2014) concluded that future studies on the relationship of organisational identity and employee satisfaction could be extended to other industries and workplace cultures.

Additionally, Gajendran *et al.* (2014) argued that social normative within the virtual workplace can have a significant effect on the employee satisfaction and performance of virtual workers. Social normative are influential factors that are shared among a group of people (Morris, Hong, Chiu, & Liu, 2015). Mission statements, processes and procedures, cultural changes, management theories and communication exchanges are some of the factors that contributes to the social normative within an organisation (Moser & Axtell, 2016).

Gajendran *et al.* (2014) maintained that within the context of organisational identity, an individual's desire to adapt and conform to an organisation's culture could be the result of leader-member exchange and social normative. With the appropriate balance of leader-member exchanges and established social normative, virtual work arrangements can lead to richer social interaction, increased performance, positive feelings of empowerment, flexibility and autonomy and a higher level of employee satisfaction. Other implications were for managers to establish organisational guidelines about the competencies and skills needed to be eligible for virtual work. Managers who view the autonomous nature of virtual work as a beneficial structure for both workers and the organisation are likely to see increased performance and employee satisfaction.

### ***Autonomy and Competitive Advantage of Virtual Organisations***

According to current literature, researchers have established a relationship between autonomy and employee satisfaction among virtual workers (Greenhaus & Kossek, 2014; Kossek, Valcour & Lirio, 2014; Naqvi & Khan, 2013). Greenhaus and Kossek (2014) suggested that more interest has been placed on understanding the dynamics of autonomous workplace structures due to changes in the economy, advances in technology and how people use the Internet to perform job responsibilities and connect socially. When given the autonomy to work from home, some virtual workers have defined self-management and the opportunity to balance work and home as key benefits of virtual work structures (Raghuram & Fang, 2014). Anderson and Dunning (2014) established that an individual may consider themselves to have autonomous freedom when given the flexibility to control their schedule, make decisions, organize and prioritize tasks and assume responsibility for work outcomes (Anderson *et al.*, 2014).

Within the virtual workplace, researchers found the perception of autonomy to be a powerful motivator for workers with a high level of self-efficacy and discipline (Gajendran *et al.*, 2014; Raghuram & Fang, 2014). Mulki and Jaramillo (2011) claimed that individuals possessing a

high level of self-efficacy were more likely to be strong critical thinkers and capable of thriving in an autonomous environment. Gajendran *et al.* (2014) explored the influence of autonomy by conducting a meta-analysis of 46 studies that involved a sample size of 12,833 participants. Responses support the claim that autonomy is an appealing job characteristic that promotes employee satisfaction, lessens turnover rates and enhances performance. In a similar analysis, De Cooman, Stynen, Van den Broeck, Sels and De Witte (2013) chose autonomous motivation as a mediating variable between job characteristics, behaviour outcomes and work effort. A sample size of 689 anonymous participants was recruited from 12 Belgian service organisations. The participants were highly educated white-collar workers that were employed full time and had worked at the same organisation for at least 15 years. In essence, the findings indicated that workers become autonomously motivated when job characteristics align with the individual worker's needs, work skills and competencies. Moreover, findings support the idea that autonomously motivated workers are more invested in the organisation's success, are more dedicated to achieving or exceeding performance goals, tend to stay with an organisation longer and experience a higher level of employee satisfaction. In reviewing the literature, De Cooman *et al.* (2013) noted that few researchers have fully assessed the relationship between job characteristics, behavioural outcomes and work effort through the mediating lens of autonomous motivation. Extending research to other industries and exploring how autonomy affects other job outcomes, resources and challenges could be valuable to the field of management.

Although autonomy has been highlighted as a benefit of virtual work, the challenge of researchers is to explore the job demands of virtual work and suggest coping strategies and ideas that virtual workers can use to develop the skills of self-management (Nurmi, 2011). Implications for managers included the finding that autonomously motivated workers experienced a high level of organisational identity, engage with other workers and supervisors and take ownership of expectations and work outcomes. Workers benefit from having the autonomy to manage their schedules in a manner that balances work, life and family (Greenhaus & Kossek, 2014; Raghuram & Fang, 2014). As technology enables job tasks to be completed from dispersed locations, organisations can achieve work outcomes by employing workers who prefer autonomous environments and possess the competencies required to work virtually unsupervised (Naqvi *et al.*, 2013). De Cooman *et al.* (2013) maintained that autonomous motivation can be increased if job environments are designed around the needs of the individual worker and their level of competency and work skills.

As workplace demands evolve, the need to align job designs with the competency and need levels of individual workers has become a significant theme within organisations (De Cooman *et al.*, 2013). Finally, Pyöriä (2011) acknowledged that as with any other work structure, virtual work arrangements offer benefits and challenges. For the individual worker, the perception of autonomy has been related to employee satisfaction while the perception of working in an isolated environment has been linked to a heightened sense of disconnectedness and loneliness (Bartel *et al.*, 2012; Greenhaus & Kossek, 2014; Kossek *et al.*, 2014; Naqvi *et al.*, 2013). As work is a personal experience, researchers have suggested that more studies could be conducted at the individual level to better understand how virtual workplace isolation affects the employee satisfaction and work outcomes of virtual workers (Allen *et al.*, 2015; Bartel *et al.*, 2012; Belle *et al.*, 2015; Davis & Cates, 2013; Greer & Payne, 2014; Maher & Bedawy, 2015; Moriarty, 2014; Smith, Patmos, & Pitts, 2018).

### ***The Nature of Virtual Work and Competitive Advantage of Virtual Organisations***

Managers and workers struggle to adapt to the nature of virtual work, especially if there has not been adequate training, established clear expectations or strategies incorporated to ensure a high level of connectivity and support (Bartel *et al.*, 2012; Greer & Payne, 2014; Lautsch & Kossek, 2011). Researchers have described the concept of virtual work as work done outside a co-located workplace environment, such as a home office or other geographically convenient locations (Dahlstrom, 2013; Gajendran, Harrison, & Delaney-Klinger, 2014). Bentley *et al.* (2016) suggested that virtual work is usually conducted without personal interaction with supervisors and co-workers. Lautsch and Kossek (2011) added that virtual workers usually fulfil job responsibilities, communicate and connect with supervisors and co-workers through the technology of computers, cell phones, video conferencing, shared databases and company Intranets. Although advances in technology have affected organisations and people in positive ways, managers may find it challenging to change customary management practices, manage workers and communicate mainly through technology.

Moser and Axtell (2016) studied the nature and complexities of virtual work and argued that regardless of technical advancements, social interaction is an important element that is difficult to replicate in virtual workplace settings. Moser and Axtell (2016) further noted that virtual communication can hinder an individual's ability to interpret social cues and engage with supervisors and co-workers.

Belle *et al.* (2015) recognized the challenges of establishing organisational belonging among virtual workers and noted the integral relationship with engagement, productivity and performance. Glikson and Erez (2013) studied social norms in virtual work among participants from five different countries and found that participants with a low level of organisational identity may begin to feel lonely and isolated. The isolating nature of virtual work presented an opportunity for managers to examine and improve core management practices that meet the needs of today's diverse workplace (Maher & Bedawy, 2015).

Davis and Cates (2013) studied the relationship between workplace isolation and the engagement of virtual workers. Davis and Cates (2013) extended the study to determine if workplace isolation and the gender of virtual workers were related. Davis and Cates (2013) concluded that workplace isolation does affect employee engagement. Managerial implications included the suggestion that workers will become disengaged from the organisation if they do not experience human interaction. Finally, Davis and Cates (2013) did not find that gender affects the level of workplace isolation experienced. That portion of the study was inconclusive, but they felt confident in suggesting that isolation is a major factor that can affect the success of virtual work arrangements. Since the number of virtual workers is expected to increase, Davis and Cates (2013) argued that workplace isolation and the possibility for limited employee engagement are critical problems within the virtual workplace.

Fønner and Roloff (2010; 2012) posited the frequency of information exchange and the individual virtual worker's competence and reliance on technology are determining factors in whether the nature of virtual work is conducive to employee satisfaction.

### ***Concept of Competitive Advantage***

Competitive advantage as a term generally describes the relative performance of rivals in a given market environment. Competitive advantage is the implementation of a unique strategy that creates value (Kryscynski, Coff & Campbell, 2021). McDonough *et al.* (2001) defined competitive advantage as an advantage gained over competitors for offering greater value to customers, either through lower prices or by providing additional benefits and service that justify similar or possibly higher prices (Porter & Kramer, 2019).

Building a competitive advantage involves looking at what the customer wants, ensuring customer satisfaction, better pricing via cost reduction, employee satisfaction to ensure improved delivery of goods and services and finally, profitability for organisations (Peppers & Rogers, 2016). Gligor, Feizabadi, Russo, *et al.* (2020) summarized that cost, quality, time and flexibility are the four main areas of focus in competitive advantage globally.

Ferrier (2001) notes that with the competitive advantage theory, everyone is better off if decisions are made based on the theory of competitive advantage at all levels – national, local, corporate and individual (Crick & Crick, 2021). Katei (2013) noted that it is nothing more than asking for the optimal utilization of resources and the globalization of manufacturing and services across the world as if we lived in a borderless world and not a world with thick boundaries that define the territory of nations; hence the only viable solution for breaking down the borders are the virtual teams.

Competitive advantage improves a firm's effectiveness and efficiency while increasing its profit (Wernerfelt, 1984; Lin, Hsu, Hsu & Chung, 2020). Competitive advantage can be attained through either an internal or external change in the market (Gerald, Obianuju & Chukwunonso, 2020). The firm's resources, capabilities and of course the magnitude of the change itself influences the change in its' competitive position. The firm should be able to respond to change quickly through the utilization of its resources, capabilities and strategic positioning. Competitive advantage resources are heterogeneously distributed and are perfectly immobile (Bromiley & Rau, 2016). This connotes that different firms have different strategies, have diversified competitive advantage and this results in different financial performance.

A business can be said to have a "competitive advantage" when it can create more economic value than its' marginal competitor in its market of operations (Cardeal & Antonio, 2012). When this firm puts a strategy that creates value into operation, it would have a competitive advantage whereas a competitive firm (potential or existing) may not use or put this value creation strategy into operation concurrently (Barney, Ketchen Jr. & Wright, 2021). Wernerfelt (1984) described value creation as the improvement in a firm's effectiveness and efficiency, or that there is no reduction in a firm's effectiveness or efficiency as a firm with a competitive advantage will earn a higher profit or potentially have a superior profit rate over the competition (Orishede, 2021). The second condition, 'being unique in the market', considers all current competitors in the industry, but also potential competitors who might enter the industry (Baumol, Panzar & Willing 1986; Celikyay & Adiguzel, 2019). The definition above is a mixture of a market position perspective of competitive advantage that is grounded in an industrial organisation economics perspective and a resource-based perspective focusing on the firm's internal characteristics and views firms' internal resources as the source of competitive advantage (Vitari & Raguseo, 2020). This definition considers both perspectives and is chosen as a baseline for competitive advantage.

There are different understandings of how “competitive advantage” is achieved both among practitioners and academics. Some map it with positional superiority in the marketplace, based on the provision of superior customer value or the achievement of lower relative costs. Others map it with interchangeability of “distinctive competence”, based on relative superiority in skills and resources. Taken together competitive advantage can be said to be based on two qualities: firstly, the capacity to identify and understand the competitive forces at play and how they change over time, next linking the competence to mobilize and manage the resources necessary for the chosen competitive response through time (Burgelman, Floyd, Laamanen, *et al.* 2018).

When an organisation attains competitive advantage over its competition, it will lead to higher performance, because the firm can improve its quality, lower production costs and time to market (Burgelman *et al.*, 2018).

### ***Underpinning Theory for the Study and Empirical Review***

After reviewing the literature, this study adopted the principles of Maslow’s (1943) hierarchy of needs theory and Bandura’s Self-Efficacy theory as it contributes to the current literature and offers insights that explained and created an understanding of why the individual worker’s needs is a critical element to ensuring a high level of employee satisfaction and positive work outcomes in virtual organisations. It is also well suited for this study and can be used in the exploration of the lived experiences of individual virtual workers. This study reviewed the works of other researchers on the subject matter. Willis (2016) investigated the factors that influences the virtual employees’ job satisfaction and work outcomes by examining their lived experiences. The findings from this study indicated that job satisfaction and work outcomes might differ according to the self-efficacy level, needs and virtual competencies of the individual virtual worker. Burman and Shastri (2016) did a comparative study of job satisfaction between employees of virtual teams and traditional teams. The results indicated that though the different teams do not differ significantly on their job satisfaction levels but overall, it was reported that job satisfaction was higher for virtual team employees than for traditional team employees.

Tabane (2012) studied job satisfaction in virtual and face-to-face teams for multiple generations in the workplace and the main objective of the research was to investigate the relationship between the levels of job satisfaction in virtual and face-to-face to teams for and amongst multiple generations. The study found that there are no significant differences between how multiple generations feel about job satisfaction. In addition, there was no evidence to suggest that there is a significant change in levels of job satisfaction for multiple generations in different work teams. Also, it was discovered that the level of utilization of technology does not influence the levels of job satisfaction differently for multiple generations.

Brunelle (2012) studied virtuality in work arrangements and affective organisational commitment. The relationship between the various components of the virtuality of work arrangements and the strength of workers’ affective commitment to the organisation was tested.. The results indicated that geographic and temporal factors negatively impact workers’ affective commitment, while technology, work practices, organisation and cultural factors have a positive impact on workers.

Okechukwu, Egbo and Isikuru (2017) studied the effect of virtual management on employee performance in selected e-business in Lagos state, Nigeria. The findings from the study revealed that: virtual communication had a significant positive effect on employees' effectiveness in selected e-commerce firms in Lagos state, Nigeria and virtual collaboration significantly affected employees' productivity in selected e-commerce firms in Lagos state, Nigeria. From the findings of this study, they concluded that, virtual management is a good tool for reducing the overhead cost in selected e-commerce firms in Lagos state, Nigeria.

Obisi (2016) investigated the empirical validity of the adjustment to virtual work arrangement by business organisations in Anambra State, Nigeria. The study found that the level of internet connectivity, usage and teledensity contributes to a positive domestic balancing framework for the operation of virtual arrangement in the country. The findings also revealed that the nature of interpersonal relationship among employees of business organisations play a significant role in the application of virtual work arrangements in the country.

Katei (2013) studied the effect of virtual teams on the competitive advantage of International Business Machine (IBM) In Airtel Africa Project, Nairobi, Kenya. From the findings of the study, it was evident that virtual information systems can be used to identify and create new products and services and to develop new markets or radically change products based on the demanding nature of the current markets as organisations can work on new initiatives by establishing pure online operations through implementation of virtual environments.

Davis and Cates (2013) explored the relationship between workplace isolation and engagement to determine the relationship between workplace isolation and gender among teleworkers and how it affects their engagement. The result of the t-test was inconclusive. They recommended that leaders of organisations develop teleworking engagement strategies that not only target reducing workplace isolation and its' perceptions to enhance engagement for teleworkers, but also they should address possible issues related to increased perceptions of isolation across gender.

Staples, Hulland and Higgins (1999) investigated how virtual organisations can manage remote employees effectively. Overall, the results indicated that remote employees' self-efficacy assessments plays a critical role in influencing their remote work effectiveness, perceived productivity, job satisfaction and ability to cope as a strong relationship was observed between employees' remote work self-efficacy judgments and several antecedents, including remote work experience and training, best practices modelled by management, computer anxiety and IT capabilities.

Toglaw (2006) investigated organisational commitment in a virtual work environment and examined the influence of various personal and work-related variables on workers' organisational commitment in a virtual work environment. He also examined the differences between virtual and traditional workers on the level of their organisational commitment and other perceptions. The results of the in-depth interviews conducted indicated that there is a positive connection between affective organisational commitment and virtual workers' perceptions about organisational support, electronic communication and consideration leadership in a virtual work environment.

### Research Gap

Due to the fact that most researchers and organisations are getting more interested in virtual organisation structure which is attributable to the apparent benefits it offers, but the identification of specific constructs like individual virtual competencies, motivation, organisational identity, autonomy, the nature of the work that should be put in place in these organisations has not been well researched and have not yet been considered by many organisations. Few studies exist in the area of virtual organisations in Nigeria necessitating the need for this study to see how employee satisfaction influences the competitive advantage of virtual organisations in Lagos State, Nigeria. It is expected that virtual organisations ensure that the specific constructs outlined in this study are looked at and adopted so that their organisations will have a favourable competitive advantage.

### Methods

This study adopted the survey research design type because a well-structured questionnaire was designed, disseminated to and retrieved from the respondents. The population of this study consisted of all employees of the virtual organisations operating in Lagos State, Nigeria totalling 42708 then stratified random sampling was used in administering copies of the questionnaire to a total of four hundred (400) employees of these organisations, which were conveniently selected and constituted the sample size that was arrived at through the use of the Yamane's (1967) number estimation technique which gave resulted in 400 respondents.

Calculated below:

$$n = \frac{N}{1+N(e)^2}$$

Where:

n= Sample size;

N= population size;

e = percentage level of significance; and

N = 42708

$$n = \frac{42708}{1 + 42708 (0.05)^2}$$

$$n = \frac{42708}{1 + 42708 (0.0025)}$$

$$n = \frac{42708}{1 + 106.77}$$

$$n = \frac{42708}{107.77}$$

= 396.288

Approximately = 400.

The rationalisation behind the use of this formula is to scientifically get a suitable and sizeable sample of employees that presently work with the various virtual organisations in Nigeria. To arrive at a realistic, precise and distinct result, the respondents' sample size was proportionally distributed among these virtual organisations using a stratified random sampling procedure.

This study made use of primary data that was gotten via a structured questionnaire. The distribution and collection of copies of the questionnaire to and from the respondents was done by using online surveys like Google forms, online monkey survey among others and

physical contact. The primary data was obtained by administering questionnaires designed using a Five-point Likert scale i.e. ((1) = Strongly Disagree (2) = Disagree, (3) = Neutral, (4) = Agree (5) = Strongly Agree) to elicit information from respondents measuring the degree of agreement by the respondents to a statement that describes a situation and this formed the basis of the analysis of the fieldwork stated in the data analysis and interpretation section of this study. This study adopted Wang and Haggerty’s (2011) model and a multiple regression model was derived as this model explained the variation in the value of the dependent variable (Competitive Advantage) based on a change in the independent variable, employee satisfaction denoted by (Individual Virtual Competencies, Motivation, Organisational Identity, Autonomy and Nature of the Work).

The model for the study is expressed functionally as:

$$COMPADV = ES \tag{1}$$

Where  $ES = IVC, M, OI, A, NW$

$$COMPADV = f(IVC, M, OI, A, NW) \tag{2}$$

This model is further expressed mathematically as:

$$COMPADV = \beta_0 + \beta_1IVC + \beta_2M + \beta_3OI + \beta_4A + \beta_5NW + \varepsilon \tag{3}$$

Where:

COMPADV = Competitive Advantage; IVC = Individual Virtual Competencies; M = Motivation; OI = Organisational Identity; A = Autonomy; NW = Nature of the Work;  $\varepsilon$  = Error term;  $\beta_0$  = Constant;  $\beta_1 \dots \beta_5$  = Coefficients of the Independent variables

We had **A priori expectation** stated as:  $\beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0$  and  $\beta_5 > 0$  means that a unit increase in individual virtual competencies, motivation, organisational identity, autonomy and nature of the work will bring about an increase in the competitive advantage of virtual organisations.

**Validity and Reliability of the Research Instrument**

To ensure face and content validity, the instrument was given to experts and senior colleagues with proven expertise in the HR and management field. To ensure the reliability of the measuring instrument, the “test/retest method” was used to determine its’ reliability as copies of the questionnaire were distributed to staff of the selected organisations on two different occasions; after which the scores of the respondents from the two tests were examined to establish the degree of consistency between them. The Cronbach’s alpha value for each construct is above 0.6. This means that the questionnaire is reliable and that it can be depended upon to elicit the necessary information from the respondents (Nunnally & Bernstein, 1994).

Table 1. Reliability Test

S/N	Variables	Number of Items	Cronbach’s Alpha Value
1	Individual Virtual Competencies	4	0.806
2	Motivation	4	0.856
3	Organisational Identity	4	0.894
4	Autonomy	4	0.832
5	Nature of the Work	4	0.897
6	Competitive Advantage	4	0.876

Source: Researcher’s fieldwork, 2021.

Employee satisfaction was measured regarding its factors (Individual Virtual Competencies, Motivation, Organisational Identity, Autonomy and Nature of the Work) using a scale adopted from Yin, Fen, Meng, Yin, & Jack (2012). On the other hand, competitive advantage was measured using the scale adopted from Davis, Dehning, and Stratopoulos (2003). Descriptive and inferential analysis of the data gotten from the field survey was done using the computer software: The Statistical Package for Social Sciences (SPSS) version 24. Descriptive Statistics included the use of mean and standard deviation while inferential statistics included the use of the Pearson's Correlation Coefficient (PCC) and the Ordinary Least Squares (OLS) Analysis respectively.

**Data Presentation, Analysis and Interpretation**

This study analysed, presented and interpreted the data collected from the respondents and showed the hypothesized relationship between employee satisfaction and competitive advantage of virtual organisations in Nigeria.

**Table 2. Mean, Standard Deviation and Pearson’s Correlation Coefficient for All Variables**

Variables	Mean	Standard Deviation	IVC	MOT	OI	AUTO	NW	COMP ADV
IVC	3.49	1.305	1.0000					
MOT	3.552	1.2675		1.0000				
OI	3.465	1.2535	0.623**	0.517**	1.0000			
AUTO	3.495	1.24875	0.485**	0.522**	0.499**	1.0000		
NW	3.352	1.3135	0.604**	0.546**	0.347**	0.494**	1.0000	
COMPAD	3.415	1.3435	0.521**	0.538**	0.422**	0.417**	0.582**	1.0000

**Source:** Researchers’ computation based on the field survey 2021 using SPSS 24.0

Table 2 shows that Individual Virtual Competencies had an overall mean of 3.49 with a standard deviation of 1.305 and this shows that individual virtual competencies has a positive impact on employee satisfaction in virtual organisations in Nigeria, Motivation had an overall mean of 3.5525 with a standard deviation of 1.2675 and this shows that motivation has a positive impact on employee satisfaction in virtual organisations in Nigeria, Organisational Identity had an overall mean of 3.465 with a standard deviation of 1.2535 and this shows that organisational identity has a positive impact on employee satisfaction in virtual organisations in Nigeria, Autonomy had an overall mean of 3.495 with a standard deviation of 1.24875 and this shows that autonomy has a positive impact on employee satisfaction in virtual organisations in Nigeria, Nature of the Work had an overall of 3.352 with a standard deviation of 1.3135 and this shows that nature of the work has a positive impact on employee satisfaction in virtual organisations in Nigeria and Competitive Advantage had an overall mean of 3.415 with a standard deviation of 1.3435 and this shows that employee satisfaction has a positive impact on the competitive advantage of virtual organisations in Nigeria.

Table 3. Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.477	0.760		1.945	0.052
Individual Virtual Competencies	0.118	0.059	0.110	1.995	0.047
Motivation	0.224	0.062	0.197	3.618	0.000
Organisational Identity	0.139	0.056	0.122	2.485	0.013
Autonomy	0.027	0.052	0.025	0.512	0.609
Nature of the Work	0.377	0.055	0.353	6.908	0.000

**R=.856<sup>a</sup>; R Square=0.731; Adjusted R Square=0.723; Standard Error of the Estimate=2.95992; F-Stat=59.602; Durbin-Watson=2.224**

Source: Researchers’ computation based on the field survey 2021 using SPSS 24.0

The coefficient of determination ( $R^2$ ) stood at a value of 0.731, which indicates that 73.1 percent of all the systematic variations in the dependent variable (Competitive Advantage) are accounted for by the independent variables (Nature of the Work, Organisational Identity, Autonomy, Motivation, Individual Virtual Competencies) in this model. The adjusted coefficient of determinant ( $R^2$ ) stood at 0.723 which shows that the data fits the model. The value of the Durbin–Watson (d) statistic was 2.224 and it was above 2, hence, there is evidence of negative autocorrelation. This indicates that successive error terms are negatively correlated.

The F-Stat was at a value of 59.602 with a P-value less than 0.05. This showed that employee satisfaction is a significant variable for the competitive advantage of virtual organisations. The hypotheses were stated in the null form and tested with their p-value in the regression result at 5% level of significance.

The overall regression model generated from the research can be seen below:

$$COMPADV = 1.477 + 0.118IVC + 0.224M + 0.139OI + 0.027A + 0.377NW + 2.95992$$

The coefficients of the tested sub-independent variables from Table 3 above are infused into the aforementioned model equation in the methods section of this research and this goes to show the identified individual variables impacts the dependent variable (competitive advantage). Also, the standard error of estimate was added to the equation to account for the uncontrollable variables not taken into consideration by the researchers.

**H<sub>1</sub>:** There is a significant relationship between individual virtual competencies and the competitive advantage of virtual organisations in Nigeria as the P-value in the regression result is 0.047 which is lower than 0.05. Hence, the null hypothesis ( $H_0$ ) was rejected, as there is a significant positive relationship between individual virtual competencies and competitive advantage.

**H<sub>2</sub>:** There is a significant relationship between motivation and the competitive advantage of virtual organisations in Nigeria as the P-value corresponding to the coefficient associated with the impact of motivation on the competitive advantage in the regression result is 0.000,

which is lower than 0.05. Thus, we reject the null hypothesis ( $H_0$ ) as there is a significant positive relationship between motivation and competitive advantage.

**H<sub>3</sub>:** There is a significant relationship between organisational identity and the competitive advantage of virtual organisations in Nigeria as the P-value conforming to the effect of organisational identity on the competitive advantage of virtual organisations in Nigeria in the regression result is 0.013, which is less than 0.05. Therefore, we reject the null hypothesis ( $H_0$ ) as there is a positive and significant relationship between organisational identity and the competitive advantage.

**H<sub>4</sub>:** There is no significant relationship between autonomy and the competitive advantage of virtual organisations in Nigeria as the P-value matching the effect of autonomy and the competitive advantage of virtual organisations in Nigeria in the regression result is 0.609, which is higher than 0.05. Therefore, we do not reject the null hypothesis ( $H_0$ ) as there is a positive and non-significant between relationship between autonomy and the competitive advantage of virtual organisations in Nigeria.

**H<sub>5</sub>:** There is a significant relationship between the nature of the work and the competitive advantage of virtual organisations in Nigeria as the P-value matching the effect of the nature of the work on the competitive advantage of virtual organisations in Nigeria in the regression result is 0.000, which is lower than 0.05, so we reject the null hypothesis as there is positive and significant relationship between the nature of the work and the competitive advantage of virtual organisations in Nigeria.

## **Findings**

Firstly, it was observed that there is a significant relationship between individual virtual competencies and the competitive advantage of virtual organisations in Nigeria as the P-value in the regression result is 0.047 which is lower than 0.05. This suggests that an increase in the individual virtual competencies dimension will lead to an increase in the competitive advantage of virtual organisations in Nigeria and can affect how employees perform and their contributions to the competitive advantage of the virtual organisations.

Secondly, the study found out that there is a significant relationship between motivation and the competitive advantage of virtual organisations in Nigeria as the P-value corresponding to the coefficient associated with the impact of motivation on the competitive advantage in the regression result is 0.000, which is lower than 0.05. An increase in the motivation component of employee satisfaction will definitely lead to an increase in the competitive advantage of virtual organisations in Nigeria as a motivated employee will work better and contribute more to the competitive advantage of the virtual organisation than a demotivated employee.

Thirdly, it was shown that there is a significant relationship between organisational identity and the competitive advantage of virtual organisations in Nigeria as the P-value conforming to the effect of organisational identity on the competitive advantage of virtual organisations in Nigeria in the regression result is 0.013, which is less than 0.05. This suggests that an increase in the organisational identity dimension will lead to an increase in the competitive advantage of virtual organisations in Nigeria as employees want to be identified with a virtual organisation that has a strong brand image and does well when compared to related organisations.

Fourthly, it can be seen that there is no significant relationship between autonomy and the competitive advantage of virtual organisations in Nigeria as the P-value matching the effect of autonomy and the competitive advantage of virtual organisations in Nigeria in the regression result is 0.609, which is higher than 0.05. Although it is not significant but organisations will still need to consider the autonomy component of employee satisfaction as it will probably result in an increase in the competitive advantage of virtual organisations in Nigeria as some employees may want to experience freedom to do their tasks and duties at their own pace.

Lastly, the study found out that there is a significant relationship between the nature of the work and the competitive advantage of virtual organisations in Nigeria as the P-value matching the effect of the nature of the work on the competitive advantage of virtual organisations in Nigeria in the regression result is 0.000, which is lower than 0.05. This suggests that an increase in the nature of the work dimension will lead to an increase in the competitive advantage of virtual organisations in Nigeria as employees work in dispersed and varying locations and the nature of the work might be determined by the peculiar difficulties in the varied locations.

The findings from this study corroborate the findings of Katei (2013), Willis (2016), Burman and Shastri (2016), Obisi (2016), Okechukwu, Egbo and Isikuru (2017) as it shows that employee satisfaction is an important indicator that virtual organisations can use to achieve competitive advantage.

## **Conclusion**

This study examined employee satisfaction and its' impacts on the competitive advantage of virtual organisations in Lagos State, Nigeria. From the research study carried out, it was shown that there is a significant positive relationship between individual virtual competencies, motivation, organisational identity, nature of the work and competitive advantage of virtual organisations in Nigeria while it shows that there is a positively non-significant relationship between autonomy and the competitive advantage of virtual organisations in Nigeria. Therefore, this research study concludes that employee satisfaction has a significantly positive relationship on the competitive advantage of virtual organisations in Lagos State.

## ***Recommendations***

Based on our findings, the following recommendations were made:

1. The virtual organisations need to ensure that they employ employees that have the skills and competencies required to perform their duties upon recruitment, selection and on-boarding to the organisation. Also, organisations and employees need to invest in human capital development to develop the competencies required to perform the various job tasks in the organisations.
2. The virtual organisations need to ensure that employees are motivated extrinsically and intrinsically as a motivated employee will be productive and contribute more to the competitive advantage of the virtual organisation than a demotivated employee.
3. Virtual organisations need to ensure that the organisational identity they possess is that of a strong brand image and does well when compared to related organisations as employees want to be associated with an organisation that has a strong presence

- and reputable image in the industry.
4. Virtual organisations need to ensure that employees experience freedom to do their tasks and duties at their own pace as this can impact the competitive advantage of virtual organisations in Nigeria.
  5. Lastly, virtual organisations need to take cognisance of employees that work in dispersed locations with peculiar difficulties in those varied locations as this can reduce their inputs and thus affect the overall competitive advantage of virtual organisations in Nigeria.

## References

- Acharya, A. (2018). The factors behind working in virtual community. *Journal of Global Operations and Strategic Sourcing*, 12(2), 246-267. <https://doi.org/10.1108/JGOSS-03-2018-0011>
- Ahmad, K. Z. B., Jasimuddin, S. M., & Kee, W. L. (2018). Organizational climate and job satisfaction: do employees' personalities matter? *Management Decision*. <https://doi.org/10.1108/MD-10-2016-0713>
- 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. <https://doi.org/10.1177/1529100615593273>
- Alromaihi, M. A., Alshomaly, Z. A., & George, S. (2017). Job satisfaction and employee performance: A theoretical review of the relationship between the two variables. *International Journal of Advanced Research in Management and Social Sciences*, 6(1), 1-20.
- Anderson, J. E., & Dunning, D. (2014). Behavioral norms: Variants and their identification. *Social and Personality Psychology Compass*, 8(12), 721-738. <https://doi.org/10.1111/spc3.12146>
- Aunger, R., & Curtis, V. (2013). The anatomy of motivation: An evolutionary-ecological approach. *Biological Theory*, 8(1), 49-63. <https://doi.org/10.1007/s13752-013-0101-7>
- Badenhorst, H. (2012). *Methodology of measuring the effectiveness of empowerment*. University of Johannesburg (South Africa).
- Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. *Journal of Management*, 47(7), 1936-1955. <https://doi.org/10.1177/01492063211021655>
- Bartel, C. A., Wrzesniewski, A., & Wiesenfeld, B. M. (2012). Knowing where you stand: Physical isolation, perceived respect and organisational identification among virtual employees. *Organisation Science*, 23(3), 743-757. <https://doi.org/10.1287/orsc.1110.0661>
- Baumol, W. J., Panzar, J. C., & Willig, R. D. (1986). On the theory of perfectly-contestable markets. In *New developments in the analysis of market structure* (pp. 339-370). Palgrave Macmillan, London. [https://doi.org/10.1007/978-1-349-18058-5\\_12](https://doi.org/10.1007/978-1-349-18058-5_12)
- Belle, S. M., Burley, D. L., & Long, S. D. (2015). Where do I belong? High-intensity teleworkers' experience of organizational belonging. *Human Resource Development International*, 18(1), 76-96. <https://doi.org/10.1080/13678868.2014.979006>
- Bentley, T. A., Teo, S. T. T., McLeod, L., Tan, F., Bosua, R., & Gloet, M. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied Ergonomics*, 52, 207-215. <https://doi.org/10.1016/j.apergo.2015.07.019>

- Boonda, P. (2018). Analytical study of Virtual Service Provider Office Management (VSPOM) factors for service plan in the regional health service in Thailand. *MFU Connexion: Journal of Humanities and Social Sciences*, 7(2), 148-173.
- Bowers, A., Wu, J., Lustig, S., & Nemecek, D. (2022). Loneliness influences avoidable absenteeism and turnover intention reported by adult workers in the United States. *Journal of Organizational Effectiveness: People and Performance*. <https://doi.org/10.1108/JOEPP-03-2021-0076>
- Bridgman, T., Cummings, S., & Ballard, J. (2019). Who built Maslow's pyramid? A history of the creation of management studies' most famous symbol and its implications for management education. *Academy of management learning & education*, 18(1), 81-98. <https://doi.org/10.5465/amle.2017.0351>
- Bromiley, P., & Rau, D. (2016). Operations management and the resource based view: Another view. *Journal of Operations Management*, 41, 95-106. <https://doi.org/10.1016/j.jom.2015.11.003>
- Brunelle, E. (2012). Virtuality in work arrangements and affective organizational commitment. *International Journal of Business and Social Science*, 3(2). <https://doi.org/10.3316/IJEBM0302043>
- Bryan, L. L., & Joyce, C. I. (2007). *Mobilizing minds: Creating wealth from talent in the 21st-century organisation*. McGraw-Hill.
- Burgelman, R. A., Floyd, S. W., Laamanen, T., Mantere, S., Vaara, E., & Whittington, R. (2018). Strategy processes and practices: Dialogues and intersections. *Strategic management journal*, 39(3), 531-558. <https://doi.org/10.1002/smj.2741>
- Burman, S., & Shastri, S. (2016). Comparative study of job satisfaction between employees of virtual teams and traditional teams. *International Journal of Science and Research*, 5(1), 1536-1540. <https://doi.org/10.21275/v5i1.NOV153068>
- Busch, E., Nash, J., & Bell, B. S. (2011). *Remote work: An examination of current trends and emerging issues*. Ithaca, NY: Center for Advanced Human Resource Studies, Cornell University, 2(3), 6.
- Cardeal, N., & Antonio, N. S. (2012). Valuable, rare, inimitable resources and organization (VRIO) resources or valuable, rare, inimitable resources (VRI) capabilities: What leads to competitive advantage?. *Cardeal, N., António*, (2012), 10159-10170. <https://doi.org/10.5897/AJBM12.295>
- Celikyay, M., & Adiguzel, Z. (2019). Analysis of product innovation performances in terms of competitive strategies of companies in production sector under the influence of technology orientation. *International Journal of Organizational Leadership*, 8(3), 43-59. <https://doi.org/10.33844/ijol.2020.60480>
- Chen, Y., & Hew, K. F. (2015). Knowledge sharing in virtual distributed environments: Main motivators, discrepancies of findings and suggestions for future research. *International Journal of Information and Education Technology*, 5(6), 466. <https://doi.org/10.7763/IJNET.2015.V5.551>
- Crick, J. M., & Crick, D. (2021). The dark-side of coopetition: Influences on the paradoxical forces of cooperativeness and competitiveness across product-market strategies. *Journal of Business Research*, 122, 226-240. <https://doi.org/10.1016/j.jbusres.2020.08.065>
- Dahlstrom, T. R. (2013). Telecommuting and leadership style. *Public Personnel Management*, 42(3), 438-451. <https://doi.org/10.1177/0091026013495731>
- Davidow William, H., & Malone Michael, S. (1992). *The Virtual Corporation*. New York.

- Davis, L., Dehning, B., & Stratopoulos, T. (2003). Does the market recognize IT-enabled competitive advantage? *Information & Management*, 40(7), 705-716. [https://doi.org/10.1016/S0378-7206\(02\)00092-7](https://doi.org/10.1016/S0378-7206(02)00092-7)
- Davis, R. & Cates, S. (2013) The dark side of working in a virtual world: An investigation of the relationship between workplace isolation and engagement among teleworkers. *Journal of Human Resource and Sustainability Studies*, 1, 9-13. <https://doi.org/10.4236/jhrss.2013.12002>
- De Cooman, R., Stynen, D., Van den Broeck, A., Sels, L., & De Witte, H. (2013). How job characteristics relate to need satisfaction and autonomous motivation: Implications for work effort. *Journal of Applied Social Psychology*, 43(6), 1342-1352. <https://doi.org/10.1111/jasp.12143>
- De Kok, A. (2016). The new way of working: bricks, bytes and behaviour. In the impact of ICT on work (pp. 9-40). Springer, Singapore. [https://doi.org/10.1007/978-981-287-612-6\\_2](https://doi.org/10.1007/978-981-287-612-6_2)
- De Kok, A. (2018). The New Way of Working: An Empirical Assessment of Organisational and Technological Effects (Doctoral dissertation, Utrecht University).
- Dietz, J.L., Hoogervorst, J.A., Albani, A., Aveiro, D., Babkin, E., Barjis, J., Caetano, A., Huysmans, P., Iijima, J., van Kervel, S. and Mulder, H., 2013. The discipline of enterprise engineering. *International Journal of Organisational Design and Engineering*, 3(1), 86-114. <https://doi.org/10.1504/IJODE.2013.053669>
- Ferrier, W.J. 2001. Navigating the competitive landscape: The drivers and consequences of competitive aggressiveness. *Academy of Management Journal*, 44, 858-877. <https://doi.org/10.5465/3069419>
- Fonner, K. L. & Roloff, M. E. (2010). Why teleworkers are more satisfied with their jobs than are office-based workers: When less contact is beneficial. *Journal of Applied Communication Research*, 38(4), 336-361. <https://doi.org/10.1080/00909882.2010.513998>
- Fonner, K. L. & Roloff, M. E. (2012). Testing the connectivity paradox: Linking teleworkers' communication media use to social presence, stress from interruptions and organisational identification. *Communication Monographs*, 79(2), 205-231. <https://doi.org/10.1080/03637751.2012.673000>
- Gaete Fica, H. (2016). Critical analysis of interpersonal trust determinants in virtual teams, working in capability planning in the identification of capability gaps or needs, to provide required future military capability in the UK's MOD.
- Gajendran, R. S. Harrison, D. A., & Delaney-Klinger, K. (2015). Are telecommuters remotely good citizens? Unpacking telecommuting's effects on performance via i-deals and job resources. *Personnel Psychology*, 68(2), 353-393. <https://doi.org/10.1111/peps.12082>
- Gerald, E., Obianuju, A., & Chukwunonso, N. (2020). Strategic agility and performance of small and medium enterprises in the phase of Covid-19 pandemic. *International Journal of Financial, Accounting, and Management*, 2(1), 41-50. <https://doi.org/10.35912/ijfam.v2i1.163>
- Gligor, D., Feizabadi, J., Russo, I., Maloni, M. J., & Goldsby, T. J. (2020). The triple-a supply chain and strategic resources: developing competitive advantage. *International Journal of Physical Distribution & Logistics Management*.
- Glikson, E., & Erez, M. (2013). Emotion display norms in virtual teams. *Journal of Personnel Psychology*. <https://doi.org/10.1027/1866-5888/a000078>

- Greenhaus, J. H., & Kossek, E. E. (2014). The contemporary career: A work-home perspective. *Annual Review Organizational Psychology and Organizational Behaviour*, 1(1), 361-388. <https://doi.org/10.1146/annurev-orgpsych-031413-091324>
- Greer, T. W., & Payne, S. C. (2014). Overcoming telework challenges: Outcomes of successful telework strategies. *The Psychologist-Manager Journal*, 17(2), 87. <https://doi.org/10.1037/mgr0000014>
- Guido, Z., Knudson, C., Gerlak, A. K., Mason, S., Hewitt, C. D., & Muth, M. (2022). Implementing a knowledge system: Lessons from the global stewardship of climate services. *Global Environmental Change*, 74, 102516. <https://doi.org/10.1016/j.gloenvcha.2022.102516>
- Hajam, A. A., & Sundar, K. (2022). Organizational Climate as an Indicator of Job Satisfaction among Public Sector Employees in Jammu & Kashmir Cements Limited. *European Online Journal of Natural and Social Sciences*, 11(1), pp-219.
- Handke, L., Klonek, F. E., Parker, S. K., & Kauffeld, S. (2020). Interactive effects of team virtuality and work design on team functioning. *Small Group Research*, 51(1), 3-47. <https://doi.org/10.1177/1046496419863490>
- Hopland, J., & Savage, C. M. (1989). Charting New Directions. *Digital Enterprise*, 3, 8-12. <https://doi.org/10.1002/cc.36819896503>
- Huang, J. Y., & Bargh, J. A. (2014). The selfish goal: Autonomously operating motivational structures as the proximate cause of human judgment and behaviour. *Behavioural and Brain Sciences*, 37(2), 121. <https://doi.org/10.1017/S0140525X13000290>
- Huang, J. Y., & Bargh, J. A. (2014). The selfish goal: Autonomously operating motivational structures as the proximate cause of human judgment and behavior. *Behavioral and Brain Sciences*, 37(2), 121. <https://doi.org/10.1017/S0140525X13000290>
- Ihenyen, I. (2015) E-commerce evolution in Nigeria: Opportunities and threats.
- Jerome, L. W. (2013). Innovation in social networks: Knowledge spillover is not enough. *Knowledge Management Research & Practice*, 11(4), 422-431. <https://doi.org/10.1057/kmrp.2012.44>
- Jones, C., & Shao, B. (2011). The Net generation and digital natives: implications for higher education.
- Katei, M. A. (2013). A Study on the Effect of Virtual Teams on Competitive Advantage, A Case of International Business Machines (IBM) In Airtel Africa Project (Doctoral dissertation, University of Nairobi).
- Kossek, E. E., Valcour, M., & Lirio, P. (2014). The sustainable workforce: Organisational strategies for promoting work-life balance and wellbeing. *Wellbeing: A complete reference guide*, 1-24. <https://doi.org/10.1002/9781118539415.wbwell030>
- Kryscynski, D., Coff, R., & Campbell, B. (2021). Charting a path between firm-specific incentives and human capital-based competitive advantage. *Strategic Management Journal*, 42(2), 386-412. <https://doi.org/10.1002/smj.3226>
- Lautsch, B. A., & Kossek, E. E. (2011). Managing a blended workforce: telecommuters and non-telecommuters. *Organizational Dynamics*, 40(1), 10-17. <https://doi.org/10.1016/j.orgdyn.2010.10.005>
- Leach, D. K. (2016). When freedom is not an endless meeting: A new look at efficiency in consensus-based decision making. *The Sociological Quarterly*, 57(1), 36-70. <https://doi.org/10.1111/tsq.12137>
- Lin, H. E., Hsu, I. C., Hsu, A. W., & Chung, H. M. (2020). Creating competitive advantages: Interactions between ambidextrous diversification strategy and contextual factors from a dynamic capability perspective. *Technological Forecasting and Social Change*, 154, 119952. <https://doi.org/10.1016/j.techfore.2020.119952>

- Loi, R., Chan, K. W., & Lam, L. W. (2014). Leader–member exchange, organizational identification, and job satisfaction: A social identity perspective. *Journal of Occupational and Organizational Psychology*, 87(1), 42-61. <https://doi.org/10.1111/joop.12028>
- Lumley, E. J., Coetzee, M., Tladinyane, R. & Ferreira, N. (2011). Exploring the job satisfaction and organisational commitment of employees in the information technology environment. *Southern African Business Review*, 15, 100-118.
- Luthans, F. (2008). *Organisational behaviour (11th ed.)*. Boston, MA: McGraw-Hill.
- Maan, A. T., Abid, G., Butt, T. H., Ashfaq, F., & Ahmed, S. (2020). Perceived organizational support and job satisfaction: a moderated mediation model of proactive personality and psychological empowerment. *Future Business Journal*, 6(1), 1-12. <https://doi.org/10.1186/s43093-020-00027-8>
- Mafini, C., & Dlodlo, N. (2014). The relationship between extrinsic motivation, job satisfaction and life satisfaction amongst employees in a public organisation. *SA Journal of Industrial Psychology*, 40(1), 01-12. <https://doi.org/10.4102/sajip.v40i1.1166>
- Maher, A., & Bedawy, R. (2015). Core practices for managing virtual employees in public organizations. *Journal of Business and Economics*, 6(1), 113-120. [https://doi.org/10.15341/jbe\(2155-7950\)/01.06.2015/011](https://doi.org/10.15341/jbe(2155-7950)/01.06.2015/011)
- Makino, E. (2013). *Appreciative Inquiry summits and organizational knowledge creation: A social systems perspective*. The Claremont Graduate University.
- Martin, A. & Roodt, G. (2008). Perceptions of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution. *SA Journal of Industrial Psychology*, 34(1), 23-31. <https://doi.org/10.4102/sajip.v34i1.415>
- Martins, L.L., Gilson, L.L. & Maynard, M.T. (2004). Virtual teams: What do we know and where do we go from here? *Journal of Management*, 30, 805-835.
- Maslow, A. H. (1943). Preface to motivation theory. *Psychosomatic medicine*. <https://doi.org/10.1097/00006842-194301000-00012>
- Maslow, A. H. (1954). *Motivation and personality*. New York, NY: Harper & Row.
- Mbundu, I. N. (2011). A critical evaluation of job satisfaction levels during the transitional period of a merger: The case of Walter Sisulu University (Unpublished master's thesis). Pretoria, South Africa: University of South Africa,
- Mcdonough, E.F., Kahn, K.B., & Barczak, G. (2001). An investigation of the use of global, virtual and collocated new product development teams. *The Journal of Product Innovation Management*, 18, 110-120.
- Moriarty, B. (2014). Research design and the predictive power of measures of self-efficacy. *Issues in Educational Research*, 24(1), 55-66.
- Morris, M. W., Hong, Y. Y., Chiu, C. Y., & Liu, Z. (2015). Normology: Integrating insights about social norms to understand cultural dynamics. *Organizational Behavior and Human Decision Processes*, 129, 1-13. <https://doi.org/10.1016/j.obhdp.2015.03.001>
- Moser, K., & Axtell, C. (2016). Group Norms in Virtual Work: New Directions. In *2016 Annual Meeting of the Academy of Management* (Vol. 2016, No. 1). <https://doi.org/10.5465/ambpp.2016.15106symposium>
- Mulki, J. P., & Jaramillo, F. (2011). Workplace isolation: salespeople and supervisors in USA. *The International Journal of Human Resource Management*, 22(04), 902-923. <https://doi.org/10.1080/09585192.2011.555133>
- Mysirlaki, S., & Paraskeva, F. (2020). Emotional intelligence and transformational leadership in virtual teams: Lessons from MMOGs. *Leadership & Organization Development Journal*. <https://doi.org/10.1108/LODJ-01-2019-0035>
- Nagel, R. N., & Dove, R. (1991). *21st century manufacturing enterprise strategy: An industry-led view*. Diane Publishing. <https://doi.org/10.21236/ADA257032>

- Naqvi, S. M. H., & Khan, M. A. (2013). Employees training and organizational performance: Mediation by employees performance. *Institute of Interdisciplinary Business Research*, 5(4), 490-503.
- Nunnally, J. & Bernstein, I. (1994). *Psychometric theory*. New York: McGraw-Hill.
- Nurmi, N. (2011). Coping with coping strategies: How distributed teams and their members deal with the stress of distance, time zones and culture. *Stress and Health*, 27(2), 123-143. <https://doi.org/10.1002/smi.1327>
- Nwabueze, U., & Mileski, J. (2018). Achieving competitive advantage through effective communication in a global environment. *Journal of International Studies*, 11(1). <https://doi.org/10.14254/2071-8330.2018/11-1/4>
- Obisi, C. (2016). The empirical validity of the adjustment to virtual work arrangement by business organisations in Anambra State, Nigeria. *International Journal of Scientific Research in Education*, 9(3), 173-181.
- Ogrean, C., Herciu, M., & Belascu, L. (2009). Searching for sustainable competitive advantage-- From tangibles to intangibles. *Journal of US-China Public Administration*, 6(4), 1-9.
- Ogunkoya, O. (2018). Strategic entrepreneurship and competitive advantage in Nigeria banking industry. *Management & Marketing XVI*, 1, 107-121.
- Okechukwu, E. U., Egbo, D. E., & Isikuru, H. O. (2017). Effect of Virtual Management on Employee Performance in Selected E-Business Firms in Lagos State, Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 6(3), 214–229.
- Ollier-Malaterre, A., Jacobs, J. A., & Rothbard, N. P. (2019). Technology, work, and family: Digital cultural capital and boundary management. *Annual Review of Sociology*, 45(1), 425-447. <https://doi.org/10.1146/annurev-soc-073018-022433>
- Omoregbe, O. & Eniola, Y. T. (2017). Production facilities maintenance practices and sustainable competitive advantage in the paint manufacturing industry, Benin City, Nigeria. *Annals of the University of Petrosani*, 17(1), 209-222, Economics, Romania.
- Orishede, F. (2021). Relationship between competitive advantage and value creation and profitability in the firm. *African Journal of Social and Behavioural Sciences*, 11(2).
- Peppers, D., & Rogers, M. (2016). *Managing customer experience and relationships: A strategic framework*. John Wiley & Sons. <https://doi.org/10.1002/9781119239833>
- Porter, M. E., & Kramer, M. R. (2019). Creating shared value. In *Managing sustainable business* (pp. 323-346). Springer, Dordrecht. [https://doi.org/10.1007/978-94-024-1144-7\\_16](https://doi.org/10.1007/978-94-024-1144-7_16)
- Pyöriä, P. (2011). Managing telework: risks, fears and rules. *Management Research Review*. <https://doi.org/10.1108/01409171111117843>
- Raghuram, S., & Fang, D. (2014). Telecommuting and the role of supervisory power in China. *Asia Pacific Journal of Management*, 31(2), 523-547. <https://doi.org/10.1007/s10490-013-9360-x>
- Raghuram, S., Hill, N. S., Gibbs, J. L., & Maruping, L. M. (2019). Virtual work: Bridging research clusters. *Academy of Management Annals*, 13(1), 308-341. <https://doi.org/10.5465/annals.2017.0020>
- Rajput, S., Singhal, M. & Tiwari, S. (2016). Job satisfaction and employee loyalty: A study of academicians. *Asian Journal of Management*, 7(2), 1-5. <https://doi.org/10.5958/2321-5763.2016.00015.9>
- Ravikumar, T. (2013). A study on impact of team work, work culture, leadership and compensation on engagement level of employees in MSMEs in India. *International Journal of Advanced Research in Management and Social Sciences*, 2(8), 175-185.

- Sageer, A., Rafat, S., & Agarwal, P. (2012). Identification of variables affecting employee satisfaction and their impact on the organization. *IOSR Journal of business and management*, 5(1), 32-39. <https://doi.org/10.9790/487X-0513239>
- Shekhar, S. (2016). *Managing the reality of virtual organizations*. Springer India. <https://doi.org/10.1007/978-81-322-2737-3>
- Smith, S. A., Patmos, A., & Pitts, M. J. (2018). Communication and teleworking: A study of communication channel satisfaction, personality, and job satisfaction for teleworking employees. *International Journal of Business Communication*, 55(1), 44-68. <https://doi.org/10.1177/2329488415589101>
- Sousa, M. J., & Wilks, D. (2018). Sustainable skills for the world of work in the digital age. *Systems Research and Behavioral Science*, 35(4), 399-405. <https://doi.org/10.1002/sres.2540>
- 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. <https://doi.org/10.1287/orsc.10.6.758>
- Sudiardhita, K. I., Mukhtar, S., Hartono, B., Sariwulan, T., & Nikensari, S. I. (2018). The effect of compensation, motivation of employee and work satisfaction to employee performance Pt. Bank Xyz (Persero) Tbk. *Academy of Strategic Management Journal*, 17(4), 1-14.
- Supriyono, S., & Susmonowati, T. (2022). The Role of Extrinsic and Intrinsic Motivation to Maintain Employee Performance Productivity During Work From Home (WFH): A Case Study of a Private University in Jakarta. *Technium Social Sciences Journal*, 27, 606-619.
- Tabane, R. D. T. (2012). *Job satisfaction in virtual and face-to-face teams for multiple generations in the workplace* (Doctoral dissertation, University of Pretoria).
- Thabane, L. J., Radebe, P. Q., & Dhurup, M. (2017). The effect of job satisfaction on the organisational commitment of administrators. *Journal of Economics and Behavioral Studies*, 9(6 (J)), 188-198. [https://doi.org/10.22610/jeb.v9i6\(J\).2015](https://doi.org/10.22610/jeb.v9i6(J).2015)
- Toe, T. T., Murhadi, W. R., & Lin, W. (2013). Research study on the correlation between employee job satisfaction and employee motivation. *International Journal of Business Management*, 6(1), 142-166.
- Toglaw, S. D. (2006). *Organizational commitment in a virtual work environment* (Doctoral dissertation).
- Vikram, J. & Sayeedyafar, D. (2014). A study of HRM practices and its impact on employees' job satisfaction in private sector banks. *Journal of Advance Research in Computer Science and Management Studies*.
- Vitari, C., & Raguseo, E. (2020). Big data analytics business value and firm performance: linking with environmental context. *International Journal of Production Research*, 58(18), 5456-5476. <https://doi.org/10.1080/00207543.2019.1660822>
- Vodanovich, S., Sundaram, D., & Myers, M. (2010). Research commentary—digital natives and ubiquitous information systems. *Information Systems Research*, 21(4), 711-723. <https://doi.org/10.1287/isre.1100.0324>
- Walvoord, A.A.G., Elliot, L.R., & Coover, M.D. (2008). Empowering followers in virtual teams: Guiding principles from theory and practice”, *Computers in Human Behaviour* (article in press).
- Wang, D., Su, Z., & Yang, D. (2011). Organisational culture and knowledge creation capability. *Journal of Knowledge Management*, 15(3), 363-373. <https://doi.org/10.1108/13673271111137385>

- Wang, Y., & Haggerty, N. (2011). Individual virtual competence and its influence on work outcomes. *Journal of Management Information Systems*, 27(4), 299-334. <https://doi.org/10.2753/MIS0742-1222270410>
- Waqas, A., Bashir, U., Sattar, M. F., Abdullah, H. M., Hussain, I., Anjum, W., Ali, M. & Arshad, R. (2014). Factors Influencing Job Satisfaction and Its Impact on Job Loyalty. *International Journal of Learning and Development* 4(2), 141-161. <https://doi.org/10.5296/ijld.v4i2.6095>
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180. <https://doi.org/10.1002/smj.4250050207>
- Willis, R. M. (2016). *Factors that Affect Job Satisfaction and Work Outcomes of Virtual Workers* (Doctoral dissertation, Walden University).
- Yin, C. S., Fen, C. Y., Meng, K. Y., Yin, L. P. & Jack, W. W. (2012). *A study of employee satisfaction and its effects towards loyalty in hotel industry* (Unpublished thesis). Malaysia: University Tunku Abdul Rahman.
- Zumrah, A. R., Ali, K., & Mokhtar, A. N. (2022). Job Satisfaction: The Factors That Influence It and Its Impact on Turnover Intention. *Open Journal of Social Sciences*, 10(2), 281-291. <https://doi.org/10.4236/jss.2022.102020>

