

REMOTE WORK IN PUBLIC INSTITUTIONS: THEORETICAL CONSIDERATIONS AND EXPLORATION OF ITS POTENTIAL BENEFITS

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Abstract: The opportunities offered by information technologies in the information society have enhanced business life flexibility, so the working environment has become portable from traditional offices to outside offices. Major public institutions have preferred remote work intensively, which has been a must since the COVID-19 pandemic outbreak. Therefore, the research aims at identification of the remote work benefits remote work to achieve economic efficiency in public institutions. From this perspective, a desktop study was carried out to provide remote work rationale from a theoretical perspective. The Knowledge-Based Economy (KBE), Feminization of the Workplace, The Flexible-Firm Model, Generational Theory, and Social Exchange Theory in the paper’s theoretical background determine the remote work significance. The primary conclusions are that using remote work may give public institutions opportunities, such as encouraging women to enter the labour market and designing future working environments for new generations, and the advantages, such as securing a faster communication structure and having a more skilled labour force to achieve economic efficiency.

Keywords: remote work, public institutions, theoretical background, economic efficiency, potential benefits of remote work, labour force

INTRODUCTION

The on-going globalisation around the world and the ever increasing competitive environment are making progress and implies a need for human resources significance and working systems, which are the most valuable assets of public institutions to provide economic efficiency (Townsend, DeMarie, and Hendrickson, 1998; Kam, 2019; Trippner-Hrabi, Chądzyński and Kam, 2023). Over the years, institutions’ employee profiles and working systems have been changing and diversifying. (Kianto, Saenz and Aramburu, 2017; Kam, 2019; Kam and Trippner-Hrabi, 2021). Therefore, in contemporary environment with fierce competition, public institutions must develop appropriate working systems to ensure they know the human resources that will make them successful and focus on institution goals (Kam, 2019).

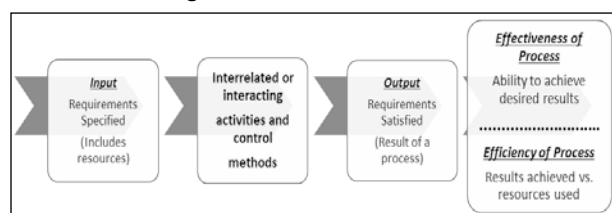
Technological developments, such as smartphones and tablet computers, have revolutionized everyday working life in the 21st century. Even though employees do not commute to their work establishment, they are enabled to connect with their colleagues and supervisors through technological devices instantly. Most of today’s office workers has technological devices and internet access support. If almost everyone can reach the internet quickly, employees can work from anywhere, anytime. This new spatial independence dramatically changes technology’s role in the working environment, offering new opportunities and challenges (Messenger and Gschwind, 2016).

In this study, remote work is considered part of the work process in public institutions. According to ISO 9000, a “process” can be defined as a “set of interrelated or interacting activities, which transforms inputs into outputs.” These activities require the allocation of resources such as people and materials. A generic process is shown in Figure No. 1 below (Corrie, 2004).

Both inputs and desired outputs can be physical (such as equipment, materials, or components) or intangible (such as energy or knowledge) (Corrie, 2004). According to the ISO 9000 standard, effectiveness is the ability to achieve desired results. (Tsim et al.,2002; Corrie, 2004) From this perspective, remote work is such an input that allows to achieve desired output of the work process in public institu-

tions. This study defines economic efficiency as the ability to achieve desired results from an economic perspective based on theoretical rationale.

Figure 1. A Generic Process



Remote work in public institutions gains importance because these entities want to implement activities effectively; they must adapt the work process to the market’s requirements to achieve economic efficiency. With the widespread use of remote work, there is a need to identify the potential benefits of utilizing remote work in public institutions. Therefore, the research aims to identify the benefits of utilizing remote work to achieve economic efficiency in public institutions.

With the Covid-19 pandemic, remote work has grown in popularity swiftly, and many companies had to adjust quickly to it (Bick, Blandin, and Mertens, 2020; Marzano and Zając, 2022). Also, raw statistics support this expression. According to Eurofound data dating back to July 2020, 33.7% of employees telecommuted in Europe (Eurofound, 2020). Even if the population across Europe began to re-open again following the first intense lockdown, the proportion of telecommuters declined, but it was still remarkable. According to Eurofound data collected in February and March 2021, 24% of employees telecommuted in Europe (Eurofound, 2021).

Prior to the COVID-19 pandemic in 2018, the proportion of telecommuters in Poland was lower than the average among EU Member States. It accounted for approximately 4.6%, whereas across the entire EU, 5.2% of individuals falling into 15-64 age bracket telecommuted regularly from their homes. However, in 2020, Poland’s percentage of individuals who “usually work from home” doubled compared to the 2018 data, reaching 8.9%. Notably, by the end of the first quarter of 2021, the sectors with the highest share of

telecommuters in the total workforce were financial and insurance services (36.1%), education (45.9%), and IT (66.8%). These sectors had already been leading in digitalization and automation even before the pandemic outbreak (Radziukiewicz, 2021).

Generally, the direction of change is similar around the world. When the American time use survey, which the Bureau of Labour Statistics conducted, the percentage of telecommuters in May/December nearly doubled during the COVID-19 pandemic in 2020, rising from 22% in 2019 to 42% in 2020 (BLS, 2021). Moreover, Dingel and Neiman (2020) disclosed that 37% of jobs in the United States could be performed at home, significantly varying from city/industry to another.

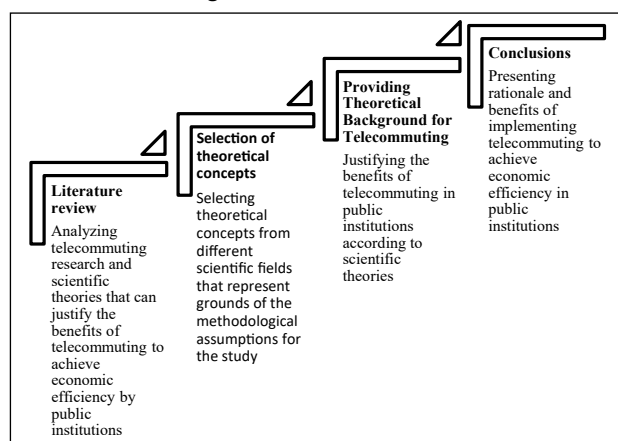
However, remote work cannot be implemented in all public institutions because the nature of some organizations' scope of work is unsuitable for implementing remote work, such as technical/infrastructural services (e.g., water supply, public transport, road maintenance, and public space). Because they are closely related to the use of technical infrastructure in physical space, and their virtual dimension is limited. Hence, it is decided to exclude such public institution services from the study. This study addresses public institutions only by organizations whose nature of work and virtual dimensions allow to implement remote work.

Consequently, statistical data shows that remote work is the future working system. According to empirical and practical evidence, it is inevitable that public institutions should apply remote work in their organizations. Despite this reliable evidence, which reveals the significance of remote work, the theoretical background of remote work in public institutions should be analysed to draw more precise conclusions. Hence, to have a comprehensive and multi-disciplinary theoretical background of research, literature study applied to the scientific theories in the fields of: economics (knowledge-based economy), sociology (generational theory and feminization of the workplace), management (flexible-firm model), and psychology (social exchange theory).

MATERIALS AND METHODS

In this paper, the desktop study method has been implemented to carry out a literature review. The research path is classified in Figure No. 2 below.

Figure 2: Research Path



Source: own analyses.

DESIRABILITY AND ADVANTAGES OF REMOTE WORK – RECENT DEVELOPMENTS

According to the literature, if carefully implemented, remote work can improve working conditions, work performance, and work quality. The results of studies showed

advantages such as superior living standards, higher productivity and flexibility, superior assessment of the workload, and reduction of costs, stress, and commuting time (Baruch, 2000; Grant, Wallace, and Spurgeon, 2013; Filardi, Castro and Zanini, 2020).

The most typically specified benefits of remote work include the elimination of commuting, fewer unnecessary meetings, reduced demands, higher employee retention, and fewer workplace downtime. Transitioning to remote work may solve many challenges of having a traditional, on-site workforce. It eliminates geographical barriers to recruiting, allowing firms to find the best talent regardless of location (Ozimek, 2020; European Commission, 2021).

The study carried out by Felstead and Henseke, 2017, shows that remote work is associated with higher organizational engagement, job satisfaction, and well-being. The public debate implies a system in which both employers and employees benefit. Employers benefit from a more productive workforce that takes up less space and is less expensive to house. In contrast, employees benefit from the potential of a superior work-life balance, which boosts job satisfaction and organizational engagement (Felstead and Henseke, 2017).

Consequently, the study results may show that if public institutions apply remote work, they can achieve positive outcomes for their organizations and personnel and may be an attractive place for skilled labour that has already been remote work in various sectors. So, extending their skilled labour can upgrade the quality of their services and make the services superior for service recipients.

However, there are always two sides to every coin, and therefore remote work has both advantages and disadvantages. The COVID-19 epidemic and widespread remote work, which led to changes in structure, the economy, and policy in Italy, were examined by Nappo et al. (2022). The significant findings indicate that worsening household economic positions are linked to a rise in householder employees' subjective feeling of job insecurity and that a rise in the proportion of family members who work from home is also linked to a rise in subjective feeling of job insecurity. Additionally, working in the private sector and on a temporary contract enhance subjective feeling of job insecurity.

As for potential disadvantages, Filardi, Castro, and Zanini (2020), Ferreira, Pereira, Bianchi, and da Silva (2021), Ipsen, van Veldhoven, Kirchner and Hansen (2021), and Bloom, Han, and Liang (2022), the studies identified elements such as having home office constraints, occurring work uncertainties, the intensification of work or the blurring of boundaries between work and private life. Moreover, non-adaptation, lack of communication, and connection with the company, psychological problems, lack of infrastructure, management issues, and difficulty in controlling the telecommuters. Various factors influence the correct implementation of remote work, such as infrastructure, worker characteristics, sector dynamics, and nature of work. From this point of view, careful and correct implementation is critical to reaching the advantages of remote work and avoid to have disadvantages in institutions.

Blumberga and Pylinskaya (2019); Ipsen, van Veldhoven, Kirchner, and Hansen (2021); Ben'ò (2021); Ferreira, Pereira, Bianchi and da Silva (2021); and Зыкова and Маусымбек (2021), the results of the studies revealed that remote work has more advantages than disadvantages for both the employer and the employee. This paper will justify the potential advantages of remote work to achieve economic efficiency in public institutions in terms of theoretical background.

OBJECTIVE REASONS WHY THE PUBLIC SECTOR NEEDS REMOTE WORK – THEORETICAL FRAMEWORK

In this part of the paper, the theoretical framework examines to procure objective reasons why the public sector needs remote work. To this extent, five theories, the Knowledge-Based Economy (KBE), Feminization of the Workplace, The Flexible-Firm Model, Generational Theory, and Social Exchange Theory, will be examined one by one.

Rationale provided by The theory of the Knowledge-Based Economy (KBE)

The OECD characterized knowledge-based economies (KBEs) in 1996 as 'economies which are directly based on the production, distribution, and use of knowledge and information' (Godin, 2006). The KBE has two widespread visions: the 'weightless economy' and the 'information economy.' The first observes that knowledge would be more significant in quantity and quality than before. In other words, non-material objects are increasingly concentrated in economic worth. The second refers to the critical role that information and communication have assumed in the modern economy. From this perspective, information and communication technology (ICT) applications would drive the new economy (Harris, 2001; Godin, 2006).

The transition to a KBE was recorded in the early 1970s and has steadily been progressing across economies, owing to progress in high technology and the growth of the information and communication service sectors (Schiliro, 2012). All in all, it is believed that KBE has become the major trend in international society in the 21st century (Hsu, Lin, and Wei, 2008). Growing specialization, research, innovation, and learning represent grounds for knowledge-based economies. The reliance on new information technology, such as remote work, is one of the significant characteristics of knowledge-based economies (Schiliro, 2012).

According to the theory, an economic system is forming that focuses more on intangible economic assets, such as new ideas, software, and services, rather than tangible assets. From this perspective, educated professionals who have access to bodies of theoretical, specialized, and abstract knowledge create added value with their brains rather than with their hands to the economic system. Because knowledge creation is less geographically constrained, changing the balance between the physical and metaphysical natures of work diminishes the work fixedness. As a result, the knowledge economy theory suggests that the remote work growth can partly be explained by this economic transformation (Felstead and Henseke, 2017).

According to Kuzior et al. (2022), there may be a link between greater organizational sustainability and digitization. Digitalization and outsourcing have also reduced CO2 emissions by lowering travel/commuting, waste, and energy consumption to reach sustainable economic growth.

Remote work creates jobs in the corners of the globe traditionally characterized by low incomes and high unemployment rates. As such, it has been touted by governments, third-sector organizations, and the private sector as a novel economic development strategy (Anwar and Graham, 2021).

When it considers that the roots of KBE are spreading worldwide dramatically and have become a significant trend (Hines and Carbone, 2013), if the international laws/regulations are okay with such employment in related countries (on both employer and employee sides), talent can be sourced worldwide. From this perspective, public institutions shall not lag behind significant trends in the knowledge-based economy, and they must apply remote work to attain economic efficiency.

Over the previous two decades, for instance, the percentage of the workforce employed in the positions of managers, professionals, and associate professionals has risen dramatically. Between 1994 and 2014, their employment share went up by ten percentage points, and by 2024, they are predicted to account for roughly half of total workforce (Felstead and Henseke, 2017; Wilson et al., 2016). Based on this data and assumption, it may be commented that remote work will be more prevalent in the labour market in the light of the reality that white-collars are using remote work methods intensively.

Rationale Based on The Feminization of the Workplace Theory

Globally, women's participation in the gainful employment has been growing (Parthasarathy, 1994). As more women enter the workforce, the workplace has become more feminized daily (Moore, 2005). Despite considerable advances in the feminization of the workplace, women's participation percentages remain low (Lagarde and Ostry, 2018). Women currently participate in the labour force at a rate of 49.3% worldwide, compared to 76% for men (Kühn, Horne, and Yoon, 2017). From this perspective, compared to the men's workforce rate, it is evident that there is a gap in women's workforce in the labour market. Statistical data shows that recent progress in reducing the gender gap in developing countries has been unsatisfactory. Female workforce participation rates, which have only slightly risen over the last two decades, must be changed to advance economic growth. (Klasen, Pieters and Santos Silva, 2021).

A study that Lagarde and Ostry carried out suggests that for the bottom half of the countries in terms of gender inequality, closing the gender gap could boost GDP by an average of 35%. Four-fifths of these gains come from adding workers to the workforce, but in total one-fifth of the gains are due to the gender diversity impact on productivity (Lagarde and Ostry, 2018). Moreover, as revealed by extensive microeconomic evidence, women and men bring different abilities and perspectives to the workplace. Studies have also indicated that having more gender-equal company boards enhances financial success (Lagarde and Ostry, 2018). In the light of this knowledge, public institutions should take steps to have qualified women's workforce power in their organizations.

Women are essential at the workplace, especially in the countries where labour shortages are a constant concern due to the aging population. Women are a vital organizational resource for a firm's competitiveness and long-term growth; therefore, engaging them at the workplace is unavoidable in contemporary working environment (Chepkemei et al., 2013; Loichinger and Cheng, 2018).

Taking into consideration that working women contribute considerably to the household, national, and global economic development, failing to develop women-friendly work practices such as fair remuneration may eventually reverse all of the gains made as a result of enhanced female engagement at the workplace (Stamarski and Song Hing, 2015; Munongo and Poee, 2021). Therefore, public institutions shall adjust their employment practices in response to the feminization of the workforce and the rising participation of mothers in the job market to meet the demands. The globalized world and advanced infrastructure technologies enable employees to work remotely anytime and anywhere. Virtually, remote work offers workforce flexibility with regard to place and time. When it is accepted that women's responsibilities are more than men's in families, remote work methods can encourage women to join the labour market. With public institutions switching their working method to remote work, they may become attractive centres for women's workforce.

The empirical evidence shows that the growth of public-sector wages and public-sector employment has had positive impact on the growth of private-sector wages in the OECD countries. Moreover, public sector employment and wages are critical in the labour market (Afonso and Gomes, 2014; Fernández et al., 2012). On the other hand, a shock to public employment reduces unemployment (Gomes, 2010). From this perspective, entering a significant number of women into the public sector may boost private-sector wages, reduce unemployment, and fuel economic growth.

Finally, the feminization of the workplace and remote work are two parts of a big puzzle. The workplace is feminizing, with women entering the labour market. If public institutions apply remote work in their organizations, they can be attractive centres for the qualified women workforce. After remote work in public institutions and providing employees with flexible and comfortable jobs, women would enter the labour market more intensely. With women entering the labour market intensely, the competition in the labour market may be more challenging as well. After all, positively evaluated candidates may be recruited in public institutions. A more qualified workforce can provide better outputs, higher employee performance, and customer satisfaction to the public institutions.

Rationale Derived from The Flexible-Firm Model

Flexible working refers to workforce flexibility over how long, where, when, and what times they work (CIPD, 2021). If companies are flexible, they can gain significant long-term competitive benefits. Firstly, a flexible business can deploy its employees and utilize their talents more effectively and efficiently than one that is not. Secondly, the more adaptable an organization is, the better it will adjust to change. Finally, employee flexibility, particularly regarding working hours, is highly valued by workforce and can thus assist in recruiting and retaining top performers (Taylor, 2018).

In the twenty-first century, Atkinson's Flexible Firm Model, which he developed in 1984, still has significant guiding and practical value. Organizations can use this strategy flexibly to upkeep their competitive edges in an open talent economy (Zhao, 2020). The flexible firm model is a comprehensive model that contains all major parameters of change observed in the research work developed by the Institute of Manpower studies and describes flexible firm parameters and types (NEDO, 1986). Within an organization, Atkinson defined three types of flexibility: functional, numerical, and financial (Atkinson, 1984). Finally, remote work is one of the flexible working methods which is significantly popular worldwide. The flexible firms model refers to the fact that when public institutions use flexible working methods such as remote work, they will have functional, numerical, and financial flexibility.

According to the British Office for National Statistics (ONS), two-thirds of individuals working at least half of their time from home are self-employed, while one third works on a part-time basis. Remote work goes hand in hand with other forms of flexible employment, and trends in these fields of work may explain at least some of the remote work growth (Felstead and Henseke, 2017). From this perspective, remote work engages with other forms of flexible employment. It provides advantages to public institutions to adjust their workforce from a numerical flexibility perspective. When public institutions need to extend their workforce during high seasons, they may hire new employees who can perform remote work anywhere. Almost everyone has an internet access, smartphones, and computers worldwide. From a functional flexibility perspective, the flexible firm model refers to a flat and faster communication structure, a more proactively

workplace. Remote work can secure a faster communication structure because, based on ICT infrastructure, workers and supervisors might communicate faster and flatter worldwide.

Rationale Derived From Generational Theory

Over the years, the generation-driven profiles of public institutions have been changing and diversifying. The reason for this is that new generations join the working life. According to generational theory, different generations have different expectations and perspectives on working life. Therefore, in contemporary working environment with fierce competition, public administrations must know the human resources that will make them achieve sustainable success and must develop appropriate work methods to enable generations to focus on organizational goals (Anholt, 2007; Anholt, 2013; Kam, 2019; Kam and Trippner Hrabi, 2021). The characteristics and expectations of the population structure in public institutions emerge as a critical success factor in goal attainment.

The four generations currently in the working environment are the Baby Boomers, born between 1946–1964, Generation X, born between 1965–1980, Generation Y, born between 1981–1995; and Generations Z, born between 1996- and later (Oblinger and Oblinger, 2005; Kam, 2019). Considering that each generation reflects the characteristics of their times and has different values and worldviews, these elements directly affect business life. According to generational theory, every four generations currently in the working environment can reveal significantly different levels of efficiency for different work systems.

Baby Boomers are known to be the most committed individuals to their organizations and have experienced tremendous technological advances in their adulthood. Their children are more prone to technology than themselves and are used to exercise quick access to information. (Delahoyde, 2009; Kam, 2019; Oblinger and Oblinger, 2005;). This generation members do not account for a big share of active labour force because most of the have retired.

Generation X members emphasize individual rather than collective work and have experienced substantial technological developments in their adulthood. However, they have adapted to technological developments and mainly have used mobile phones as a communication tool (Kupper-schmidt, 2000; Hammil, 2005).

Generation Y is known as the “why” generation because the generation members question everything (Washburn, 2000; Lamm and Meeks, 2009). They are fond of freedom in business life, they show interest in the media and communication, and most consumer, are very weak in their commitment to their workplaces. There is a general belief and assumption that they will work in more than ten different companies throughout their lifetimes. Their most distinctive trait is that they were born when technology was still widely used. Technological tools such as smartphones and computers are a part of their life. They use them not only to communicate, play games, and spend their leisure, but also to get the information and data they want as soon as possible. They are open to change and innovation, impatient, dislike red tape, it is hard to please them, and they love their freedom and comfort when it comes to personality traits (Hammil, 2005; Schwarz, 2008; Zemke, Raines and Filipczak, 2013; Miroński and Gawlik, 2018; Kam, 2019; Kam, 2021).

According to the Generation Y characteristics, technological tools are part of their life. They spend their leisure with technological tools, follow news from there, and study online. Therefore, the technological environment is familiar to them. Their knowledge of the technological environment enables them to telecommute efficiently. They are fond of freedom in business life and fragile in their commitment to

their workplaces, which reveals that they may work remotely more effectively and comfortably. Since remote work may provide more freedom than working on-site, from this perspective, their expectations comply with remote work precisely. Moreover, they are open to change and innovation. So they will not have any problem with remote work.

Lastly, Generation Z members live in an environment where new technological developments and communication and transportation facilities are available. They can use technology well and are growing up with small portable devices (smartphones, computers, MP3 players, iPods, and DVD players). Even if there are long distances among the Generation Z members, they can establish a mutual connection by communicating verbally and visually with digital devices at any time. In addition, they tend to be physically alone. For these reasons, there is a prediction that they will be more willing to live alone. The most distinctive features of this generation are; technology addiction, lack of geographical constraints, and individuality. When the number of Generation Z members goes up in working life, organizational dynamics will be changed. Moreover, the Z Generation will carry the speed dependency that emerged with the technology brought by the Y generation to the working life (Kam, 2019; Williams, 2010).

The Generation Z members can use technology well and perform remote work successfully; they tend to be physically alone and prefer to avoid geographical constraints. Remote work is a proper system allowing them to work anywhere and anytime; hence, it meets their expectations.

Rationale From Social Exchange Theory

The social exchange theory rests on the reciprocity standard and is one of the major theoretical perspectives in social psychology. According to the theory, exchange starts with one party giving a benefit to another, is positive, and feelings of duty are formed between the parties if the recipient reciprocates (Coyle-Shapiro and Shore, 2007). The resources exchanged could be physical, such as commodities or money, or intangible, such as social benefits or friendship. The theory's core premise is that people enter and upkeep relationships to have some benefits from them (Lambe, Wittmann, and Spekman, 2001). The 'win-win exchange relationship' premise, which can persist as long as it is reciprocal, is the foundation of social exchange theory. The relationship power between parties is significant in order to sustain social exchange. The research on the impacts of power and reliance exchange relationships is Emerson's (1962) essential contribution to the theory. He believes that power imbalances make relationships unstable and that interdependence is essential for the long-term survival of a social exchange relationship (Lambe, Wittmann, and Spekman, 2001). Emerson's determination is correct because if the power of parties is not balanced, the social relationship cannot be sustained in long term. When one person treats another well, reciprocity dictates that the other person should be treated adequately (Gouldner, 1960). In other words, if an employer treats an employee well and gives him or her a pleasant working environment, proper working methods, numerous social rights, reasonable compensation, and other benefits, the employee may reciprocate with practical work, high performance, and positive outcomes.

When considering Social Exchange Theory's basic assumptions and previous studies about remote work, it reveals that if public institutions apply remote work as their working method, employees may provide practical work and superior performance. The results of previous studies carried out on remote work institutions showed advantages such as superior living standards, higher productivity and

flexibility, superior assessment of the workload, and reduced costs, stress, and commuting time (Baruch, 2000; Grant, Wallace, and Spurgeon, 2013; Filardi, Castro and Zanini, 2020). It means that when employees telecommute, they are productive and flexible. If public institutions apply remote work system, they can provide the above advantages to their employees.

On the one hand, proper working methods appear to have positive outcomes in public institutions; on the other hand, inappropriate work methods may have adverse impact on the personnel performance and outcomes. Therefore the working method is significant for public institutions. There is no doubt that the employee profile is essential as the working method in order to generate positive outcomes. So public institutions have to shape their employee profile regarding their working method. When public institutions have good employee profiles for remote work, the social exchange process may trigger naturally then they will receive positive outcomes (higher performance, higher productivity).

The fulfilment of commitments enables the employees to preserve a positive self-image as debtors, avoid the social stigma associated with violating reciprocity norms, and receive favourable treatment from the company.

As a result, employees drive to make up for favourable treatment by putting forth performance that the company appreciates (Eisenberger, Armel, Rexwinkel, Lynch, and Rhoades, 2001). Social exchange models have explored various aspects of the employment relationship (Johnson and O'Leary-Kelly, 2003), and it comes out that diverse variables shape social exchange relations. However, the most significant factor is a psychological contract.

Psychological contracts are one type of social exchange between employers and employees. Most psychological contract research has focused on identifying the components of an employee's contract and the impacts of employer contract fulfilment or non-fulfilment. For instance, Robinson et al. (1994) discovered that MBA graduates' psychological contracts include expectations of rapid progression, good salaries, long-term employment security, and training (Johnson and O'Leary-Kelly, 2003).

According to the psychological contract, employee expectations are significant in applying social exchange. In order to understand the expectations of employees, generational traits should also be looked at while considering employee profiles in the labour market. Despite every generation having different characteristics and values, there are common points for them. From this point of view, public institutions must be aware of generational characteristics correctly to settle psychological contracts smoothly. Generation Z and Y are the youngest groups actively working in the labour market. In other words, they will work in the labour market long. Therefore, public institutions need to plan their current and future work method, remote work, to meet generations' expectations.

Examining the characteristics of both generations reveals that technology is part of their life; they are fond of freedom and they are weak in their commitment to their workplaces. In addition, especially Generation Z tends to be physically alone. Public institutions may apply psychological contracts with these generation members to have a social exchange with them smoothly. By applying psychological contracts with generations, they may receive positive outcomes from employees, such as high performance and higher productivity.

As a result, social exchange theory indicates that if public institutions apply remote work as their working system, they will receive positive outputs from their employees since remote work has various advantages for employees. Em-

ployees with a flexible and proper working environment may work effectively and productively. The social exchange might have been triggered positively solely in case employees have appropriate working methods that meet their expectations. After that, public institutions may have a total capacity of their labour force abilities.

RESULTS AND DISCUSSION

The KnowledgeBased Economy (KBE), Feminization of the Workplace, Flexible-Firm Model, Social Exchange Theory, and Generational Theory addressed the benefits of remote work in the study's theoretical background. Using remote work may offer public institutions opportunities and the advantages of having a more skilled workforce to achieve economic efficiency.

Consequently, Knowledge-Based Economy (KBE) states that the value of knowledge and human capital has increased in the global economy daily. Moreover, KBE implies that with the development of communication technologies, employment has become delocalised. Remote work may contribute to reaching sustainable economic growth by reducing CO2 emissions. It can be a major player in designing new economic development strategies by governments, third-sector organizations, and the players in the private and public sectors.

Finally, the public institutions must generate their working systems for remote work, considering the dynamics of knowledge-based innovation. If they want to provide high-quality services to their citizens, it is critical to have skilled labour force. Therefore, they should not stay behind the major KBE trend to aim to have a talented labour force.

As a result of the workplace feminization, the share of women's workforce has grown in the labour market. Entering more women into the public sector may reduce unemployment and boost economic growth. On this point, public institutions have to apply the proper working methods to be attractive to women.

Consequently, the Flexible Firm Model claims that public institutions may achieve a flatter and faster communication structure and a more proactive workplace with flexible working methods such as remote work. Functional, numerical, and financial flexibility can make them more dynamic; hence they need to apply remote work, which provides flexibility to employees and makes their work attractive.

Finally, social exchange theory claims that there is a social exchange between employees and public institutions. A successful relationship may be possible by meeting common expectations between them. Public institutions should not only pay attention to employee expectations, but also employees should pay attention to the public institutions' requests. As an employer, public institutions decide on the working method. Since the direct impact on employees' performance and satisfaction, the decision of the working method is a substantial issue because having a proper working system such as remote work affects the social exchange and triggers favourable psychological contracts with employees.

As a result of the Generational Theory, we can conclude that individuals born and growing up in different periods have different value judgments. When we look at the characteristics of Baby Boomers, Generation X, Generation Y, and Generation Z, they differ, and it supports generational theory strongly. With globalization, it is easy to predict that the members of the next generations will have different value judgments and cultural characteristics. Considering the unpredictable technological developments, future generations will be much more involved with technology and the development of social communication networks. Public institutions

should care for new generations' expectations and adapt their organizational structure to keep abreast with progress in 21st century. To this extent, they must implement remote work to reach talented employees as part of their work system to achieve economic efficiency.

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