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**Covid-19 Outcomes: Exploring the footprints of the pandemic on the office market in Johannesburg, South Africa**

Journal:	<i>Journal of Corporate Real Estate</i>
Manuscript ID	JCRE-08-2023-0035.R2
Manuscript Type:	Research Paper
Keywords:	Covid-19 Pandemic, Africa, Office Markets, Space Use, Workplace management, Remote working

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3 **Covid-19 Outcomes: Exploring the footprints of the pandemic on the office sector in**  
4 **Johannesburg, South Africa**  
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8 **Abstract**  
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10 **Purpose:** This paper aims to explore the impact of COVID-19 on office space in Johannesburg.  
11 This study further explores the role of changing work practices in the office sector in South  
12 Africa due to the pandemic and its impact on future office space use planning and management.

13 **Design/Methodology/Approach:** To understand the footprints that the COVID-19 pandemic  
14 has left on the office space market in Johannesburg, this study employs semi-structured  
15 interviews, which were administered to corporate office users, and a thematic analysis was  
16 adopted to understand the view, perspectives, and expectations of office users.  
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19 **Findings:** The study showed that space users perceive COVID-19-induced remote working as  
20 having benefits, opportunities, and challenges. A notable shift in office space utilization has  
21 emerged, with employees increasingly opting for roles that permit remote work. This newfound  
22 flexibility, accommodating both on-site and remote work, often makes working from home  
23 more appealing than traditional office environments that may no longer align with users'  
24 preferences for office spaces.  
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27 **Practical Implications:** The pandemic's impact has brought about irreversible changes,  
28 compelling policymakers and business leaders to strategize and prepare. This proactive stance  
29 aims to prevent avoidable challenges for employees and companies during future pandemics.  
30 A thoughtful approach to the post-pandemic world can usher positive changes in the office and  
31 property sector. This includes the coexistence of both remote work and on-site working models.  
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34 **Originality:** This paper provides valuable insight into some of the outcomes of the COVID-19  
35 pandemic in South Africa that are essential for future office space use planning and  
36 management. The insights from this study extend the literature and provide novel knowledge  
37 based on an office sector in the “global south.”  
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40 **Research Limitations/Implications:** The study is limited to Johannesburg, South Africa, and  
41 may not apply to other African markets. Ten in-depth interviews were conducted, and analysis  
42 and results were deduced; this may be considered a limitation of this study.  
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## 1. Introduction

Office space use has changed significantly over the last two decades following changes to work culture. These changes have been driven by economic, socio-cultural, and technological forces, leading to the emergence of innovative office space use models such as hybrid working and shared spaces (Miller, 2013; Sullivan, 2003; Harris, 2015). These innovative office space use models have become more prominent, particularly in service occupations such as IT and marketing (Saiz, 2020). Remote working has mainly gained prominence in the last decade. As of 2019, 5% of the UK workforce worked from home (Office for National Statistics, 2020), and 5.2% of the US workforce ultimately worked from home, while 43% worked from home occasionally (Hess, 2019).

Although working from home (WFH) was already well entrenched in many countries' work culture by the last decade's end, the COVID-19 pandemic significantly altered working patterns and, by extension, the office real estate sub-sector globally. The pandemic created a global world health emergency, which led to a shutdown of national economies and severe restrictions on the movement of people. In response, firms and organizations allowed their workforce to work from home. In the UK, 46% of the workforce worked from home within the first month of the official pandemic declaration of 11 March 2020, and 86% of those who worked from home attributed it to the COVID-19 pandemic. Evidence further suggests that approximately 60% of the workforce in Finland and 50% in Luxembourg, the Netherlands, Belgium, and Denmark worked from home by April 2020 (Eurobond, 2020; Reuschke and Felstead, 2020).

In South Africa, there has been a heightened interest and adoption of remote working following the pandemic because of the benefits recorded during the pandemic. Data from World Wide Worx (2020) reveals that companies, mainly those already rolled out digital transformation strategies before the COVID-19 outbreak, saw a 70% increase in productivity. Furthermore, 73% of South Africans in a survey carried out in 2020 expressed willingness to work remotely for an employer with no physical presence in the country (Statista, 2023). Although these positive sentiments appeared widespread during the pandemic, more recent signals appear to be mixed. Some scholars (such as Green Journal, 2022 and Sigahi et al., 2021) have argued that recent working patterns attract benefits such as improved personnel planning, reduced commute-related carbon emissions, and flexible leases, while others (such as Clark, 2021; Szumilo & Wiegmann, 2021) argue that these practices have adversely affected employees' well-being and productivity. A similar divergence in the sentiments associated with remote

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3 working (relative to office-based working) is observed in South Africa (Daniel, 2022). These  
4 mixed signals and complexities significantly affect the office real estate market.  
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7 This study explores the role of changing working practices in the office sector in South Africa.  
8 More specifically, it investigates the role of COVID-19 in shaping the expectations and  
9 sentiments in the user segment of Johannesburg's real estate office sector. To gain an in-depth  
10 understanding of the views, perspectives, sentiments, and expectations in the user segment of  
11 the market, a qualitative research method was employed using a grounded theory research  
12 strategy. Semi-structured interviews were administered to corporate office space users, and  
13 thematic analysis was adopted. The study showed that space users perceive COVID-19-  
14 induced remote working as having benefits, opportunities, and challenges. Furthermore,  
15 companies in Johannesburg aim to reduce their office occupancy levels by negotiating more  
16 flexible leases. This suggests that the office sector in South Africa may be on a similar pedestal  
17 to other developed economies' markets, although some variations were observed.  
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26 Johannesburg is the provincial capital and largest city of Gauteng, South Africa, and an  
27 internationally renowned and vibrant metropolis. It is the most populous city in South Africa  
28 and is recognized as the financial capital of South Africa. According to Joburg (2018), the city  
29 generates 16% of South Africa's GDP, employs 12% of the national workforce, and is home  
30 to 74% of corporate headquarters. The city also features the largest and most established office  
31 market in South Africa and is considered Africa's economic gateway (JLL, 2023). The city is,  
32 therefore, best suited for the contextualization of this study, as it will provide sufficient insight  
33 that can be used to understand the South African office market and, more specifically, the  
34 footprint of the pandemic on the office market in South Africa.  
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43 The changes to work practices, particularly after the pandemic outbreak, have left several  
44 footprints in the office market. These changes include reduced space requirements, shorter  
45 leases, and increasing demand for higher space quality (Oladiran et al., 2023). In Johannesburg,  
46 office space demand decreased, and vacancy rates have increased with oversupply in the  
47 market (JLL, 2020). Similar trends can be observed in other economies (Fiorentino et al., 2022).  
48 Thus, corporate organizations and businesses are increasingly engaging in conversations  
49 regarding their operational and adaptation strategies to match the current pace of the office  
50 market evolution (Kalyan et al., 2020). Data from Knight Frank's (Y)OUR SPACE survey  
51 (2021) shows that 75% of corporate real estate space use managers are planning strategic  
52 changes to their office space uses. However, developing these strategies is complicated due to  
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3 the insufficient insight into the current changes taking place and, perhaps, more importantly,  
4 the lack of clarity on what the immediate future holds for the office market. This can exacerbate  
5 the risk associated with real estate investment and provide insights into the potential changes  
6 that can mitigate some risks.  
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10 Although there are several scholarly contributions to the conversation on the COVID-19  
11 imprint, the contribution to the office real estate market is relatively thin, and a significant  
12 number of these contributions provide descriptive analysis with limited empirical analysis.  
13 Although some scholarly contributions have been made more recently based on empirical  
14 evidence, there are still limitations. For instance, the paper by Oladiran et al. (2023) utilizes  
15 the empirical analysis to explain the fundamental changes in the office market following the  
16 pandemic outbreak. However, this paper does not provide continental or country-level insight.  
17 Furthermore, their adoption of quantitative techniques using secondary data limits the depth of  
18 insight that qualitative methods, such as interviews, could offer. There is also minimal  
19 scholarly contribution from an African perspective. Although studies (Ayodele et al., 2022)  
20 provide some insight into an African context (Ibadan, Nigeria), the paper focuses on co-  
21 working spaces. Similarly, Mayerhoffer's (2021) and Yang et al. (2023) studies are limited to  
22 co-working. This leaves a knowledge gap regarding the broad-ranging impact of the COVID-  
23 19 pandemic on the office market in Africa and, more specifically, South Africa.  
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35 This paper provides valuable insight into some of the outcomes of the COVID-19 pandemic in  
36 South Africa that are essential for future office space use planning and management. It also  
37 provides novel contributions to the conversations around the COVID-19 aftermath. The  
38 insights from this study extend the literature and provide novel knowledge beyond based on an  
39 office market in the “global south.” Previous studies that examined some of these effects using  
40 empirical evidence have not provided sufficient insights into the user segments of the African  
41 markets, making it challenging to identify the major trends and trajectories. The findings also  
42 indicate that regardless of the pandemic, economic factors remained core considerations in  
43 firms’ space use adaptation strategy during the pandemic and lease structural changes though  
44 noticeable, may be less prominent in the South African context; these contrast to dynamics  
45 observed in Oladiran et al. (2023). Additionally, the findings indicate that remote working in  
46 the South African context primarily relates to working from home; third spaces (Saiz, 2020) is  
47 therefore less prominent in the South African context.  
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3 The paper continues with a review of relevant literature, and the third section provides an  
4 overview of the data and methodology. Section four presents the findings and discussion, and  
5 section five provides the conclusion.  
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## 10 **2. Literature Review**

11 The demand for office space is theoretically determined by a range of factors, which are macro-  
12 level, such as population growth, employment rates, and economic composition, and micro-  
13 level, such as technological advancements, globalization, and the evolving landscape of  
14 businesses (Rabianski & Gibler, 2007; Harris, 2015). Businesses' diverse requirements and  
15 evolving operational practices have led to dynamic shifts in workspace needs. Occupiers'  
16 activities, such as tenants' expansion, relocation, and spatial upgrading, have also influenced  
17 the demand for office spaces. These factors are now changing and transforming office space  
18 configurations and leading to the development of novel office space use models such as  
19 hotdesking, flexible working and shared spaces (Haynes et al., 2009; Miller, 2014; Rabianski  
20 & Gibler, 2007), and these are changing the conceptual approach to office market research.  
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29 The theory that underpins office space demand is premised on the assumption that demand  
30 evolves over a long period. While this is the case, there are often exceptional circumstances  
31 when demand fails to align with this theoretical construct as they fail to account for  
32 institutional, economic, and political shocks that can cause sudden changes. The black swan  
33 theory suggests that, sometimes, rare, unpredictable events may occur, which can leave  
34 footprints and significantly change sector systems and traditions (Runde, 2009). This was the  
35 case with the outbreak of the COVID-19 pandemic in the first few months of 2020.  
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42 On 30 January 2020, the WHO<sup>1</sup> Emergency Committee declared a global health emergency  
43 following the outbreak of the COVID-19 pandemic across the globe. This was followed by the  
44 declaration of a global pandemic on 11 March 2020, and this led to the shutdown of several  
45 businesses, organizations, and companies that asked their staff to work from home. The  
46 COVID-19 pandemic has been classified as a black swan event (see Antipova, 2021),  
47 disrupting economies, industries, and societal norms globally, including the office market. The  
48 mandated shutdowns, physical distancing measures, and the surge in remote work have led to  
49 rapid unemployment, fiscal deficits, and a contraction in national GDP (Chen et al., 2020). The  
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<sup>1</sup> World Health Organisation

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3 unprecedented nature of the pandemic and its sustained economic repercussions underscore the  
4 concept of a Black Swan event.  
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7 Although work culture and workspace use were already in transition before the outbreak of the  
8 pandemic, particularly in service occupations such as design, marketing, and customer service  
9 (Saiz, 2020), the black swan nature of the pandemic led to significant disruption of the office  
10 market. The “lockdown,” social distancing, and remote working culminated in the  
11 underutilization of office spaces and other dynamics, reducing demand for traditional office  
12 environments (Nicola et al., 2020; JLL, 2020). Remote working has gained more traction,  
13 transcending occupational barriers and resonating with employers and employees as a viable  
14 working model (Bartik et al., 2020). However, this rapid shift to remote work has brought  
15 advantages and challenges to light, including altered perspectives on productivity assessment,  
16 well-being, and work-life equilibrium (Bloom et al., 2016; Felstead & Henseke, 2017).  
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20 Miller (2014) argues that the overall density of space that a firm requires will decrease (or  
21 increase) as the number of employees in the firm decreases (or increases). This assumes that  
22 firms typically aim to maximize their available office spaces before they demand more. With  
23 digital technology advancements and increased shared spaces, hot desking, and remote working  
24 (Miller, 2013), these new models should lead to decreased space quantity demanded as an  
25 adaptation strategy when economic and business shocks occur. Co-working has increased  
26 significantly and become more prominent after the pandemic (Mayerhoffer, 2021; Yang et al.,  
27 2023). The increased adoption of remote work has implications for the traditional notion of  
28 office space, compelling organizations to revisit their spatial requirements. This study,  
29 therefore, makes an essential contribution to the overall office space use demand in the context  
30 of black swan events.  
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34 It should be noted that the pandemic attracted benefits, challenges, and opportunities. Ipsen et  
35 al (2021) and Tagliaro and Migliore (2021) note employees’ perception of the pandemic  
36 induced WFH<sup>2</sup> experience was more positive than negative. According to CBI (2020),  
37 employees now benefit from increased flexibility in their work patterns, time-saving from  
38 commutes, improved productivity, and a more structured approach to communication. Some  
39 associated challenges include mental health, isolation, and difficulty building relations,  
40 particularly for less experienced staff members. Some of these points have been supported by  
41 other scholars (such as Bloom et al. 2016 and Felstead and Henseke 2017). A firm’s perception  
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60 <sup>2</sup> Working from Home

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3 of the benefits, challenges, and opportunities offered by remote working plays an essential role  
4 in its strategy on how space is used. Oladiran et al. (2023) find that firms that have a positive  
5 sentiment towards working from home are likely to downgrade their office spaces, and the  
6 same applies to firms that share negative sentiments, i.e., they are likely to demand more space  
7 or keep their current office spaces the same. This suggests that examining the sentiments of an  
8 organization or space user(s) towards the pandemic is vital for establishing how the pandemic  
9 has affected their office space demand. The current study takes this essential factor into  
10 account.  
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Businesses revealed that they experienced productivity reduction, erosion of work culture and  
a heightened workplace health and safety concern (Marzban et al 2021). Maillot et al 2022  
further notes that changes to working times led to feelings of intensification and or increase in  
working hours, and the lack of face-to-face social relations deprived employees of both their  
usual ways of working and the value they drew therefrom. Pataki-Bitto and Kapusy (2021)  
specifically highlight that Gen Z demographics have high expectations of the workplace with  
a preference for flexible work arrangements; they therefore suggest that for organisations to  
survive post-pandemic, they would need to adopt hybrid working models.

Although the body of knowledge around the COVID-19 pandemic and its footprint in the office  
sector is increasing, there is a limited contribution from an African context. Scholarly  
contribution, particularly in the African context, is still relatively sparse, with the vast majority  
being descriptive with limited empirical analysis. More importantly, though essential to the  
African context, contributions from Ayodele et al. (2022) have a limited scope of application,  
i.e., co-working. This leaves a knowledge gap concerning the broader implications of the  
COVID-19 pandemic on African office markets. The office markets in Africa are highly  
heterogenous and are at various stages of development and transparency; this study, therefore,  
is not an attempt to explore the footprints of the pandemic on African markets in general;  
instead, it aims to provide valuable insights that can enrich the quality of the debates on this  
subject from an African context and minimize existing ambiguity and generalizations that  
currently exist.

Therefore, the empirical analysis in this study is designed to provide insight into the outcomes  
of the pandemic in Johannesburg, particularly in the office market. These insights capture space  
users' perceptions and sentiments about the Johannesburg office market, and they can indicate  
the trajectory of office space demand and the future of the office market in South Africa. These

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3 insights would be valuable to office market investors and portfolio managers, and they will  
4 also be helpful for office space use planning and management.  
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### 9 **3. Data and Methods**

10 In order to explore and unravel a broad range of the footprints left by the COVID-19 pandemic  
11 on the office sector in Johannesburg, the empirical work in this study was carried out using  
12 qualitative techniques. As Thanh and Thanh (2015) suggest, this approach is appropriate for  
13 determining participants' perceptions, understanding, and experiences, and this can provide  
14 more in-depth insight beyond the scope of statistical analysis. This underpinned the approach  
15 to the study by Adisa et al. (2021). Moreover, the study's exploratory nature and the grounded  
16 theory research strategy required an inductive method. This approach relies on inferences from  
17 previously unknown relationships (Glaser and Strauss (1967), enabling the researchers and  
18 respondents to co-construct knowledge rather than objectivity, proving a pre-set hypothesis  
19 (Charmaz, 2006). It also depends on participants' insightful and in-depth comments about their  
20 knowledge and experiences (Jackson et al., 2007). Additionally, the relatively recent COVID-  
21 19 pandemic and the high uncertainty associated with the remote working model support the  
22 qualitative methodology. By discovering how participants make meaning of their experiences,  
23 past, perspectives, and situations, qualitative research strives to give an in-depth insight into  
24 their social reality (Ormston et al., 2014)  
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36 To gain an in-depth understanding of the views, perspectives, sentiments, and expectations in  
37 the user segment of the market, semi-structured interviews were administered to corporate  
38 office space users, and thematic analysis was adopted. Gaining insights from stakeholders  
39 when an event or the phenomenon being investigated occurs is essential for comprehending  
40 the event's root cause and potential trajectory (Myers, 2019). Purposive sample techniques were  
41 adopted. This sampling approach seeks to guarantee that participants are chosen deliberately,  
42 allowing the researcher to obtain a sample of individuals who can provide pertinent information  
43 (Bryman & Bell, 2011). Furthermore, it enables the researcher to choose people who can  
44 contribute to the study (Quinlan, 2011). Creswell (2013) and Saunders et al. (2016) advise that  
45 a sample size of five to thirty is suitable for research for a semi-structured or in-depth interview.  
46 Additionally, Saunders et al. (2016) also suggest that a sample size of four to twelve is suitable  
47 for research on a homogeneous population. Kuzel (1992) further argues that a sample size of  
48 six to eight people can produce sufficient data for qualitative research. These perspectives  
49 framed the data collection approach and design used in this study.  
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3 According to Mays and Pope (1995), rich qualitative data can be obtained through a purposive  
4 sampling approach. This technique enables the researchers to identify individuals that can  
5 provide the appropriate level of information required for the study. Purposive sampling  
6 techniques were therefore adopted in the data collection. The interview subjects were ten  
7 corporate portfolio executives and property managers from firms based in Johannesburg who  
8 were knowledgeable about the impact of the pandemic on the office sector. They included four  
9 corporate portfolio executives, four asset managers and two property managers with more than  
10 ten years of work experience in the property sector in the respective selected companies in  
11 South Africa.

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13 The property specialists were selected due to their extensive expertise in the property sector,  
14 and they were responsible for the use, management, and allocation of the organization's real  
15 estate assets. The respondents' ages displayed variation, with the youngest falling between 25  
16 and 40 years old and the oldest surpassing 55. Most respondents were within the age bracket  
17 of 41 to 54 years. Regarding company sizes, the respondents represented entities with over 100  
18 employees, and their operational history spanned from 0 to 25 years within South Africa. These  
19 respondents were entrusted with real estate decisions from middle to upper-tier management  
20 levels.

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22 The questions were set up to be semi-structured to ensure uniformity of questioning was  
23 maintained while also ensuring that the respondents could provide further insights beyond the  
24 pre-determined direction set by the interviewer. Furthermore, it also gave the interviewer  
25 leeway to explore some areas of the conversation deeper based on the nature of the response or  
26 other non-verbal cues. For health and safety reasons, the interviews were conducted virtually.  
27 Moreover, remote interviews are increasingly becoming normalized and are generally  
28 perceived as more or less effective than face-to-face interviews.

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30 All the interviews were held in English and recorded using online virtual platforms such as  
31 Microsoft Teams, of which consent was given. All respondents provided consent for the  
32 interviews to be conducted at the outset of each session. The interview had three sections. The  
33 first section aimed to capture the demographic and social characteristics of the respondents.  
34 The interviewer then asked in the second section about the benefits, opportunities, and  
35 challenges associated with COVID-19-induced remote working, organizations' perceptions  
36 about the work-from-home practice, and organizations' adaptation strategies. The questions in  
37 section C aimed to examine the footprint of the pandemic on the demand for office spaces and  
38 to explore prospects.

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3 This study adopted thematic analysis with the aid of MAXQDA software. A similar technique  
4 was adopted by Eriksson and Santesson (2021) in their study on organizational culture and the  
5 effects of remote work. Thematic analysis involves the researcher coding data to find themes  
6 for intensive analysis (Saunders et al., 2016). Large volumes of qualitative data can be analyzed  
7 using thematic analysis, but it can also be applied to lesser volumes of data to produce detailed  
8 explanations or interpretations (Saunders et al., 2019). Thematic analysis can interpret vast  
9 amounts of qualitative data, merge data from comparable notes and transcripts, and extract  
10 crucial patterns and themes from the information for future research (Saunders et al., 2019).  
11 This analytical technique is agile since it is not constrained by a particular research viewpoint  
12 (Saunders et al., 2016). In qualitative research, the process of selecting, coding, and  
13 categorizing data is known as data reduction. Data display is then followed by data analysis,  
14 which aids the researcher in reaching a study conclusion (Sekaran and Bougie, 2016). With  
15 this approach, data analysis is a repetitive process rather than a linear one.

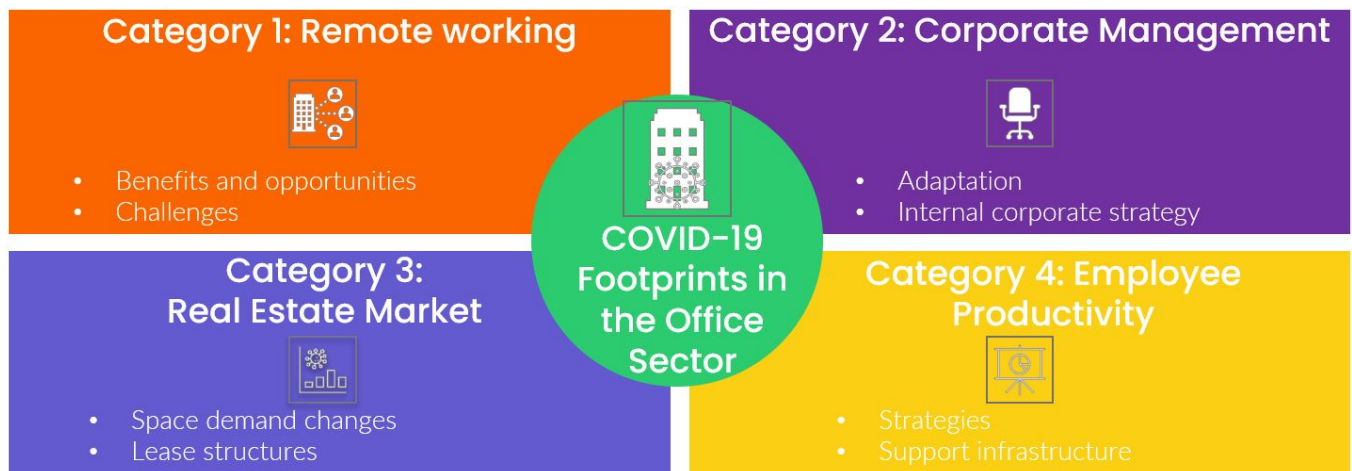
16 Although the techniques adopted in this study suit the subject matter, there are a few limitations  
17 and challenges worth highlighting. One of these is transferability, which is the degree to which  
18 the findings from the study can be applied to various contexts or circumstances (Yilmaz, 2013).  
19 One of the ways this has been mitigated is the explanation of the research design, sampling,  
20 and data analysis provided in the early parts of this sub-section. Furthermore, clearly defining  
21 the research questions, findings, interpretation, and context throughout the paper allows the  
22 reader to understand the scope of the study and judge its transferability. It should, however, be  
23 noted that although the respondents primarily respondent based on their firms' positions, the  
24 interview questions contained some general questions that transcended individual or company-  
25 based methods to general market sentiments. Another potential challenge relates to the use of  
26 virtual interviews. Lack of face-to-face interviews may sometimes lead to a loss of some non-  
27 verbal cues, although this study is not considered too sensitive, and as such, an interview such  
28 as this is unlikely to miss out on non-verbal cues. Irvine (2011) however argues that virtual  
29 interviews are more effective at gathering sufficient data than face-to-face interviews. These  
30 limitations, notwithstanding, this study is exploratory and aims to provide insight into a context  
31 that has received minimal scholarly attention. Generally, it contributes to the discourse on the  
32 role of the pandemic in redefining several economic and social realms, specifically, the office  
33 real estate sector in the global south and South Africa.  
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#### 4. Findings and Discussions

The research findings of the conducted interviews provide better answers to the research questions *"What are the opportunities posed by people working remotely?"*, *"What is the impact of the COVID-19 Pandemic on the demand for office space?"*, *"What is management's perception of people working remotely?"* and *"Considering the COVID-19 pandemic, what are recommended strategies to maximize staff productivity?"*. The data collected has been divided into three main sections. To interpret the data, the research employed the well-established pattern-matching methodology (Crang, 1997) to cluster and analyze the data. The initial step involved selecting the most informative sections of the interview transcriptions that addressed our research questions or their components. The subsequent step entailed creating a structural description of each interview's content, incorporating insights into management perceptions. In the third step, we identified text passages sharing common arguments through thematic coding (e.g., theme: "increase in action controls"). This process allowed us to compare interviewees' responses, revealing similarities and differences. Arguments were then organized around similar themes. Drawing from our identification of common patterns, we focused on constructing a theorized narrative based on the research questions. The most significant findings are presented within these categories, providing a comprehensive overview of the interview results.

##### 4.1 Analysis Categories and Themes

In line with the research questions, the thematic analysis addressed four core factors that defined the covid-19 footprints in the South African office sector. Within these categories, eight themes emerged as shown in Figure 1. The core factors are remote working (benefits, opportunities and challenges), corporate management (companies' adaptation and internal corporate strategies), the real estate market (changes to space demand and lease structures) and employee productivity (strategies involved and supporting infrastructure). These factor and themes capture core issues and provide a conceptual framing for insight into the covid-19 pandemic footprint in the South African context.

**Figure 1: Emergent Themes from the Analysis****Category 1: Remote working**

The study by (Bloom et al., 2014) detailed the benefits of remote working policies. As reflected in the literature review, South Africa was not spared in experiencing the benefits, opportunities, and challenges initiated by all property sectors to set up home offices and increase the demand for hybrid and remote working. The respondents were unanimous in highlighting that remote working was the direct result of the COVID-19 pandemic. One of the respondents stated, "...we generally didn't apply remote working before COVID-19; actually COVID-19 is the brainchild of remote working".

All the respondents alluded to fact that remote working offered benefits/opportunities and challenges.

**a. Benefits and Opportunities presented by remote working**

The respondents admitted that before the COVID-19 pandemic, few companies practiced remote working policies in South Africa. The pandemic allowed for most employees to work remotely. This was noted to have been attributed to the impact of the COVID-19 pandemic in South Africa. As a result of the COVID-19 pandemic, the idea of working from home gained additional attention and meaning since the proportion of people who work from home increased to unprecedented levels. Carroll and Conboy (2020) highlighted how COVID-19 pushed companies to adopt online working-from-home practices in a 'big bang' manner. To recognize the dynamics of implementing, embedding, and integrating new technologies and practices into businesses, they examine the normalization process theory (NPT) and its underlying components.

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3 WFH provided a better work-life balance for most respondents, increasing their productivity  
4 as they had fewer distractions. One of the respondents stated that *“you could just spend time*  
5 *with family and things like that, and you do have to sit in traffic for three hours a day”*. The  
6 firms detailed reduced staff welfare costs, resulting in operational effectiveness and efficiency,  
7 increased staff engagement, and a significant decline in absenteeism. The opportunity for work-  
8 life balance was acknowledged by the participants for employees WFH. The respondents  
9 alluded to how most tenants leasing the office building adopted a remote working policy, which  
10 increased the reduction in the office space occupied due to staff not being in the office daily,  
11 which created opportunities for better-utilized spaces to accommodate all employees. Many  
12 corporates across the globe have quickly welcomed a ubiquitous part of working from home  
13 by adapting to the pressing demands (JLL, 2020).  
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#### 25 b. Remote working challenges

26 The challenge expressed by most participants during the interview was the resistance of staff  
27 getting back to the office and how companies overcame the challenge as an opportunity to  
28 create spaces that would make staff more effective by creating flexibility for the staff and  
29 changes to the working hours (meaning less hours spent in traffic) as contributed to the research  
30 by Oladiran et al. (2023). However, employers also noted that some deadlines were unmet due  
31 to delayed feedback, technological challenges (internet service issues), miscommunication, and  
32 power outages (load shedding). The quality of output from employees is also reduced due to  
33 reduced supervision. One of the core challenges of remote working is team cohesion and poor  
34 collaboration. One respondent stated, *“As a team leader, sometimes just sitting around in the*  
35 *same space, this information sharing this collaboration, they're just happen naturally without*  
36 *even thinking”*. This sentiment was shared by several other respondents. Another respondent  
37 pointed out the health and well-being challenges posed by remote working. The respondent  
38 stated, *“COVID was obviously detrimental to most, but that, that work life balance or that*  
39 *working from home situation and especially if things aren't going as well as they should be at*  
40 *home as it's quite challenging”*. Indeed, physical and mental health challenges can be  
41 exacerbated by prolonged remote working, particularly when some of the factors driving these  
42 challenges are driven by experiences at home.  
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55 It is important to also note that all the respondents defined remote working as WFH. Valuable  
56 can be drawn from this pattern, specifically that the remote working from the South African  
57 context may in a way be limited to working from home. This contrasts with other remote  
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3 working options, such as third spaces for instance which was highlighted in Saiz (2020). Third  
4 spaces refer to spaces that are not within the conventional office spaces and not in residential  
5 spaces. This includes working from restaurants, parks, pubs etc. This study did not probe  
6 further into the prospects of third, although it can be assumed that this transformation took  
7 place during the pandemic when social distancing was in force, and this would have made the  
8 exploration of third spaces difficult. Further research into this will be valuable.  
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## 15 **Category 2: Corporate Management**

17 There was a concise effort to probe the corporate positions, perceptions, and approaches to the  
18 adaptation of companies to remote working.  
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### 22 a. Adaptation

24 The participants discussed how organizations had seen mixed perceptions and no changes in  
25 the practices about working from home before the COVID-19 crisis. They acknowledge how  
26 achieving collaboration had its challenges due to difficulties in sharing information, reaching  
27 out to people, making decisions, and obtaining feedback, as observed by the participants.  
28 Hafermalz (2020) mentioned how remote working is not new; however, many companies were  
29 pressured to permit their employees to work from home, as in 2020, while the COVID-19 crisis  
30 surfaced globally. This had extensive implications for organizations, including how they might  
31 exercise management control, i.e., “have an impact on employees’ behaviours in appropriate  
32 ways” to obtain their goals (Merchant and van der Stede, 2007).  
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40 Furthermore, the respondents suggested that the adaptation to remote working was more  
41 “forceful” than voluntary. This indicates that corporate organisations supported remote  
42 working because they had no option; thus, the adaptation strategy lacked adequate planning  
43 and execution. Additionally, the tone in the responses differ to those in other economies where  
44 employers seemed to drive and support the working from home due to the perceived “greater  
45 good”. One of the factors that may be responsible for this deviance is that the South African  
46 government had a less robust adaptation strategy to support companies and employers such as  
47 the furlough in the UK; thus, employers would have been forced to think about the viability of  
48 their businesses if they remained shut for too long.  
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3 b. Internal corporate strategy  
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5 The perception of management with employees working from home was mixed pre-COVID-  
6 19 pandemic, as the perceptions and practices were poor and with no change. During the  
7 pandemic in South Africa, only essential staff worked from the office, including security,  
8 cleaning, and gardening staff. Most of the office building had to be closed, giving access to  
9 only essential staff. The respondents adopted rotations of remote working for the employees,  
10 scheduled office working days for employees, and anticipated how many employees would be  
11 in the office at any given moment. In an entirely voluntary system, all employees can work at  
12 the office simultaneously, which can result in an office space shortage. There may be a conflict  
13 between employer and employee because of this situation. Ancilla et al. (2021) stated that  
14 companies must reconsider their values and corporate culture to align with emerging work  
15 theories. It is generally easier to achieve effective collaboration when everyone is physically  
16 present in the same space or location (Franken et al., 2021). Creating healthy work relationships  
17 between co-workers and interacting with colleagues is integral to an organization's culture and  
18 social existence (Markland, 1998). As previously highlighted, the advantages of remote work  
19 could primarily apply to individuals inclined towards or capable of participating in remote  
20 work, Kaduk et al. (2019).  
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34 Despite this, a significant number of participants preferred working from home. However,  
35 space management has become a priority for most organizations, mainly due to increasing  
36 operational costs of use, the need for more collaborative spaces and open plans, and the need  
37 for adjustment. Frequency to accommodate the organization's rapid growth or expansion  
38 (Miller, 2014; Appel-Meulenbroek et al., 2011; Saurin and Ratcliff, 2010). The respondents  
39 found that remote work offered better flexibility, enabled a greater focus on their tasks,  
40 increased productivity, and resulted in higher job satisfaction. Furthermore, the overall attitude  
41 amongst employers and employees towards increasing remote working was positive. However,  
42 it is essential to note that the practicality of remote work varies among businesses, as some  
43 respondents still prefer in-person work compared to WFH.  
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51 The respondents agreed that the management's perception towards employees expressed  
52 improved productivity, reduced staff expenses, improved the engagement levels between the  
53 employees and managers, and improved the company's retention of employees by offering  
54 employees WFH options. Achieving remote working in companies depends on how it is  
55 managed (Peters and Van der Lippe, 2007). The participants acknowledged that management  
56 has continued to practice remote working conditions for company employees.  
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3 One common theme that runs through these categories of themes is that corporate strategies  
4 focused primarily on economic angles with less emphasis on social angles. This contrasts with  
5 the findings of the Knight Frank's (Y)OUR SPACE (2020) survey which revealed that global  
6 real estate space users were beginning to think beyond economic to environmental and social  
7 aspects of office space use. As stated, prior, these differences in priorities may be the result of  
8 the economic packages that various governments provided to organisations during the  
9 pandemic which may not have been provided at the same level for South African companies.  
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### 19 **Category 3: Real Estate Market**

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21 Many businesses reconsidered their operating model, opting to shift towards providing all firm  
22 operations online using remote work. As previous work suggests, determining changes in the  
23 workplace should be considered in organizations applying objectives to consider collaboration,  
24 productivity, culture, and business in leased space, as adopted by Ancillo et al. (2020). These  
25 changes led to structural changes in the real estate market, particularly the office market. Two  
26 core office market changes include changes to space demand and changes to lease structures.  
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#### 33 a. Space demand changes

34 Several tenants have been observed evaluating the reconfiguration of their space and space  
35 requirements prior to lease renewals. Landlords of buildings offering amenities such as coffee  
36 shops needed to reimburse tenants for rental remissions during the pandemic. This  
37 reimbursement was necessary because tenants could not operate due to lockdowns, resulting in  
38 negligible foot traffic within office buildings. Consequently, rentals were waived and recorded  
39 as bad debt write-offs to accommodate the tenants. This measure was taken to prevent tenants  
40 from being unjustly burdened by rental obligations for amenities they could not access.  
41 Additionally, it facilitated positive landlord-tenant relationships and ensured consistent future  
42 income.  
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50 Currently, the findings suggest office space changes include more remote working policies in  
51 demand and space use decisions. Miller (2013) mentions that respondents and previous  
52 literature agree that the occupancy rate fluctuates and is sometimes relatively low. It would be  
53 naïve to assume this would not be true when remote working is fully implemented. Although  
54 no evidence suggests demand for office space is decreasing today (Rode, 2023), referring to  
55 the office market remaining the worst due to oversupply, the 2023 quarter two report notes the  
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3 improvement in the vacancy rates while the market nominal rental growth remains positive.  
4 The evidence suggests that the demand will eventually stabilize as an effect of remote working.  
5 The participants did not put much emphasis on there being a high possibility that demand for  
6 office space will somewhat weaken. One participant mentioned how some tenants expressed  
7 the limited requirement to return to the office. The fact that landlords and tenants together form  
8 the demand for office space implies that stability in demand for office space is highly probable.  
9 However, it is essential to point out that the results do not support remote working as a complete  
10 solution. As outlined by Sucheran and Olanrewaju (2021), the analysis of historical literature  
11 on remote work diverges from the perspective presented during the COVID-19 pandemic. This  
12 shift can be attributed to the distinctive context brought about by the enforced lockdown  
13 regulations in South Africa.  
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#### 24 b. Lease terms and structures

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26 This shift created opportunities for negotiations, as tenants considered relinquishing office  
27 space or securing reduced rentals as critical factors in lease agreements. Concurrently, other  
28 tenants elected to retain their existing office spaces while implementing redesigns to optimize  
29 space usage and efficiency. These changes led to shortened lease durations, reflecting tenants'  
30 reservations about committing to extended leases (5 to 10 years). Instead, they favoured shorter  
31 leases, spanning 1 to 3 years, to mitigate operational risks. As one of the respondents noted,  
32 “*.so shorter lease terms are being negotiated because of the intention to consolidate and move*  
33 *out*”. Although the lease structures appear to be changing, the rate of change does not align  
34 with previous studies where leases were being re-negotiated at a mass scale. This may be  
35 because leases in South Africa are generally shorter (3- 5 years) than they are in other  
36 developed countries; thus, there would not been too long left on the lease after the pandemic.  
37 The scope of this study does not consider what firms will do after their leases expire- if this  
38 was done, perhaps, there would have been some insight on how lease structures changed  
39 several years down the line. However, it is clear that tenants are demanding more flexibility  
40 in lease terms, with respondents indicating that tenants are now opting for three-year contracts  
41 and break clauses increasingly being sought.  
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#### 56 **Category 4: Employee Productivity**

57 The themes in this category captured the strategies for maximising productivity in the  
58 workplace and support infrastructure.  
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3 Respondents generally perceive decline in productivity as one of main negative impacts of the  
4 pandemic which they associated with working from home. A respondent stated, "... I think  
5 productivity is definitely a challenge.... unfortunately, there is going to be opportunity cost lost  
6 from lack of productivity when people are working from home". There are other challenges  
7 that relate to infrastructure. One respondent stated that "...the set up at home creates  
8 distractions and employees are not able to work properly with poor internet connectivity, load  
9 shedding, weak laptop batteries die etc".

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11 Certain companies have implemented various strategies to facilitate collaboration and  
12 productivity when employees are in the office. These strategies include adopting hot desking  
13 practices, introducing communal areas for team collaboration, establishing pause areas for  
14 relaxation, and redesigning the office layout to an open-plan environment. Moreover,  
15 companies have invested in power backup solutions for Wi-Fi stability, upgraded employees'  
16 home Wi-Fi connections, and provided ergonomic chairs and desks for comfortable work  
17 setups. One respondent provided further insight. They stated that "... *not everyone had access*  
18 *to computer, printers and 3G cards, so we obviously had to gear up for it to provide Internet,*  
19 *provide office furniture to some employees including internet services, faxes, furniture, et*  
20 *cetera*".

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22 Furthermore, companies have embraced improved software solutions such as Microsoft Teams  
23 and Office 365 to enhance communication and workflow and leveraged cloud computing  
24 instead of relying solely on traditional server setups. These initiatives aim to create a conducive  
25 work environment that fosters collaboration and efficiency for both in-office and remote work  
26 scenarios.

## 4.2 Limitations

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28 As this study has been based on a qualitative study, there is a limitation on to what extent the  
29 findings of this paper can be generalized and transferred to other comparable studies. Also, the  
30 qualitative study consisted of ten interviews, which is another factor that can limit  
31 generalizability. These factors may have a limited impact on the external validity of this paper,  
32 where the findings can be more relevant to owners who saw the impact of the pandemic through  
33 the tenants and the decisions that needed to be made. The data was collected post- COVID19  
34 (July - November 2023), so attitudes and behaviours might have changed since then. Moreover,  
35 by describing all the steps taken in the method section regarding how the qualitative study and  
36 findings have been conducted, a high level of transparency has been ensured in this paper.  
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3 However, even though a transparent methodology approach makes it clear to other researchers  
4 how to conduct the study, it cannot be guaranteed that the same findings will be generated.

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6 The qualitative study includes personal opinions and experiences from participants that differ  
7 from one person to another, which is a factor that can impact findings. The findings indicate  
8 that the office market will survive the COVID-19 pandemic by including changes to the  
9 workplace, use of space, demand, and quality of space. Landlords ensuring the design of office  
10 buildings need amenities in proximity or within the building, which is essential to attract  
11 tenants. Organizations must make cost-effective decisions when leasing space by including  
12 employees' well-being and options to work remotely. Additionally, the fourth category of  
13 themes did not receive robust engagement from the respondents. This may be because  
14 productivity, particularly in the service and corporate sectors is quite subjective and there is  
15 still a lack of convergence about how remote working has affected productivity in the  
16 workplace.  
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## 28 **5. Conclusion**

29 This research focused on understanding the role of changing working practices in the office  
30 sector in South Africa (in the context of the covid-19 footprints). The COVID-19 pandemic  
31 was experienced worldwide, and South Africa was no exception. This required more places of  
32 work to close offices during the high peak of the COVID-19 pandemic in 2020 and 2021, with  
33 only essential staff being allowed to work during this period. This impacted many companies,  
34 not fully utilizing the offices they leased from landlords. Even though it benefited tenants who  
35 received relief and rental deferments on payments, the spaces were no longer utilized the same  
36 as when required to return to the office.  
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43 When employees returned to the offices, companies had to reconsider the required spaces,  
44 reduce space, or close down offices. The requirement for employees to return to the office was  
45 received with much resistance, and tenants and landlords needed to relook at how best to  
46 provide incentives to bring staff back. Many companies have looked at ways to achieve lower  
47 operational costs in the office spaces, acknowledging that during the pandemic, many  
48 companies saved on the occupancy and operating costs of the offices. The more flexible  
49 approach could have a long-term impact on the requirement to lease out space. In contrast to  
50 omitting the need for offices altogether, predictions around working from home tend to be  
51 closely tied to part-time work from WFH policies. It will be intriguing to observe how  
52 companies' encounters with remote work amid the pandemic will influence the nature and  
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3 magnitude of office space requirements. The findings indicate the presence of specific strategic  
4 categories crucial for reimagining and transforming the workplace post-COVID-19.  
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7 Although several findings from this study seem to align with studies in various contexts, some  
8 remarkable differences can be observed: they include companies' reaction and adoption been  
9 driven more by economic factors than by social and environmental factors. This is a stark  
10 contrast to the findings in Oladiran et al (2023) which reported that social and environmental  
11 factors are becoming key considerations in office markets in other developed economies.  
12 Furthermore, the remote working option primarily discussed were related to working from  
13 home, leaving third space use less prominent. Additionally, lease re-negotiations did not seem  
14 to feature actively in the discourse, and this may potentially have been because of the relatively  
15 shorter leases in South Africa in comparison to other countries. Additionally, this study reveals  
16 that infrastructure is a key challenge to the adoption of remote working. Issues such as power,  
17 internet and computing facilities have not been brought up in past studies in more developed  
18 economies. This is a valuable contribution to the debates around remote working which  
19 underscores that it is more effective in societies where electrical and information technology  
20 support it's adoption.  
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23 The findings underscore the need for additional research to comprehend the psychological  
24 consequences of the pandemic on employees about remote work. This includes the absence of  
25 daily face-to-face conversations and informal gatherings. However, as noted in Di Renzo et  
26 al.'s (2020) study, it has also facilitated heightened collaboration among employees within the  
27 workplace. The findings indicate that to achieve success in remote work (WFH), a well-  
28 structured performance review system is essential for any company pursuing such an approach.  
29 The COVID-19 pandemic has undeniably posed challenges and transformed our interactions  
30 with remote work. The growing integration of technological tools within companies is viewed  
31 as a means to enhance remote work in the future, prompting a heightened demand for more  
32 adaptable tools that empower employees to manage their tasks effectively.  
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35 Based on the research results, the demand and utilization of office space have evolved, giving  
36 rise to a decrease in traditional office layouts and the emergence of more open, collaborative  
37 spaces. These spaces now incorporate dedicated focus rooms and well-equipped meeting areas  
38 with enhanced audio-visual capabilities. This setup supports hybrid work models and online  
39 meetings with minimal technological hindrances. Consequently, employees are now better  
40 equipped to engage in their tasks effectively. The pandemic's impact has catalyzed irreversible  
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3 changes, compelling policymakers and business leaders to strategize and prepare. This  
4 proactive stance aims to prevent avoidable challenges for employees and companies during  
5 future pandemics. A thoughtful approach to the post-pandemic world can usher positive  
6 changes in the office and property sector. This includes the coexistence of both remote work  
7 and on-site working models.  
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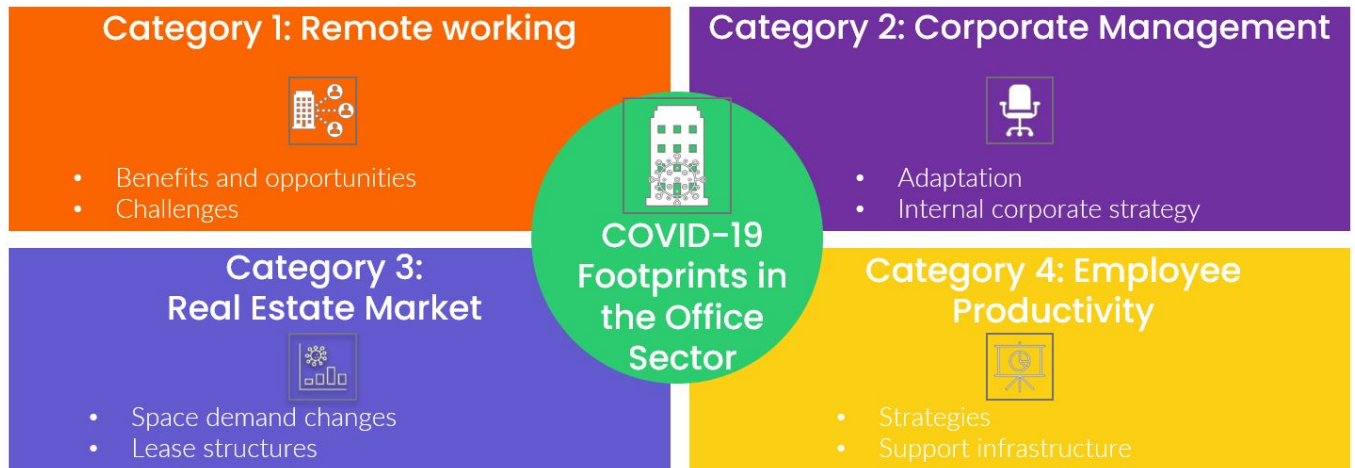
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**Figure 1: Emergent Themes from the Analysis**

Journal of Corporate Real Estate

## Reviewers Response and Comment document

Reviewer: 1

Recommendation: Minor Revision

Comments: The paper improved from the first draft, needs to go through some points that were mentioned also have a proofread for language and grammar.

Additional Questions	Response	Feedback and changes
1. Originality: Does the paper contain new and significant information adequate to justify publication?:	Yes the paper shows update knowledge to a situation that affected the workplace	Thank you for the feedback
2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?:	The update was relevant	Thank you for the feedback
3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?:	Improved yet some addition to the selected sample to show if it either homogeneous or not	Thank you for the feedback
4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?:	The analysis provided clear outcomes and were clear	Thank you for the feedback
5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes,	adding recommendation of how this collected data can benefit readers who are not academic or researches would benefit the paper	Thank you for the feedback. The concluding section contains information on the relevance of the findings to non-academic audiences. This has now been highlighted in the manuscript.

affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?:		
6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.:	Some acronyms need to be in the footnote	Included an acronym in the footnote. In other cases, the acronyms were used immediately after the full meaning was used in the first instance. Thereafter, only the acronym was used.

Reviewer: 2

Recommendation: Minor Revision

Comments:

Thank you for the revisions and additions to this version of the manuscript, it is much improved

Additional Questions	Response	Feedback and changes
1. Originality: Does the paper contain new and significant information adequate to justify publication?:	Yes	Thank you for the feedback
2. Relationship to Literature: Does the paper demonstrate an adequate understanding of the relevant literature in the field and cite an appropriate range of literature sources? Is any significant work ignored?:	Clarity has been improved in the revised manuscript	Thank you for the feedback
3. Methodology: Is the paper's argument built on an appropriate base of theory, concepts, or other ideas? Has the research or equivalent intellectual work on which the paper is based been well designed? Are the methods employed appropriate?:	Yes, however an overall summary of the complete dataset would be beneficial - i.e., the sample size has been increased from 5 to 10 interviews in this revision. What is the total pool of interview participants and data that the authors are drawing from? And what was the selection criteria	Thank you for your feedback. The sample size justification has been provided and further information has been provided on the rationale for the purposive sampling approach adopted. The selection criteria are also highlighted and the sample composition, including demographics, has been introduced. These are highlighted in section 3.

	for the 10 interviewees included in this paper? Why/ how (describe the data filtration process briefly)	
4. Results: Are results presented clearly and analysed appropriately? Do the conclusions adequately tie together the other elements of the paper?:	Thank you for the addition of figures, categories and direct quotations, the findings are much clearer	Thank you for the feedback
5. Implications for research, practice and/or society: Does the paper identify clearly any implications for research, practice and/or society? Does the paper bridge the gap between theory and practice? How can the research be used in practice (economic and commercial impact), in teaching, to influence public policy, in research (contributing to the body of knowledge)? What is the impact upon society (influencing public attitudes, affecting quality of life)? Are these implications consistent with the findings and conclusions of the paper?:	Yes	Thank you for your feedback
6. Quality of Communication: Does the paper clearly express its case, measured against the technical language of the field and the expected knowledge of the journal's readership? Has attention been paid to the clarity of expression and readability, such as sentence structure, jargon use, acronyms, etc.:	Yes, quality is fine	Thank you for the feedback

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