How do corporate drivers and individual preferences for agile working meet? Study of Hong Kong organisations and employees

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ABSTRACT

Purpose: Agile working, also known as activity-based working (ABW) has gained interest from both business and academia. Agile working allows employees to work flexibly, choosing and switching between different non-assigned workstations, with varying degrees of privacy, depending on the task they are working on. The aim of this study is to investigate how corporate drivers and individual preferences for agile working meet. In contrast to places where agile working concepts have been studied extensively, such as the Netherlands, (see Hoendervanger *et al*., 2016; Appel-Meulenbroek *et al*., 2015; De Been and Beijer, 2014) this study focuses on an under-researched region, that of Hong Kong.

Theory: 'Systems-thinking' describes processes that are involved when an organisation transforms from one phase into another. This process takes place at both an organisational as well as at individual levels. The implementation of a workplace concept involves a physiological as well as a psychological change, and the 'System' only operates when both individual and corporate levels align in their approach and implementation (Thakore *et al.*, 2020).

Design/ methodology/ approach: A transdisciplinary lens was applied using mixed methods, combining quantitative and qualitative research techniques. Data collection and analysis were carried out using a combination of a survey questionnaire (systems knowledge) and semi-structured interviews (target knowledge). The research findings are developed to inform the emerging trends (transformation knowledge) that are significant for relevant stakeholders.

Findings: The changing nature of work, productivity and wellness were found to be key drivers for implementation of agile workplace strategies at corporate level, whereas preferences at individual level were found to be positively associated with an individual's exposure level to them. Furthermore, internal constraints such as lack of time and resources were found to limit the efforts of organisations in investing and monitoring impacts and outcomes of agile working, highlighting the need for further research in this area.

Originality/ value: This research is undertaken in the context of Hong Kong where, like the wider Chinese context, there is limited previous research on agile working. While there are a number of non-academic reports, they do not explicitly consider this emerging innovative model

of working and its impact on business performance. The research is initiating a dialogue for investigation for the benefit of business and academia alike.

Keywords

Agile working, Hong Kong, Productivity, Wellness

1 INTRODUCTION

The perception of workplace in a knowledge society is changing. Technological advances, such as digitalization, laptop computers and cloud services have enabled team members to work from any location. This increased connectivity means that the boundaries of the office are blurring and are no longer limited to the physical real estate footprint alone. Instead, spaces beyond the office, such as home, hotel, or modes of transport may also be used to carry out the tasks traditionally carried out in office setting (Harris, 2016). To respond to the needs of the more mobile workforce, organisations may introduce agile workplace concepts. Agile workplaces utilise reduced desk ratios (fewer workstations than there are employees), and provide non-assigned desks as well as other informal and formal meeting areas. This enables employees to work flexibly, choosing and alternating between different non-assigned workstations with varying degrees of privacy depending on task they are working on (Hoendervanger *et al.,* 2016; De Bruyne and Beijer, 2015).

The concepts and impacts of agile working have been studied elsewhere and extensively studied in the Netherlands (Hoendervanger *et al*., 2016; Appel-Meulenbroek *et al*., 2015). There are, however, limited studies on agile workplace strategies in the context of Asian organisations, and more especially of those in either Hong Kong or mainland China.

2 THEORETICAL FRAMEWORK

'Systems-thinking' is a worldview which allows appreciation of holistic systems, having interconnections between system-components, properties such as drivers, outcomes and feedbacks, and can be applied to problems of multiple disciplines (Cerar 2012; Forrester 1994; Voinov 2008). 'Systems-thinking' describes processes that are involved when an organisation transforms from one phase into another. This process takes place at both organisational and individual levels. The implementation of a workplace concept involves a physiological as well as a psychological change, and the 'System' only operates when both individual and corporate levels align in their approach and implementation – they meet (Thakore *et al.*, 2020).

This study focuses on investigating drivers for organisations (considered as 'systems' in the context of this study) to implement agile workplace strategies at the corporate level; and investigates equally important employees' preferences for agile workplaces at an individual level. Drivers are established by analysing the current context of agile workplace literature, whereas the preferences of employees are investigated using empirical evidence.

3 LITERATURE REVIEW

Agile working is discussed in literature as new ways of working, flexible working, or activity-based working (ABW) (De Bruyne and Beijer, 2015; Harris, 2016). Initially, the literature was

searched for the drivers of agile working. Those identified include: changing nature of work and workplace; productivity; (employee) satisfaction; and wellness. Out of all identified drivers, this study has selected to analyse the following drivers in closer detail: changing nature of work and workplace; productivity; and wellness.

3.1 Changing nature of work and workplace

The workplace is no longer seen as just a physical place for carrying out tasks. Increasingly, it is being used as a conveyor of messages on the values and identity of the organisation to staff and visitors (Haynes 2012; Khanna *et al.* 2013) and as a business enabler that allows an organisation to compete and strategically place itself in the marketplace (Botting and Pastakia 2014). In addition, workplace change strategies are being used as tools to facilitate organisational and cultural change (Skogland 2017) and as a way to attract talent (Harris, 2016). Finally, reduced desk ratios may be utilised to facilitate flexible work practices as well as to provide an opportunity for remote working. The reduction of permanent workstations makes sense, as it can contribute to 'spaceless growth', which affects the organisation's bottom line. (Harris, 2015; Skogland, 2017). In addition to economic drivers, the changing demographic of the workforce contributes to the change of workplace. Today's workplace may have up to four different generations working alongside each other, each with their own expectations and needs (Haynes *et al.* 2017; Haynes 2011).

3.2 Productivity

Productivity is defined as the ability of people to enhance their work output through increase in the quantity and/or quality of the product or service they deliver (Walters and Helman, 2020). Workplace productivity may be measured in various ways, such as: conducting employee self-assessment surveys, monitoring employee absenteeism levels, measuring the amount of time spent on a specific task, desk utilisation ratios, real estate costs, staff retention rates and/or revenue breakdown. (Thompson and Jonas 2008; CABE 2005).

Several studies have been conducted to evaluate connections between workplace and productivity (De Croon et al. 2005; Bodin-Danielsson and Bodin 2008; Haynes 2007). Haynes (2007) has established that while physiological aspects such as layout and comfort do contribute to productivity, the most significant impact of all is caused by the behavioural environment. The behavioural environment consists of interaction and distraction, which were found to be the most important positive and negative contributors to productivity, respectively.

3.3 Wellness

Wellness is emerging as an aspect of workplace design (Harris, 2016) and is considered a key contributor to productivity (Alker *et al.*, 2015). Evidence demonstrates that physiological aspects of workplace impact the wellbeing and productivity of employees. For example, good indoor workplace air quality has been linked to increases of up to 61% in employee cognitive performance (Allen *et al.*, 2016); and increased illuminance levels has been found to improve productivity by up to 20% (CABE, 2005). On the other hand, productivity is lost due to employees' ill health, including absenteeism and lateness (Vischer, 2007).

4 METHODOLOGY

The objective of this paper is to investigate how corporate drivers and individual preferences for agile working meet. A methodological approach utilising transdisciplinarity underpinned by

systems-thinking was deemed to be appropriate for this organisational workplace investigation (further theoretical argument for this methodology is presented in Thakore *et al.,* 2020). To achieve this, a transdisciplinarity lens was adopted to frame the research objective (a holistic knowledge). Desk research and a survey questionnaire were then carried out to investigate stakeholders' perspectives on the issues of agile working (to gain systems knowledge). Finally, semi-structured interviews were carried out to engage with industry experts (to gain target knowledge). The results of holistic, system and target knowledge were then analysed. The research findings and its interpretation contributed to the transformative knowledge, which is presented in the Discussion section.

A survey was administered using an online survey tool, and a random sampling technique was used after piloting the questionnaire with volunteers. The survey questionnaire was targeted toward professionals working in an office environment in Hong Kong. The survey investigated the challenges and opportunities of agile working in Hong Kong against previously identified themes, such as productivity and wellness, in the office environments. A Likert scale was used to measure respondents' opinions. Open-ended questions were included to allow additional qualitative information. To validate the survey questions, the first interview was scheduled before the survey was sent out. After that, the survey and interviews ran concurrently. The responses from interviews and survey questionnaires were triangulated to increase reliability of the research findings.

The online survey received 86 responses, a response rate of 15%, which was considered as sufficient in both number and response rate for reliable quantitative analysis . Survey participants' profiles are presented in Table 2.

Table 2 Survey participant profile

Total responses		86
Age	20-30	28%
	30-40	43%
	40-50	15%
	50-60	9%
	60+	3%
	Prefer not to say	1%
Position	Team member	38%
	Manager	21%
	Senior manager	9%
	Director	17%
	Vice president	6%
	President	1%
	CFO/CEO/COO	2%
	N/A	5%
Current work environment	Traditional workspace	54%
	Agile workspace	34%
	Other	12%

Target knowledge was developed by interviewing three organisations using semi-structured interviews. In order to generate results that reflect different typologies of Hong Kong agile workplaces, two large scale organisations with several thousand employees and a smaller organisation with approximately 200 employees was selected. All selected interviewees held senior management positions within their organisations. The responses from interviews and survey questionnaires were triangulated to increase reliability of the research findings.

5 DISCUSSION

5.1 Changing nature of work and workplace

Decrease in real estate cost is one of the key drivers for implementing agile working (Brunia and Pullen, 2014; De Bruyne and Beijer, 2015). Economic drivers such as this were identified to be present in all three participant organisations, but they were not necessarily primary reason for the implementation of agile workplace, according to the interviewees. Rather, an agile workplace was implemented as it was found to better support the business model and facilitate new ways of working. 'Spaceless growth' and attracting talent were noted as by-products of the implementation process rather than main drivers.

The findings of this research indicate that there is growing interest in agile working in Hong Kong. In line with previous research findings (De Been and Beijer, 2014), the majority of survey respondents (36%) preferred to work either in agile workspaces or in spaces that combined both agile and traditional aspects, in comparison to those (14%) who preferred traditional workspaces. Limited studies to date have focused on mapping the preferences of entire workforces in the context of a specific city. Therefore, these statistics provide an exploratory insight into attitudes towards new ways of working in Asia, and specifically in Hong Kong.

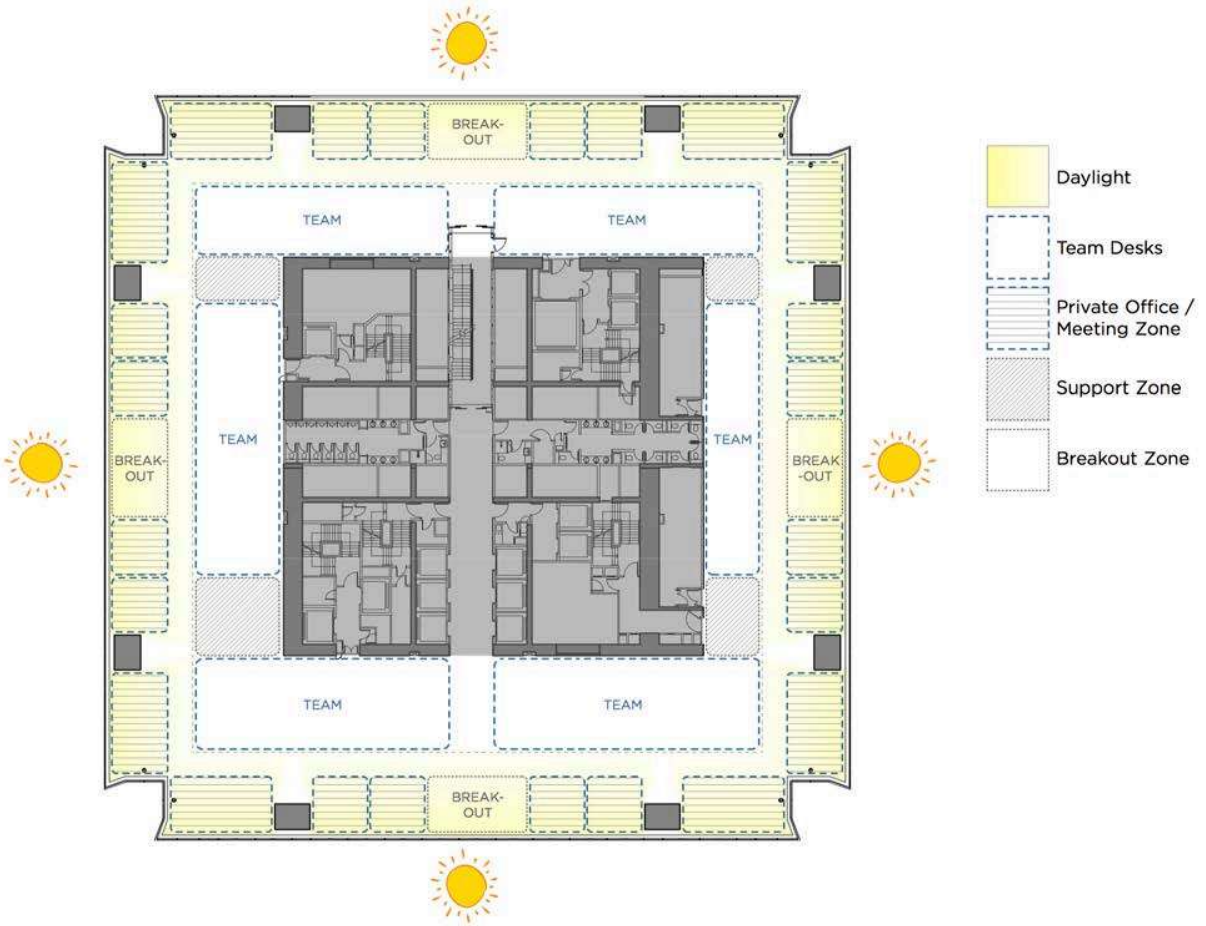
Table 3 Preference of workplace type

		Traditional workspace	Agile workspace	Both	Not sure
Overall results		14%	36%	36%	13%
Results by age	20-30	8%	50%	33%	8%
	30-40	19%	28%	36%	17%
	40-50	0%	38%	46%	15%
	50-60	13%	50%	38%	0%
	60+	67%	0%	33%	0%
Results by current workplace	Traditional	24%	13%	41%	22%
	Agile	0%	72%	28%	0%
Results by position	Team member	3%	44%	31%	22%
	Manager	17%	28%	44%	11%
	Senior manager	25%	50%	13%	13%
	Director	27%	20%	53%	0%
	Vice president	0%	50%	25%	25%
	President	20%	40%	40%	0%
	CFO/CEO/COO	100%	0%	0%	0%

The respondents' preferences were found to be somewhat dependent on their current work environment (see Table 3). Those who currently worked in agile workspaces had a strong preference for agile environments, whereas those who currently worked in traditional offices showed lower interest in agile workspaces and preferred traditional work environments or both instead. This suggests the value of evidence-based testament, whereby understanding the benefits of agile working might have to be experienced first to be appreciated.

The survey results reveal that majority of respondents that stated they preferred to work in agile workplaces identified themselves as 'team members' and fell within an age group of '20-30'. Conversely, although only a small percentage of the participants, those over 60 years of age, preferred the traditional workplace (see Table 3). This suggests differences in generational attitudes, which have also been observed in previous studies (for example McElroy and Morrow 2010; Haynes, 2011; Joy and Haynes 2011). As noted by the interviewees, the blueprint of the traditional Hong Kong office often has senior executive offices with windows along the perimeter wall, and cramped team areas with little daylight in the core of the building (see Figure i). Qualitative data from both the survey and the interviews suggest that in the Hong Kong office environment, the older generation that have gained leadership status at the workplace are hesitant to let go off their private offices, because beside their private space, they may also lose a key symbol of their hierarchical status.

Figure i Interior layout of typical Hong Kong Office



5.2 Productivity

Productivity is a key consideration of any agile workplace strategy (Haynes *et al.*, 2017). The studied organisations indicated that they used some measures to monitor the productivity of certain aspects of their business, such as utilisation rates of meeting rooms. The interviewees also noted that they were aware of further ways of measuring productivity (such as changes to costs, revenue or staff retention) however none of the firms were actively doing so, mainly due to time pressures. Instead, all studied organisations relied on perceived levels when assessing changes in productivity due to agile working. All assumed that the overall productivity was positively impacted by the introduction of the agile workplace, because the data that was tracked, such as meeting room utilisation rates, demonstrated increased efficiencies. The outcomes of self-reported studies can however be subjective as pointed out by previous research, making it difficult to judge and compare the precise impacts on (and between) businesses (*CABE, 2005).*

The findings of this study therefore indicate that measuring productivity in a corporate real-life setting is a challenging task. This is for two reasons: (a) metric tools monitoring productivity tend to focus on quantity of output, rather than quality of output. The interviewees highlighted this issue, noting that measuring productivity by metric tools alone ignored the qualitative output of the team; and (b) the practicality of using quantitative tools such as desk utilisation ratios, real estate costs, staff retention rates and/or revenue breakdown. Future research may focus on developing tools that enable organisations to assess productivity on an ongoing basis.

At the individual level, the survey findings support some positive association of agile workplaces and productivity in Hong Kong. When assessing the overall choice of office type for optimal productivity, there was an even split between 'agile', 'traditional' and 'other' office types (see Table 4). However, when assessing the perceived levels of productivity in terms of current workplace type, those currently in agile workplaces preferred agile work environments for their productivity. This does not entirely align with previous studies from elsewhere, which have found lower perceived productivity in agile workplaces (De Been and Beijer, 2014). The results may however suggest the value of evidence-based testament in context of Hong Kong workplace behaviour, as discussed earlier in relation to preference of workplace type.

Table 4 Preferred office type for optimal perceived productivity

OVERALL RESULTS				
	Traditional workspace	Agile workspace	Both	Not sure
	29%	30%	25%	16%
RESULTS BY RESPONDENTS' CURRENT WORKSPACE TYPE				
	CURRENT WORKSPACE TYPE			
PRODUCTIVITY BETTER IN:	Traditional workspace	Agile workspace	Both	Not sure
Traditional workspace	35%	17%	24%	24%
Agile workspace	19%	52%	26%	4%

5.3 Wellness

Respondents were also asked if they would prefer an employer that offers wellness features, over one that does not. Most respondents (96%) wished to work for in an office environment that included wellness features. In this context, the features that contributed to wellness at the

workplace included clean indoor air, plenty of natural daylight, a comfortable acoustic design, clean water, provision for sports and healthy food choices, in accordance with WELL Building standard.[5] Results from both the interviews and the questionnaire suggest that there is a desire for 'wellness' to be a part of workplace in Hong Kong. The popularity of wellness may be explained for a few reasons, including a lack of wellness features such as natural light in many traditional Hong Kong offices, general cramped conditions, and the hierarchical atmosphere pointed out by both survey respondents and interviewees.

6 FINDINGS

'Systems-thinking' describes processes that are involved when an organisation transforms from one phase into another, such as from traditional to agile workplace setting. According to this theory, the 'System' only operates when both individual and corporate levels align in their approach and implementation (Thakore *et al.*, 2020).

The literature review demonstrated that the changing nature of work, productivity and employee wellness are some of key drivers for implementation of agile workplace strategies at a corporate level. These drivers were also confirmed to be present in this study; however notably improved productivity was identified as a byproduct rather than primary driver. Instead, the agile workplace was implemented in the case study organisations as it was found to better support the organisation's business model and facilitate new ways of working. Furthermore, the findings highlight that internal constraints such as lack of time and resources limit the efforts of organisations in investing and monitoring impacts and outcomes of agile working. Future research may focus on developing tools that enable organisations to assess criteria such as productivity on an ongoing basis.

The preferences at an individual level on the other hand, were found to be positively associated with an individual's exposure level to agile workplaces. This was found to be true both in the case of perceived productivity as well as preference for agile over a traditional work environment. The research also highlights that, at individual employee levels, there also appears to be a growing preference in Hong Kong for employers that offer workplace wellness features. In this study, all studied organisations had met this demand by including some wellness features within their workplace. However, as this study has already highlighted, an individual's preferences may be dependent on exposure level to them. Therefore, it may be that the positive results in this study correlate with respondents' possible familiarity with workplace wellness features. Consequently, future research may focus on measuring this phenomenon in closer detail by conducting large-scale random sampling studies on preferences of wellness in Asian cities such as in Hong Kong.

In accordance to principles of 'Systems-thinking', this study found some correlations between drivers for agile working at corporate levels in comparison to preferences for agile working at individual levels. In particular, the findings on testament of evidence suggests that the drivers and preferences align more closely as the process matures. This may suggest that early agile workplace concepts (for example within a corporation with multiple offices) face some resistance, however the experience becomes more accepted as employees become familiar with the concept.

[5] https://www.wellcertified.com/certification/v1/standard/

At individual levels, generational divides in attitudes were found to hamper the receptiveness to agile working in Hong Kong. The research findings suggest that in the Hong Kong office environment, the older generation that have gained leadership status and therefore are in, or close to, decision making positions, are hesitant to let go of their private offices, because this will dismantle a key signifier of their elevated hierarchical status. These individuals are however close to retirement age, so such resistance may not present a long-term barrier to uptake.

7 CONCLUSION

This study sets out to investigate how corporate drivers and individual preferences for agile working meet. Data collection and analysis were carried out using a combination of a survey questionnaire (systems knowledge) and semi-structured interviews (target knowledge). The research findings are developed to inform the emerging trends (transformation knowledge).

This research demonstrated that the changing nature of work, productivity and wellness are some of the key drivers for implementation of agile workplace strategies at corporate level. On the other hand, preferences at individual level were found to be positively associated with an individual's exposure level to agile workplaces. In line with previous studies, this study also observed some generational differences in attitudes towards agile working.

While this paper provides assessment on drivers and preferences for agile working, it provides only an exploratory research on the workplace strategies in Hong Kong, and further future research is clearly required to map out the workplace practices and behaviors in Asian cities such as Hong Kong.

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REFERENCES

Alker, J, Malanca, M, Pottage, C, O"Brien, R, Akhras, D, Ambrose, B, Wong, J (2015), "Health, Wellbeing and Productivity in Offices", *World Green Building Council*, available at: http://www. worldgbc. org/activities/health-wellbeing-productivity-offices/research (accessed 20 February 2020).

Allen, J, MacNaughton, P, Satish, U, Santanam, S, Vallarino, J, Spengler, J (2016), "Associations of cognitive function scores with carbon dioxide, ventilation, and volatile organic compound exposures in office workers: a controlled exposure study of green and conventional office environments", *Environmental health perspectives*, 124(6), pp. 805-812.

Appel-Meulenbroek, R, Kemperman, A, Kleijn, M, Hendriks, E (2015), "To use or not to use: which type of property should you choose?", *Journal of Property Investment & Finance*, 33(4), p. 320.

Bodin-Danielsson, C, Bodin, L (2008), "Office type in relation to health, well-being, and job satisfaction among employees", *Environment and Behavior*, 40(5), pp. 636-668.

Botting, S (2016), "Commercial office space: Time for a workplace intervention", *Corporate Real Estate Journal*, 5(2), pp. 171-179.

Brunia, S, Pullen, W (2014), "Het gebruik gemeten. Bezettingsgraden in kantorenland", *Proceedings van het Center for People and Buildings*. Delft.

CABE (2005), *The Impact of Office Design on Business Performance,* Commission for Architecture and the Built Environment.

Cerar, J (2012), *Transdisciplinary Sustainable Development*. Ljubljana: University of Ljubljana.

Costanza, R, Kubiszewski, I (2012), "The authorship structure of "ecosystem services" as a transdisciplinary field of scholarship", *Ecosystem Services*, 1(1), pp. 16-25.

De Bruyne, E, Beijer, M (2014), "The influence of office type on satisfaction and perceived productivity support", *Journal of Facilities Management*, 12(2), pp. 142-157.

De Bruyne, E, Beijer, M. (2015), "Calculating NWoW office space with the PACT model", *Journal of Corporate Real Estate*, 17(2), pp. 122-133.

De Croon, E, Sluiter, J, Kuijer, P, Frings-Dresen, M (2005), "The effect of office concepts on worker health and performance: a systematic review of the literature", *Ergonomics*, 48(2), pp. 119-134.

Forrester, J (1961), *Industrial Dynamics*, Cambridge: MIT Press.

Hadorn, G, Bradley, D, Pohl, C, Rist, S, Wiesmann, U (2006), "Implications of transdisciplinarity for sustainability research", *Ecological economics*, 60(1), pp. 119-128.

Harris, R (2015), "The changing nature of the workplace and the future of office space", *Journal of Property Investment & Finance*, 33(5), pp.424-435.

Harris, R (2016), "New organisations and new workplaces", *Journal of Corporate Real Estate*, 18(1), pp. 4-16.

Haynes, B (2007), "Office productivity: a theoretical framework", *Journal of Corporate Real Estate*, Vol. 9 No. 2, pp. 97-110.

Haynes, B (2011), The impact of generational differences on the workplace, *Journal of Corporate Real Estate*, Vol. 13 No. 2, pp. 98-108.

Haynes, B, Suckley, L, Nunnington, N (2017), "Workplace productivity and office type", *Journal of Corporate Real Estate*, 19(2), pp. 111-138.

Hoendervanger, J, De Been, I, Van Yperen, N, Mobach, M, Albers, C (2016), "Flexibility in use", *Journal of Corporate Real Estate*, 18(1), pp. 48-62.

Joy, A, Haynes, B, (2011), "Office design for the multi-generational knowledge workforce", *Journal of Corporate Real Estate*, Vol. 13 No. 4, pp. 216-232.

Khanna, C, van der Voordt, T, Koppels, P (2013), "Corporate real estate mirrors brand: a conceptual framework and practical applications", *Journal of Corporate Real Estate*, 15(3/4), pp. 213-230.

McElroy, J, Morrow, P, (2010), "Employee reactions to office redesign: a naturally occurring quasi-field experiment in a multi-generational setting", *Human Relations*, Vol. 63 No. 5, pp. 609-636,

Palvalin, M, van der Voordt, T, Jylhä, T (2017), "The impact of workplaces and self-management practices on the productivity of knowledge workers", *Journal of Facilities Management*, 15(4), pp. 423-438.

Seddigh, A, Berntson, E, Platts, L, Westerlund, H (2016), "Does personality have a different impact on self-rated distraction, job satisfaction, and job performance in different office types?", *PloS one*, 11(5), pp. 1-14.

Skogland, M (2017), "A spatial approach to transformational change", *Journal of Corporate Real Estate*, Nov 13.

Thakore, R, Kavantera, A, Whitehall, G (2020), "Systems-Thinking", In Appel-Meulenbroek, R, Danivska, V (Ed.) (2020), *A transdisciplinary overview of workplace theories*, (Forthcoming).

Thompson, B, Jonas, D (2008), *Property in the Economy - Workplace design and productivity: are they inextricably linked?* RICS (Royal Institution of Chartered Surveyors), UK.

Voinov, A (2008), *Systems Science and Modelling for Ecological Economics*, Academic Press.

Vischer, J (2007), "The concept of workplace performance and its value to managers", *California management review, 49(2), pp. 62-79.*

Walters, D, Helman, D (2020), "Using Capabilities to Build a Response-Led Strategic Decision Model", In *Strategic Capability Response Analysis*. Springer, pp. 53-69.