

The Role and Impact of Information and Communications Technology (ICT) to Employees in Work from Home Set-up

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Abstract

Work from home (WFH) set-up has been offered by the private and public organizations as an alternative way of working for their employees. WFH has both advantages and disadvantages for the workforces when it is compared to the work in the office. This paper aims to describe the role of Information and Communications Technology (ICT) on employees' work-life and working relationship as well as personal life and relationship. Individuals may in like manner use ICTs to be more productive however has negative impact in individual and outcomes when the cutoff points among work and home are clouded through ICTs. While working indirectly offers different points of interest to agents and improves execution according to organizations, consistent transparency and bringing work home using ICTs can have suggestions to amicability between harmony between serious and fun times. When ICT use is linked to increased productivity and availability in work correspondence and cycles, it promotes work commitment. However, when innovation is used to induce interferences, it leads to an increase in business-related burnout among agents and a reduction in work responsibility.

Keywords— Information and Communications Technology (ICT), Work from home, Work domain, Private life domain

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I. INTRODUCTION

Technology has been developed to become part of our individual lives and has also redesigned every workplace. For the past few years, the Corona Virus had a significant impact across the globe. This pandemic causes the majority of the workforce of both the private and public entities to allow employees work at home to avoid the spread of the virus. During this time, there is another test for some labor forces. Decidedly telecommuting bargains from how to center with at-home interruptions, to attempting to be beneficial, attempting to discuss well with colleagues from far off, and simultaneously nurturing [1]. The Information and Communication's technology (ICT) has a big role in the work-from-home set-up. It integrates the technologies of electronics and methods to be used to manage knowledge and information. ICTs like the portable devices for communication, the Internet and emails effortlessly go through the life and work limits of every employee. As data and correspondence innovations, ICT companies have advanced in their abilities. With more vital availability of fast web, working remotely has filled in its utilization as another method of work. Working remotely is characterized as an adaptable work course of action whereby employees work in areas, far off from their focal workplaces or creation offices, the employees has no close to home contact with collaborators there, yet can speak with them utilizing the technology. ICT alludes to all correspondence advancements, including the web, remote organizations, PCs, programming, middleware, conferencing thru videos, interpersonal interaction, and other media applications and administrations empowering clients to get to, recover, store, communicate, and control data in a computerized structure [2].

Regardless of solid interest in the impacts of telecommuting, thought of the effect of Information and Communication innovation on work-life relationship has not gotten a lot of consideration. Ongoing grant on work

proposes that the utilization of data and correspondence innovation, ICT contributes strain and pain. It generally changes work conditions in habits that exhibit of work elevating [3]. While different discoveries concur that, through assistance of ICT-based work augmentation, interpersonal organization extension, and network to work partners are supposed to be connected to increments in trouble and can escalate efficiency [4]. Some corporations and businesses worldwide depend on the ICT to form virtual groups and communities in order to communicate. This development is feasible, but stress acquired using such technology needs to be considered. Nowadays, some employees are obliged to return to office with assurance of health safety protocols within the organization. The gradual move from work-from-home to return to office can suffice the underlying concern of different employees in the prior set-up.

This paper aims to describe the role and impact of ICT in work from home set-up by unfolding how ICT affects the employee's relationship towards his/her work-life, working relationship and personal life. This paper provides indications of how ICT affects the performance of employees while working at home. Also, suggestions are specified in this paper to acquire a work-life balanced among employees in order to cope with the limitations of ICT in dealing with work management [5].

I. ROLES OF ICT ON EMPLOYEES

A. Role of ICT on Employees' Work-life

Use of ICT nowadays is continuously changing due to digital technologies' enhancement, which affects an individual's work tasks. The everyday use of ICT provides access to the databases and technical information, monitors and automates, plans and calculates, improves challenging graphic presentations, and efficiently shares information with partners and colleagues [6].

The use of ICT is significant for every employee and this is very evident in the Covid19 Pandemic. In order to address the said pandemic, many countries has set protocols with regards to the workforce, one of those is that the number of full-time employees was forced to work from home. This is to encourage social distancing practices to lessen the spread of the said virus. In the Philippines, various quarantine measures were implemented wherein these became the basis of setting the work-from-home setup. The Telecommuting Act or the Republic Act 11165 portrays working from home as a work game-plan that allows a laborer in the private zone to work from an elective work space with the use of ICTs [7]. Due to the advent and enhancement of technology, everyone becomes more reachable compared to the normal situation [8].

The use of ICT also help the employees to be flexible and have independency of work. It empowers each person to tackle their responsibilities rapidly to do more work errands all alone, encouraging likewise to diminish manual work. Workers anywhere can deal with a similar record, simultaneously and continuously. Technology also expands laborer portability, liberating them from their work areas, permitting them to telecommute, their vehicle or anyplace as long as they have Internet access [9].

B. Role of ICT on Employees' Working Relationships

ICT has influenced individuals in positive and negative manners. Positive effects of ICT comprise the employees' ability to improve specific job, be more flexible on working hours, and share ideas with the co-workers. Individuals can participate in conversations remotely and can precisely represent any thoughts that supporters may have. Mix of ICT in the authoritative work expands seriousness, cost-effectiveness and productivity. This findings is maintained by different scientists who found that ICT expanded the efficiency of an association some way or another . It has also improved an organization's efficiency in terms of enhancement of collaboration and communication of an individual and the working team, helping employees in decision making by giving employees more access to information [10].

While it's negative effects include the increase of workloads and hours, higher levels of stress, and the struggle to disconnect from the job even when inside the home. Mobile telephones have made it possible for the employers and their employees to be linked anytime, which leads to removing the boundary between their job and private time. These effects display that ICT might also have an impact on every employee's work domain and private life domain and the relationships inside that domain [11].

The use of ICT, specifically mobile devices, offers a way always to be linked together. This does not excuse the supervisors from a constant connection with the employees to continue job-related communications even out of the office [12].

ICT enlarges the realm of impact to a supervisor such as a continuous, nonstop stream of provocation and offensive communication with his/her employees. The communication mediated by the computer may offer itself a harsher, sudden, or upsetting kind of message. Since the source does not realize the direct, emotive impression of communications, understanding both involved in communication is dampened. It may lead to escalation, which might not happen in a face to face set-up [12].

C. Role of ICT on Employees' Personal Life

The new technologies help employees to work with flexibility. However, this development come with a price. The need to be always accessible using technologies establishes a foundation of stress. It increases the possibility of experiencing extended stressful work, which might affect employees' health and welfare, leading to burnout [13].

Recent scholarship on work advises that ICT use has impact on changing the job conditions in ways that it intensify effort during work hours, which resulted to employee strain and distress [14]. The work-home interruptions effect on sleep has been examined in an ICT boundary management research thru the recovery process. Based on the theory of work recovery, employees necessary need break from the demands of job in order to oppose the strain process that often leads to negative health outcomes [15]. A study on the Stress Health suggests that in order for an employee to recover from the stress, he/she should disengage mentally and stop thinking about work after working period. All things considered, detachment psychologically should be a significant relationship between the sleep and boundary crossing [16].

Similarly, as ICT use can encourage the expansion of work into non-work life, comparable ICT-based practices can permit non-work concerns or requests to enter the work environment. Therefore, it is conceivable that representatives can utilize ICT to meet individual duties in manners that lighten a portion of the requests made by other ICT-based practices that advance work heightening [17].

D. Role of ICT on Employees' Personal Relationships

Studies have revealed that the enhancement of technology and its use has increased the splitting of the working tasks and working day and has distorted the limit between personal and work life. There is a large number of studies focusing on the impact of ICTs on employees work/life situations. Most of the studies in this area supports the idea that unclear work/life limits lead to unfavorable impact on people and families since they embraced overworking [18].

ICT being omnipresent, can make "micro transitions" through the life/work limit, persuading individuals to swing conceptual gears from being at work to real-life scenarios (and opposite) without sometimes noticing. Based on the boundary theory, this might lead to draining everyone's time, resources, drive and leading to role confusion, undesirable effects on mood and enjoyment of tasks. For instance, a mother getting an approach her cell phone from a youngster during a work meeting would quickly change mental gears from work to family; or a dad going to a kid's game accepting a work email on the cell phone may change mental gears the other way. From one perspective, ICT accordingly,

encourages the capacity to take care of errands and requests of one space, while actually being available in another area. Then again, the need to change mental gears requires the person to institute various jobs, which could prompt between job strife and strain [18].

The ICTs being used for professional reasons even after working-hours leads to the distraction of the activities of the family which is also a cause of disagreements [19]. Employees still choose to stay connected to their work knowing its adverse effects [20].

III. METHODOLOGY

A. Literature Search

In this study, previous articles were extracted and recognized. The articles utilized contain valuable and enlightening information about the job and effect of ICT in a work from home set-up. Based on predefined queries and objectives, the literature search was done by utilizing the keywords including "information communication technology", "work from home ", " work performance during covid-19 ".

B. Distribution of Papers by Journals

Twenty (20) reputable journals have been selected to search for papers. Table 1 shows the names of publishers which were selected, the number of articles selected and corresponding percentages.

TABLE I
DISTRIBUTION OF LITERATURES

Publisher	Article	Percentage
Research gate	1	5%
NPC bulletin	1	5%
Scielo	1	5%
ECORYS	1	5%
Elsevier	7	35%
Emerald Group Publishing Limited	1	5%
International Association of Applied Psychology	1	5%
Sage journal	2	10%
Entrepreneurship and Sustainability Center	1	5%
Journal of Occupational and Organizational Psychology	1	5%
Information, Communication Society	1	5%
Wiley Online Library	1	5%
Intechopen	1	5%
TOTAL	20	100%

C. Study Selection and Paper Eligibility

The selection of 20 journals was taken into consideration. The journals were picked on incorporation and rejection rules. According to avoidance measures, just related diaries were browsed the various articles, postulation, and outline reports. The following were considered for the exclusion criteria: name of the author/s, published year, and articles related to the explanation of the impact of Information Communication Technology on work-from home set up.

D. Extraction and Summarizing Data

The articles which were selected for the research were examined thoroughly to find out the answer to the crucial questions related to the study. Data were gathered from the extracted articles that are correlated to the examination of how ICT makes an impact on the employees working remotely at home because of the pandemic. The extraction of those articles had made a great help to accomplish the desired result and conclusion.

IV. RESULTS AND DISCUSSION

This research was carried out to determine the role and impact of ICT to employees on a work from home set-up. There are numerous contemplations on the utilization of ICTs at home that are positive in nature but in general people may find ICTs to be more profitable. ICTs have likewise been appeared to expand recurrence and span of authoritative correspondence while advancing attachment, improving gathering execution, and giving a discussion to data trade.

Despite the fact that increased profitability is one of the most important variables for authoritative innovation modality selection, organizations may not fully comprehend these improved outcomes. Beyond the increased efficiency expectations, there are negative effects on individuals and professional implications when the boundaries between work and home are blurred by ICTs.

[1]	Provide evidence that working from home can still be implemented after pandemic	Quantitative research	Many workers are being more productive at home than on business premises.
	To evaluate the pervasiveness of explicit work rehearses that fuse ICT	Quantitative research	Utilization of ICT-based work augmentation, social and organization extension, and availability to work partners are connected to increment in trouble and efficiency.
[4]			Social help was emphatically connected with lower levels of all far off working challenges; job self-rule adversely identified with dejection; responsibility and checking both connected to higher work-home impedance; and responsibility also connected to bring down delaying
[9]	Formulate work design perspective and study the remote working practice during the pandemic	Quantitative research	ICT is connected to more significant levels of representative strain and trouble through a work escalation measure that is demonstrated by quicker paced work and more noteworthy degrees of interferences and performing various tasks.
[3]	Survey the utilization of ICT that may impact levels of worker strain and misery.	Quantitative research	

TABLE II
SYNTHESIS OF THE LITERATURES

Study	Research Goals	Findings
[10]	Inspect the impact of ICT on representatives' work and individual lives.	Qualitative research Oversee ICT to diminish the adverse effect on work and individual lives.

[5]	To understand the different factors influencing WFH technologies	Quantitative research	Employees using WFH technologies is affected by how they perceive their social surroundings	[12]	To look at the impacts of virtual work and representatives' view of gathering viability (information sharing capacity)	Qualitative research	Both virtual work setting and individual setting should be considered while surveying the impact of virtually on gathering conduct.
[6]	To describe the use of ICT	Qualitative research	ICT provides access to work efficiently				
[13]	To inspect the connection between every day cell phone use and day by day work-home obstruction (WHI).	Qualitative research	Managers ought not anticipate that employees should be consistently accessible in private hours	[8]	Examine theory and research regarding work-related technology	Qualitative research	Representatives telecommuting extends the quantity of hours worked
[20]	To decide whether ICT assumes a part in characterizing work/home limits	Qualitative approach	ICTs may assume a huge part in encouraging negative work/home overflow.	[15]	Investigate the compromise between working at home and out-of-home, ICT and driving time	Qualitative research	Changes in ICT and driving time show rather frail replacement impacts on working out-of-home and at home, separately
[14]	To inspect the roundabout impact of ICT use at home on rest results	Quantitative Research	Circuitous impact of expanded work-home limit crossing on rest happened distinctly among people with low limits	[2]	Analyze how the extent of network communication is carried out in homes	Quantitative research	The connection among virtual and actual versatility differs relying upon sort of movement and gathering of people
[17]	To analyze the part of (ICT) at home in forming the qualities of work/family	Quantitative Research	Increasing dependence on technology induces stress, anxiety, and mental fatigue	[11]	To break down the work area and private life space	Qualitative research	Negative impact of ICT on work area and private life space
[16]	To inspect the connections between individual day-level incivility through work email (digital incivility) and representative outcomes	Qualitative research	Representatives who experienced digital incivility are presented to higher emotional and actual misery toward the finish of the Workday				
[19]	To explore how advanced work network can be impeding for representatives' work conduct	Quantitative research	Advanced work network can prompt restraint consumption, which thus is related with separation from work.				

V. CONCLUSION

During the worldwide Coronavirus epidemic, the use of innovation to communicate in organizations has become critical as the only viable way for people to connect with one another without sacrificing social separation and stay-at-home demands. As more people are charged with determining the optimal telecommuting balance, both employers and employees are looking for logical solutions based on the literatures found in journal databases. While working informally provides delegates with alternative focal points and improves execution according to organizations, consistent transparency and taking work home through Information and Communication Technologies (ICTs) can lead to a compromise between serious and pleasurable moments.

When ICT use is linked to increased productivity and availability in work correspondence and cycles, it promotes work commitment. However, when innovation is used to induce interferences, it leads to an increase in business-related burnout among agents and a reduction in work responsibility.

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