World Journal of Engineering and Technology, 2024, 12, 635-650
https://www.scirp.org/journal/wjet
ISSN Online: 2331-4249
ISSN Print: 2331-4222

An Assessment on the Impact of Technological Addiction on Workplace Productivity: Case of the Public Sector in Zimbabwe

Nelson Matanana[1], Prosper Tafadzwa Denhere[1], David Chibhoyi[2], Allen Mutumwa[2], Sithole Morgen[3], Noah Ariel Mutongoreni[2]

[1]Department of Computer Science and Information Systems at Manicaland State University of Applied Sciences, Mutare, Zimbabwe
[2]Department of Human Resources Management at Manicaland State University of Applied Sciences, Mutare, Zimbabwe
[3]Department of Applied Business Sciences at Manicaland State University of Applied Sciences, Mutare, Zimbabwe
Email: nelson.matanana@staff.msuas.ac.zw, prosper.denhere@staff.msuas.ac.zw, drchibhoyi@gmail.com, Allen.mutumwa@staff.msuas.ac.zw, morgen.sithole@staff.msuas.ac.zw, noah.mutongoreni@staff.msuas.ac.zw

How to cite this paper: Matanana, N., Denhere, P.T., Chibhoyi, D., Mutumwa, A., Morgen, S. and Mutongoreni, N.A. (2024) An Assessment on the Impact of Technological Addiction on Workplace Productivity: Case of the Public Sector in Zimbabwe. *World Journal of Engineering and Technology*, **12**, 635-650.
https://doi.org/10.4236/wjet.2024.123040

Received: April 20, 2024
Accepted: August 2, 2024
Published: August 5, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/
Open Access

Abstract

With the increasing integration of technology in modern workplaces, concerns have emerged regarding the addictive nature of technology and its potential consequences on employee productivity. This research aims to investigate the impact of technological addiction on workplace productivity within the public sector of Zimbabwe. The study employed a mixed-methods approach, combining surveys, interviews, and a case study analysis, to examine the prevalence and effects of technological addiction in affecting productivity in the public sector of Zimbabwe. The findings indicate that excessive use of social media, and other digital distractions is a growing concern in the public sector, leading to decreased focus, missed deadlines, and strained teamwork. Factors such as unrestricted internet access, lack of clear usage policies, and inadequate self-regulation contribute to the problem The research outcomes also highlight the need for awareness and interventions to address social media addiction in the workplace, promote healthier technology use, and uphold productivity and employee well-being.

Keywords

Technology Addiction, Workplace Productivity, Technology, Public Sector, Zimbabwe

1. Introduction

In today's digital age, the pervasive use of technology has transformed the way we work and communicate. While technology offers numerous benefits, there is growing concern about its addictive nature and its potential impact on workplace productivity. The addictive nature of technology has been a topic of increasing concern in recent years [1]. As people become more reliant on smartphones, social media platforms, and other digital devices, there is a growing recognition of the potential for addictive behaviors and their impact on individuals' well-being. Research suggests that the design features of technology, such as notifications, infinite scrolling, and personalized content, are intentionally created to capture and hold users' attention [2]. This constant engagement can lead to excessive use, neglecting real-world interactions, responsibilities, and experiencing symptoms of withdrawal when separated from technology [3]. The addictive nature of technology has implications for mental health, social relationships, and productivity therefore it is of paramount importance to ensure a balanced approach to technology use and the development of strategies to mitigate addictive behaviors. This research aims to explore the impact of technological addiction on workplace productivity, with a specific focus on the public sector in Zimbabwe. The public sector plays a crucial role in driving the nation's development and service delivery. This makes it essential to understand how technological addiction affects productivity within this context. As the country embraces digital transformation, the integration of technology in public sector organizations has become more prevalent. Understanding the extent of technological addiction and its effects on workplace productivity in the public sector is vital for several reasons. First, the public sector is a significant contributor to the country's socio-economic development, and any decrease in productivity can have far-reaching consequences for service delivery and overall governance. Second, public sector employees are often required to handle sensitive information and make critical decisions, making their focus and attention crucial for effective performance. Therefore, the study aims to address the gap in knowledge by examining the impact of technological addiction on workplace productivity within the public sector of Zimbabwe. This will provide valuable insights for policymakers, organizational leaders, and employees to develop strategies and interventions that promote a healthy work environment and enhance productivity in the face of technological challenges.

The prevalence of technology in both work and personal life has blurred boundaries, making it more difficult for individuals to disconnect and take breaks [4]. Symptoms of technology addiction can include an inability to control usage, neglecting important responsibilities, and experiencing withdrawal symptoms when not using digital devices [5]. These symptoms can lead to increased stress, anxiety, and a decline in overall well-being. Addressing technology addiction requires a multifaceted approach including setting clear boundaries for technology use, promoting digital detox periods, and providing education

and resources to help individuals manage their usage effectively [6]. By understanding the risks associated with technology addiction and implementing preventive measures, individuals and organizations can mitigate its impact and promote healthier relationships with technology.

From the advent of smartphones and social media platforms to the rise of artificial intelligence, technological advancements have revolutionized various industries and sectors [7] [8]. However, with the increasing reliance on technology, concerns about its potential negative impacts, such as technological addiction, have also emerged [9]. Technological addiction refers to the compulsive and excessive use of digital devices and platforms, leading to detrimental effects on individuals' well-being [10]. Technological addiction involves the excessive and compulsive use of digital devices such as smartphones, computers, tablets, and online platforms, including social media, gaming, and video streaming services [11]. This type of addiction can have significant negative effects on individuals', work productivity, mental and physical health [12]. To measure the extent of technology addition research is going to implement a combination of Smartphone Addiction Scale by Kwon, Kim, Cho, and Yang, [13] [14] and The Internet Addiction Test by Dr. Kimberly Young [14] [15]. The Smartphone Addiction Scale (SAS) is a self-report questionnaire developed to measure the severity of smartphone addiction. It consists of 33 items categorized into four subscales: salience, tolerance, withdrawal, and conflict. Participants rate their agreement on a 6-point Likert scale. The SAS assesses various aspects of smartphone addiction, including preoccupation with smartphones, the need for increased use, withdrawal symptoms, and negative consequences. It provides a reliable and valid measure to evaluate problematic smartphone use, identify individuals at risk of addiction, and assess the effectiveness of interventions targeting smartphone addiction. The Internet Addiction Test (IAT) on the other hand is a widely used self-report questionnaire designed to assess the severity of internet addiction. It consists of 20 items that measure different aspects of excessive internet use, including compulsive behaviors, withdrawal symptoms, and negative consequences. Participants rate their responses on a 5-point Likert scale. The IAT helps identify individuals who may be experiencing problems related to their internet use, such as diminished control, neglect of personal responsibilities, and negative effects on social relationships. It provides a valuable tool for researchers and clinicians to understand and address the issue of internet addiction. Excessive use of social media will be assessed to determine its impact on workplace productivity. Workplace productivity being to the efficiency and effectiveness with which work is performed in a professional setting. It is a measure of the output or results achieved in relation to the resources, time, and effort invested in completing tasks and projects [16].

Technological Use in Organisations

Technology plays a crucial role in facilitating communication and collaboration

within organizations [17]. With the advent of email, instant messaging, video conferencing, and collaboration tools, employees can communicate and collaborate in real-time, regardless of their physical locations [18]. These technological solutions enable efficient information sharing, prompt decision-making, and seamless collaboration among team members, departments, and even across different organizational levels [19]. Additionally, shared document platforms and project management software provide a centralized space for employees to collaborate on projects, track progress, and exchange feedback, enhancing overall productivity and teamwork [20]. By leveraging technology for communication and collaboration, organizations can break down geographical barriers, foster cross-functional collaboration, and promote a culture of innovation and knowledge sharing [21]. **Table 1** shows brief descriptions on some of the most common social media platforms being used in workplaces and personal lives of employees. It is of importance to note that most of these social media platforms use network provided by organizations where they are placed.

Table 1. Uses of social media platforms in the workplace.

Social Media Platforms	Brief Description
WhatsApp	A messaging app that also supports voice and video calls, as well as group chats
TikTok	A short-form video platform that allows users to create and share creative videos
Facebook	A comprehensive platform offering various features such as profiles, news feeds, messaging, groups, and marketplace.
Twitter	Known for its microblogging format, where users share short messages called "tweets" and engage in real-time conversations.
Instagram	Focused on photo and video sharing, with options for stories and reels (short videos).
Snapchat	A multimedia messaging app known for its disappearing content and interactive filters.
YouTube	A video-sharing platform that hosts a wide range of content, including vlogs, tutorials, music videos, and live streams.
LinkedIn	LinkedIn is a professional networking platform. It allows users to create professional profiles, connect with colleagues, join industry-specific groups, and showcase skills and experience. It is widely used for job searching, recruitment, and professional networking.

2. Statement of Problem

As individuals increasingly rely on digital devices and online activities, addictive behaviors related to technology can hinder employees' ability to focus, prioritize tasks, and effectively manage their time. The impact of excessive technological use in the workplace raises concerns about reduced efficiency, increased distractions, and compromised performance leading to reduced productivity [22].

Therefore, there is a need to assess the extent of technological addiction in the workplace and understand its implications for productivity in order to develop strategies and interventions that promote healthy technology use and optimize employee performance.

Limitations of the Research in This Paper

The research paper has some limitations that need to be acknowledged. Firstly, the study's findings may not be generalizable beyond the public sector in Zimbabwe, as the research focused exclusively on this specific context. Therefore, caution should be exercised when applying the results to other sectors or countries. Additionally, the research relies heavily on self-reported data, which introduces the possibility of response bias and inaccuracies due to participants' subjectivity or reluctance to disclose information accurately. Lastly, the research does not explore the potential confounding factors or alternative explanations that could influence workplace productivity, such as organizational culture, management practices, or individual differences, thus limiting the robustness of the conclusions drawn.

3. Literature Review

3.1. Factors Affecting Work Productivity

Work productivity is influenced by various factors that can significantly impact an individual's performance and output. One crucial factor is the work environment, which encompasses physical conditions, such as lighting, temperature, and noise levels [23]. A well-designed and comfortable workspace can promote focus and minimize distractions, leading to higher productivity levels. Additionally, the availability and accessibility of necessary resources and tools, such as technology and equipment, play a vital role in enhancing work productivity [24]. Another determinant is the organizational culture, including leadership style and communication patterns [25]. Supportive leaders who foster open communication and provide clear expectations can motivate employees and foster a positive work atmosphere. Furthermore, individual factors like skills, knowledge, and motivation significantly impact productivity [26].

Organizations and companies put enforce strategies in enforcing the availability of these factors in trying to improve productivity in a work setup. Implementing aspect like resources and tools, such as technology and equipment, and not monitoring usage can have a massive impact on the employees' level of engagement and commitment to work and can influence their productivity. Therefore, understanding and addressing these multifaceted factors is crucial in optimizing work productivity. Measuring productivity in the workplace is essential for assessing performance and identifying areas for improvement, referred to as Output-based measures. These measures assess productivity based on the quantity or quality of outputs produced, such as the number of units produced, revenue generated, or customer satisfaction ratings [27]. Furthermore, efficiency

measures need to be assessed. Efficiency measures productivity by evaluating the ratio of inputs to outputs. This includes metrics like labor productivity (output per labor hour), material efficiency (output per unit of material), or energy efficiency (output per unit of energy consumed).

3.2. Previous Studies on Technological Addiction in the Public Sector

Research on technological addiction in the public sector has garnered significant attention in previous studies. Several investigations have explored the impact of excessive technology use, including social media addiction, on employees' well-being and job performance within public organizations. For instance, [28] conducted a survey-based study among public sector employees and found that higher levels of technological addiction were associated with increased work-related stress and decreased job satisfaction. Another study by [29] examined the relationship between technology addiction and work engagement among public sector workers and discovered that individuals with higher levels of technology addiction reported lower levels of work engagement, indicating reduced productivity and commitment to their tasks. Additionally, a study by [30] investigated the consequences of technology addiction on public sector employees' decision-making abilities and found that excessive technology use impaired their judgment and decision-making processes, potentially compromising organizational outcomes. These previous studies collectively emphasize the importance of addressing technological addiction in the public sector to ensure employee well-being and maintain optimal workplace productivity.

4. Methodology

The study employed a mixed-methods research design, combining quantitative and qualitative approaches, to obtain a comprehensive understanding of the impact of technological addiction on workplace productivity in the public sector in Zimbabwe. An application called ActionDash was installed on a sample of 1500 public sector employees' phones, the application recorded and kept track of all mobile phone applications used by the participants during working hours for the three months in which the investigation was carried out. Stratified random sampling was used to select participants from different departments within the public sector in Zimbabwe. The sample included employees at various levels, general hand (cleaners), frontline staff (receptionist), Professional/Technical Staff (engineers, accountants, lawyers, policy analysts, or IT specialists), to capture different perspectives. A structured questionnaire was designed based on validated scales, such as the Technology Usage Scale, to measure the level of technological addiction and its impact on workplace productivity. The questionnaire included items related to work engagement, job satisfaction, work-related stress, and performance indicators. Data was collected using an online survey platform through Google form and also face-to-face from the phones of participants depending on availability and preferences. Semi-structured interviews and

focus group discussions were conducted with a subset of participants to explore their experiences, perceptions, and insights regarding how often and for what purpose they use social media in the workplace during working hours. The qualitative phase provided in-depth information, allowing for a deeper understanding of the phenomenon and potential solutions. Quantitative data was analyzed using descriptive statistics, correlation analysis, and regression analysis, to examine the relationships between technological overuse and workplace productivity. While qualitative data was analyzed using thematic analysis, identifying key themes and patterns related to the impact of technological addiction on productivity and strategies to address it. Ethical approval was obtained from the relevant research ethics committee. Informed consent was also obtained from all participants, ensuring confidentiality and anonymity of their responses. Participants were given the right to withdraw from the study at any stage.

5. Results and Discussion

There were several Key Performance Indicators (KPIs) metrics used to evaluate and assess the performance and effectiveness of employees at different levels. The participants were divided into three levels general hand, frontline staff, technical staff and for each level the KPIs were not the same. From the various levels the KPIs were as follows: Firstly, output quantity focuses on quantifying the number of tasks or projects completed by each employee within a specific timeframe. This indicator provided insight into the employee's efficiency and productivity in terms of task completion. Secondly, output quality assessed the caliber of work produced by individuals, considering factors such as accuracy, attention to detail, and adherence to predefined standards. This KPI ensured that the work delivered met the required level of excellence. Thirdly, timeliness measured an employee's ability to meet deadlines and deliver work on schedule. This indicator reflected their time management skills and reliability in fulfilling time-sensitive assignments. Lastly, customer satisfaction involved gathering feedback from internal or external customers to evaluate their level of satisfaction with an employee's work. This KPI provided valuable insights into customer experience and helped identify areas for improvement. By utilizing these KPIs, organizations can effectively gauge and enhance employee productivity, performance, and overall organizational success. Information on the use of information technology tools by public sector was presented in **Table 2** from the 1500 employees. It is important to note that during company hours 90% of the employees preferred using host company internet (Wi-Fi) when on social media.

5.1. Descriptive Analysis of Technological Addiction Levels

The analysis focused on measuring the levels of social media addiction using a structured questionnaire administered to a sample of employees. The study found that a considerable number of employees in the workplace exhibit signs of social media addiction. Approximately 94% of participants reported moderate to high levels of social media addiction. (**Table 3**)

Table 2. Social media application in 1500 employee mobile phones.

Social Media Platforms	Presence in Employees Personal Phone	Percentage
WhatsApp	1497	99.8
Tiktok	1398	93
Facebook	1490	99
Twitter	1050	70
Instagram	1189	79
YouTube	1500	100
LinkedIn	564	38

Table 3. Time spent on social media during work hours.

Social Media Platforms	Average Time Spent during the Day by Employees
WhatsApp	190 minutes
Tiktok	75 minutes
Facebook	50 minutes
Twitter	20 minutes
Instagram	65 minutes
YouTube	60 minutes

5.2. Frequency and Duration of Social Media Use

The analysis revealed that employees engage with social media platforms frequently during work hours. 85% of participants reported checking social media multiple times throughout the workday. A significant number of employees spent more than 80 minutes per day on social media platforms during work hours

5.3. Impact on Work Productivity

The analysis indicated that social media addiction has a negative impact on work productivity. With regard to the impact of social media addiction on work productivity of employees, three categories of themes were identified. They were 1) Not meeting deadlines; 2) Compromise with the work quality, and 3) Distraction from work. A considerable portion of participants reported that excessive social media use during work hours leads to distractions and reduced focus on work tasks. 53% of employees expressed challenges in meeting deadlines and accomplishing their work responsibilities due to social media-related distractions. From the 53% who faced challenges in: Not meeting deadlines; Compromise with the work quality, and Distraction from work, 99% of them had the high ratio of social media usage recorded from their mobile phones. Table 4 gives a summary of what the organizations intend employees to use social media for against what employees end up using it for.

By examining the time allocated to social media usage and comparing it with the time dedicated to work-related tasks, organizations can gain insights into the potential influence of social media on productivity levels. By identifying any correlations between excessive social media usage and lower productivity, or-

ganizations can better understand the impact of these distractions on employee performance. The research looked at a comparative analysis between the private sector organizations and public sector in the country. Results showed productivity output matrix was very high for the private sector as compared to public sector. Table 3 shows the Comparative analysis on social media usage in Private vs Public Sector during working hours. From the table, it clearly shows that the private sectors monitors and regulates the use of internet to the various applications used by the company as compared to public sector. Monitoring and regulating technology use allows for the implementation of strategies to minimize distractions and improve overall focus and efficiency in the workplace. By addressing social media-related productivity challenges, organizations can create a work environment that promotes better time management and enhances employee performance. (Table 5)

Table 4. Comparative analysis on social media usage (Company Expectation vs Actual Usage).

Social Media Platforms	Assumed Business Use	Actual Use
WhatsApp	Messaging, voice and video calls, as well as group chats	Personal messaging, voice and video calls, as well as group chats
Tiktok	Brand Awareness and Exposure, Influencer Partnerships and Collaborations, Product Showcasing and Demonstrations, Advertising Opportunities, E-commerce Integration	Posting personal videos and entertainment purposes
Facebook	Brand Awareness and Exposure, Targeted Advertising, Customer Engagement and Support, Content Marketing and Sharing, Event Promotion	Posting personal items and entertainment purposes
Twitter	Brand Awareness and Exposure, Thought Leadership and Industry Insight, Networking and Partnerships, Targeted Advertising, Customer Engagement and Support, Content Marketing and Sharing, Event Promotion	Posting personal videos and entertainment purposes
Instagram	Visual Storytelling and Branding, Product Promotion and Showcasing, Audience Engagement and Interaction, Hashtag Campaigns	Entertainment purposes
YouTube	Advertising and Monetization, Customer Testimonials and Case Studies, Product Demonstrations and Reviews	Entertainment purposes
LinkedIn	Professional Networking, Brand Building and Thought Leadership, Recruitment and Talent Acquisition, Content Marketing and Publishing	Professional Networking, Brand Building and Thought Leadership, Recruitment and Talent Acquisition

Table 5. Comparative analysis on social media usage in Private vs Public Sector during working hours.

	Time Restriction	
Social Media Platforms	**Public Sector**	**Private Sector**
WhatsApp	No Restriction policy	No Restriction policy
TikTok	No Restriction policy	Restricted between 8 am-1 pm. Then 2 pm-5 pm
Facebook	No Restriction policy	Restricted between 8 am-1 pm. Then 2 pm-5 pm
Twitter (X)	No Restriction policy	Restricted between 8 am-1 pm. Then 2 pm-5 pm
Instagram	No Restriction policy	Restricted between 8 am-1 pm. Then 2 pm-5 pm
Snapchat	No Restriction policy	No Restriction policy
YouTube	No Restriction policy	Restricted between 8 am-1 pm. Then 2 pm-5 pm
LinkedIn	No Restriction policy	Restricted between 8 am-1 pm. Then 2 pm-5 pm
Pinterest	No Restriction policy	Restricted between 8 am-1 pm. Then 2 pm-5 pm
WeChat	No Restriction policy	No Restriction policy

5.4. Work-Related Distractions

The analysis revealed that social media addiction contributes to work-related distractions and interruptions. Most participants reported feeling compelled to check social media notifications and messages, which disrupts their workflow. 70% of employees indicated that social media-related distractions negatively affect their ability to concentrate on work and complete tasks efficiently. The findings highlight the need for awareness and interventions to address social media addiction in the workplace, promote healthier technology use, and uphold productivity and employee well-being.

5.5. Correlation Analysis: Technological Addiction and Workplace Productivity

A correlation analysis was conducted to examine the relationship between technological addiction and workplace productivity in the context of the public sector in Zimbabwe. The analysis aimed to determine whether there is a significant correlation between the level of technological addiction and various indicators of workplace productivity. The correlation coefficients were calculated to assess the strength and direction of the relationship between technological addiction and workplace productivity. A positive correlation coefficient indicates a positive relationship, while a negative correlation coefficient indicates a negative relationship. The correlation analysis revealed a negative correlation between techno-

logical addiction and work engagement. The correlation coefficient between technological addiction and work engagement was found to be statistically significant ($p < 0.05$), indicating a moderate negative association between the two variables. Employees with higher levels of technological addiction tended to exhibit lower levels of work engagement, indicating reduced productivity and commitment to their tasks. Furthermore, the analysis explored the correlation between technological addiction and performance indicators, such as task completion rates and quality of work. The correlation coefficients between technological addiction and performance indicators were found to be statistically significant ($p < 0.05$), indicating a negative relationship. Higher levels of technological addiction were associated with lower task completion rates and reduced quality of work, suggesting a negative impact on workplace productivity. The findings underscore the importance of addressing technological addiction to enhance employee engagement, job satisfaction, and overall productivity. Further research and the development of interventions and strategies to mitigate the negative effects of technological addiction are crucial for improving workplace outcomes in the public sector.

Conducting performance reviews is a crucial practice in evaluating employee performance and providing feedback for growth and development. Regular reviews should be conducted based on the defined Key Performance Indicators (KPIs) and objectives established for each employee. During these reviews, it is important to assess various aspects of their performance, including output quantity, quality, timeliness, and customer satisfaction levels. By evaluating these factors, organizations can obtain a comprehensive understanding of an employee's contributions and areas for improvement. Constructive feedback should be provided to highlight specific areas where employees can enhance their performance and achieve better results. It is equally important to acknowledge and recognize areas where employees excel, reinforcing their strengths and motivating continued high performance. Conducting performance reviews enables organizations to foster a culture of continuous improvement, provide targeted support, and align employee performance with organizational goals.

5.6. Qualitative Analysis: Themes and Patterns from Interviews

Thematic analysis was employed to identify key themes and patterns that emerged from the interview data. Most participants expressed concerns about the negative impact of technological addiction on their ability to focus and be productive at work. Participants reported frequent distractions from social media, messaging apps, and other digital platforms, leading to decreased concentration on work tasks and reduced productivity. Some employees mentioned feeling overwhelmed by the constant need to check their devices, resulting in a loss of valuable work time. A recurring theme was the challenge of maintaining a healthy work-life balance due to technological addiction. Participants described difficulties in setting boundaries between work and personal life, often feeling

compelled to respond to work-related messages and emails outside of working hours. The constant connectivity and expectation of immediate responses contributed to increased stress and a blurred distinction between work and personal time. Employees expressed a desire for organizational support in addressing technological addiction in the workplace. Participants emphasized the importance of clear policies and guidelines regarding technology use during working hours. They also highlighted the need for training programs and awareness campaigns to promote healthy technology habits and educate employees about the potential negative consequences of excessive technology use.

5.7. Case Study Findings: Technological Addiction Impact and Productivity Loss

The case study aimed to examine the impact of technological addiction on productivity loss in a specific workplace setting. Through data collection and analysis, the following findings emerged. The case study revealed a significant prevalence of excessive technology use among employees. Participants reported spending a substantial amount of time engaging in non-work-related activities on their digital devices, such as browsing social media, playing games, or watching videos. Excessive technology use was found to be a common occurrence during work hours, leading to a distraction from work-related tasks.

6. Discussion

Technological addiction, characterized by excessive and compulsive technology use, has the potential to significantly affect productivity levels. By examining this issue, the research paper sheds light on the challenges faced by organizations and offers potential strategies for mitigating its negative impact. The findings of the research indicate a clear correlation between technological addiction and decreased workplace productivity. Excessive use of smartphones, social media platforms, and online gaming can lead to distractions, reduced focus, and decreased efficiency among employees. The constant interruptions caused by notifications and the temptation to engage in non-work-related activities on digital devices can hinder productivity and impede task completion. The paper's findings align with previous studies that have highlighted the detrimental effects of technological addiction on work performance. Furthermore, the results highlight the importance of understanding the underlying factors contributing to technological addiction. Factors such as the widespread availability of internet-connected devices, the influence of social media, and the increasing prevalence of online gaming all play a role in fostering addictive technology behaviors. Recognizing these factors is crucial for organizations to develop effective strategies to address and manage technological addiction among employees.

The results also emphasize the significance of employee well-being in relation to technological addiction and workplace productivity. Excessive technology use can lead to increased stress, decreased job satisfaction and low productivity. The

research suggests several strategies and interventions that can be implemented to mitigate the negative impact of technological addiction on workplace productivity. Employee education programs can raise awareness about the risks of technological addiction and provide tools for managing technology use effectively. Establishing clear technology usage policies can set expectations and guidelines for responsible technology use in the workplace. Additionally, providing resources and support for addiction management, such as counseling services or workshops, can assist employees in overcoming technological addiction and improving productivity.

The study also highlights the need for organizational support and a culture that promotes healthy technology habits. Managers and leaders play a crucial role in setting a positive example and fostering a work environment that encourages healthy technology use. By prioritizing open communication, providing regular feedback, and promoting work-life balance, organizations can create a supportive culture that helps employees manage their technology use and maintain productivity levels. By recognizing the correlation between technological addiction and decreased productivity, organizations can take proactive measures to address this challenge. Through the implementation of strategies such as employee education, clear technology usage policies, and organizational support, organizations can mitigate the negative impact of technological addiction and create a healthier and more productive work environment.

There are other factors that can contribute to low productivity by employees like the issue of providing annual bonuses and conducting performance appraisals in the public sector differs significantly from the private sector. In the public sector, the process of accessing performance appraisals and determining bonuses can be more complex and less straightforward compared to the private sector, where assessing the performance of a manager and their team is often facilitated by profit revenue figures at the end of the financial year.

7. Conclusion

This research has examined the impact of technological addiction on workplace productivity, shedding light on a significant concern faced by organizations in the modern era. The findings of this study provide strong evidence of a negative correlation between technological addiction and productivity in the workplace. Excessive and compulsive use of technology, such as smartphones, social media platforms, and online gaming, leads to distractions, decreased focus, and reduced efficiency among employees. However, study also highlights the potential strategies and interventions that can be implemented to address technological addiction and improve workplace productivity. Employee education programs can raise awareness and provide individuals with tools to manage technology use effectively. Clear technology usage policies can establish guidelines and expectations for responsible technology use. Furthermore, organizational support, such as counseling services and workshops, can assist employees in overcoming ad-

diction and regaining focus on their work responsibilities. It is crucial for organizations to foster a healthy work environment that promotes work-life balance and supports employees in managing their technology use. By implementing the strategies and interventions outlined in this study, organizations can create a healthier work environment, enhance productivity, and support the overall well-being of their employees. Future research in this area should continue to explore the dynamic relationship between technology use, addiction, and productivity to refine and develop effective strategies for organizations in the digital age.

Acknowledgements

The completion of this research paper would not have been possible without the invaluable contributions and support from various individuals and organizations. We would like to express my sincere gratitude to all those who have played a significant role in the successful completion of this study. We would also like to thank the members of my research committee, for their valuable insights, constructive criticisms, and thought-provoking discussions that greatly enriched this research. Their expertise and commitment to excellence have been truly inspiring. We are grateful to the participants who willingly took part in this study, their time and willingness to share their experiences was essential in gathering the necessary data. Their contribution has provided valuable insights and enriched the findings of this research.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

[1] Smith, A. and Anderson, M. (2018) Social Media Use in 2018.

[2] Harris, T. (2016) How Technology Hijacks People's Minds—From a Magician and Google's Design Ethicist.

[3] Kuss, D. and Griffiths, M. (2017) Social Networking Sites and Addiction: Ten Lessons Learned. *International Journal of Environmental Research and Public Health*, **14**, Article 311. https://doi.org/10.3390/ijerph14030311

[4] Smith, A. (2019) Mobile Technology and Home Broadband 2019.

[5] Norliah, K., Safiah, S., Mahadi, A.H., Shahrulanuar M. and Muhamad Afzamiman, A. (2018) The Instruments Used in Measuring Internet Addiction: A Review. *International Journal of Pure and Applied Mathematics*, **119**, 605-616.

[6] Choi, S.W. (2019) Internet and Smartphone Addiction. In: Samuels, D.N., Ed., *Handbook of Digital Media Management*, Springer International Publishing, 1-16.

[7] Johnson, A. and Lee, M. (2019) Designing for Engagement: The Role of Technology in Digital Addiction. *Journal of Human-Computer Interaction*, **12**, 134-141.

[8] Jones, C.M., Scholes, L., Johnson, D., Katsikitis, M. and Carras, M.C. (2014) Gaming Well: Links between Videogames and Flourishing Mental Health. *Frontiers in Psy-*

chology, **5**, Article 260. https://doi.org/10.3389/fpsyg.2014.00260

[9] Smith, J. (2020) The Impact of Technology Addiction on Mental Health. *Journal of Digital Health*, **15**, 45-52.

[10] Duke, É. and Montag, C. (2017) Smartphone Addiction and Beyond: Initial Insights on an Emerging Research Topic and Its Relationship to Internet Addiction. In: C. Montag and M. Reuter, Eds., *Internet Addiction*, Springer International Publishing, 359-372. https://doi.org/10.1007/978-3-319-46276-9_21

[11] Young, K.S. (1998) Internet Addiction: The Emergence of a New Clinical Disorder. *CyberPsychology & Behavior*, **1**, 237-244. https://doi.org/10.1089/cpb.1998.1.237

[12] Chen, L., Yan, Z., Tang, W., Yang, F. and Xie, X. (2020) Mobile Phone Addiction Levels and Negative Emotions among Chinese Young Adults: The Mediating Role of Interpersonal Problems. *Computers in Human Behavior*, **107**, Article 106273.

[13] Kwon, M., Kim, D., Cho, H. and Yang, S. (2013) The Smartphone Addiction Scale: Development and Validation of a Short Version for Adolescents. *PLOS ONE*, **8**, e83558. https://doi.org/10.1371/journal.pone.0083558

[14] Brown, S. and Smith, J. (2018) The Measurement of Productivity. In: Grifell-Tatjé, E., Knox Lovell, C.A. and Sickles, R.C., Eds., *The Oxford Handbook of Productivity Analysis*, Oxford University Press, 1-23.

[15] Johnson, R. (2020) The Impact of Technology on the Workplace.

[16] Lee, H. and Kim, J. (2017) The Challenge of Defining Internet Gaming Disorder and Its Related Constructs. *International Journal of Mental Health and Addiction*, **15**, 964-971.

[17] Bakker, A.B. and Demerouti, E. (2017) Job Demands-Resources Theory: Taking Stock and Looking Forward. *Journal of Occupational Health Psychology*, **22**, 273-285. https://doi.org/10.1037/ocp0000056

[18] Patel, R. (2018) The Blurring Boundaries: Work-Life Balance in the Age of Digital Connectivity. *International Journal of Organizational Psychology*, **7**, 112-120

[19] Green, T. (2022) Strategies for Managing Technology Addiction. *Journal of Digital Well-Being*, **23**, 78-85.

[20] Thompson, K. and Carter, S. (2021) Symptoms and Effects of Technology Addiction on Daily Life. *Journal of Behavioral Studies*, **19**, 56-62.

[21] Smith, J.K. and Johnson, R.H. (2018) The Impact of Technology on Communication and Collaboration in Organizations. *International Journal of Business Communication*, **46**, 312-330.

[22] Jones, A.B., Smith, C.D. and Johnson, E.F. (2019) Leveraging Technology for Effective Communication and Collaboration in Organizations. *Journal of Organizational Technology*, **15**, 45-63.

[23] Harris, C. (2018) Work Design and Productivity: A Literature Review. International Labour Organization.

[24] Bolton, S. and Houlihan, M. (2019) Work Matters: Critical Perspectives on Contemporary Work. Palgrave Macmillan.

[25] Smith, L. (2020) Organizational Culture and Employee Satisfaction: A Review. *Journal of Organizational Management*, **5**, 26-39.

[26] Robbins, S.P., Coulter, M. and DeCenzo, D.A. (2018) Fundamentals of Management: Essential Concepts and Applications, Student Value Edition. Pearson.

[27] Chen, Y., Li, J. and Xie, Y. (2018) The Impact of Information Technology on Productivity: Evidence from the Manufacturing Sector. *Journal of Management In-*

formation Systems, **35**, 502-527.

[28] Smith, J. (2017) Technological Addiction in the Public Sector: Effects on Job Satisfaction and Work-Related Stress. *Public Administration Review*, **77**, 226-236.

[29] Johnson, R.D., Smith, A.D. and Smith, M.L. (2019) Technology Addiction in the Public Sector: Examining Its Effects on Work Engagement. *Public Personnel Management*, **48**, 429-451.

[30] Brown, A. and Jones, B. (2018) The Consequences of Technology Addiction on the Public Sector: Implications for Decision-Making. *Journal of Public Administration Research and Theory*, **28**, 556-573.