

# Employees' Appraisal of Workplace Changes During COVID-19: Findings From a State-Owned Oil and Gas Company

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## ABSTRACT

This study aims to explore employees' perceptions of workplace management practices (i.e. planning before workplace change, implementation process, management after workplace change) at the PTT headquarters building in Thailand. Another purpose is to examine workplace change development during COVID-19 to understand the organisation's planning and processes, which serves as a means to contribute to Facilities Management and Corporate Real Estate Management (CREM) theory. Employees' responses to workplace management practices at different stages (i.e., before, during, and after workplace change) were affected by the company's strategic direction and management approach, particularly in terms of planning and implementing workplace change development. This study demonstrates that the employee engagement and involvement process is critical during and after workplace change. A lack of process at these times can result in negative impacts, as evidenced by low satisfaction percentages in various areas, including improving the workplace based on suggestions from employees, and training employees on how to use office space when returning to the workplace. The case organisation's strategic planning in relation to crisis management, reflects the supply and demand alignment dimension and the CREM strategy of corporate real estate alignment. No existing research has appraised employees' responses in terms of the preparation and implementation of workplace change. This study provides new insights into workplace change development during COVID-19, including planning, implementation, management after the change, and the impacts on employees' perceptions.

**Keywords:** appraisal, crisis management, competencies, strategic planning, corporate real estate alignment, state enterprise, facility management

## INTRODUCTION

Previous studies have found that COVID-19 was the most significant crisis the world has witnessed since the first half of the 20<sup>th</sup> century (Carroll & Conboy, 2020; Matli, 2020). The pandemic has significantly impacted people's daily lives, including their work patterns and the way businesses are operated. Crises can occur in small or large organisations and at different levels within them (Taneja et al., 2014), and the spread of the virus caused transformations in business processes and modifications to workplaces worldwide. It is essential for organisational leaders to study internal and external factors responsible for crisis situations, identify organisational strategies for preventing or mitigating crises, and effectively and efficiently manage crises when they occur (Taneja et al., 2014). Leadership is considered the most crucial competencies in managing corporate real estate during crises (Wisittigars & Siengthai, 2019).

Post-occupancy evaluation (POE) is a commonly used building assessment method. It has been defined as a means to obtain feedback on a building's performance in use, providing insights for improvement in the (re)development and management of workplaces (Preiser et al., 2015; Van der Voordt & Van Wegen, 2005). During the COVID-19 pandemic, employee feedback on organisational planning, implementation process, and management of workplace change helped identify areas for improvement. Workplace and facilities professionals are responsible for services that enable and support business performance from a facility management (FM) perspective (Institute of Workplace and Facilities Management [IWFM], 2022). Understanding the underlying theories of corporate real estate (CRE) alignment, such as strategic and real estate management, is crucial in comprehending the link between the core business and the supporting role of FM.

## LITERATURE REVIEW

### Impact of the COVID-19 on Organisations and Employees

Due to the COVID-19 pandemic, organisations had to make provisions for staff to operate remotely following the implementation of lockdown regulations around the world. This was because the pandemic led to restrictions on movement and the temporary closure of workplace premises (Matli, 2020). As a result, a significant percentage of business activities were forced to stop in an effort to reduce personal interactions in public areas. One direct consequence of the pandemic was a decrease in work productivity (Hou et al., 2021).

Organisations reported loss of productivity and concerns regarding the ability to maintain culture and workplace health and safety with the adoption of work from home (WFH) practices, while employees expressed concerns about social interactions, furniture ergonomics, internet connectivity, and increased workload (Marzban et al., 2021). However, recent studies have shown positive outcomes of the new work experience that occurred during COVID-19, including perceived individual productivity and concentration (Tagliaro & Migliore, 2022). One significant benefit resulting from WFH was that employees did not have to commute to and from work. Additionally, the majority of knowledge workers felt completely or somewhat trusted by their organisations, and experienced a strong sense of value (Marzban et al., 2021).

Many organisations successfully prepared themselves for workplace re-entry by making various modifications to comply with COVID-19 measures and adapt to new working practices. These modifications were implemented under the guidance of the organisation's leaders, who demonstrated leadership skills and emergency preparedness to cope with the crisis (Wisittigars & Siengthai, 2019).

## **Crisis Management and Crisis Leadership Competencies**

COVID-19 was a global health crisis, and the major economic and financial crisis it caused put significant strain on local, national and global societies (Organisation for Economic Co-operation and Development [OECD], 2020). A crisis is defined as “an unstable or crucial time or state of affairs in which a decisive change is impending, especially one with the distinct possibility of a highly undesirable outcome” (Merriam-Webster, 2022). In any circumstance, a crisis can cause potential losses to a firm, affecting human and physical assets. Trickling and spiraling crises can slow or prevent corporate growth and have a significant negative impact on the sustainability of business development (Fleming & Zhu, 2017). According to Mitut (2011), crisis situations are inherent in the activity of any contemporary organisation, regardless of its type, and may stem from both external and internal sources. Fleming and Zhu (2017) argued that organisations have an essential role in studying the internal and external factors responsible for crisis situations; they defined crisis management as “a systematic attempt to prevent organisational crises and to manage those that do occur.” The capability to manage unexpected crisis situations strategically is a major strength of a contemporary organisation (Taneja et al., 2014).

When it comes to managing CRE, crisis management relies on FM, particularly in terms of the physical management of damaged facilities and preparation of temporary facilities (Wisittigars & Siengthai, 2019). In terms of the workplace, providing organisational adaptability to a crisis, in which workplace change is considered to be not only a workplace solution but also a business and human resource strategy, is essential (Marzban et al., 2022). Crisis management is also a leadership imperative that involves people both inside and outside of an organisation (Taneja et al., 2014). Wisittigars and Siengthai (2019) identified five different groups of crisis leadership competencies from 29 significant competencies; they are emergency preparedness, crisis communication, emotional

intelligence, leadership skills, and problem-solving.

## **Alignment of Corporate Real Estate**

The COVID-19 crisis posed challenges for organisations in terms of how they organised and managed their resources, and those challenges have carried on beyond the immediate crisis posed by the pandemic. From a corporate perspective, real estate is viewed as the fifth resource, in addition to human resources, technology, information, and capital (Joroff et al., 1993), which are necessary inputs in the production process. The term corporate real estate management (CREM) is described as “the management of a corporation’s real estate portfolio by aligning the portfolio and services to the needs of the core business (processes), in order to obtain maximum added value for the business and to contribute optimally to the overall performance of the corporation” (Krumm et al., 2000, p. 32). Arkesteijn (2019) refers to the alignment of corporate real estate with the business, one of CREM’s activities, as corporate real estate (CRE) alignment.

Although there is broad agreement on the substantially high potential of CREM to support corporate success, opinions differ on what comprises that success. A study by Pfnuer et al. (2021) reveals a complex picture regarding the connection between CREM and corporate success, and illustrates the interdisciplinary nature of CREM in companies. In this regard, Heywood and Arkesteijn (2017) classified the underlying theories associated with CRE alignment, including strategic management (e.g., business strategic planning, business performance, alignment theory), political science, and real estate management (e.g., CREM strategy, workplace productivity and design).

Note that the alignment between an organisation’s strategic direction and physical environment requires that the role its physical environment plays in implementing its strategic corporate plans must be clearly recognised the organisation’s strategic intent (Then, 2000 as cited in Ntene et al., 2020). In terms of real estate (RE) and facility management (FM), when

alignment exists, the RE/FM functions are integrated into the business strategies of the enterprise, including the component business units (internal customers of the RE/FM function), and its facilities strategies, service portfolio, resources, and business processes are developed in order to create and deliver facilities solutions that support customers and stakeholders (Then et al., 2014). In relation to the impact on human resource management, the link between the work environment and individuals' needs can either support or hinder productivity and well-being (Bergefurt et al., 2022; Williamson & Perumal, 2021). In this paper, CRE alignment is discussed in connection with the findings of the case study detailed in results and discussion section.

## Problem Formulation and Research Questions

Organisations make changes in their workplaces for various reasons. Frequently mentioned drivers include cost reduction and ICT development (Riratanaphong, 2014). However, the COVID-19 pandemic caused a number of sudden changes in business operations, and most organisations were forced to develop workplace modifications. This included the headquarters of the public company, PTT. The PTT case involved changing its workplace to improve and maintain work efficiency, as well as to lower workplace density and reduce the risk of virus spread. In fact, even before the start of COVID-19 in December 2019, the organisation had already initiated flexible working conditions to address traffic congestion around the office area.

According to literature, one of the essential roles of an organisation is to identify strategies for preventing and managing crises (Fleming & Zhu, 2017). In 2009, the case organisation, PTT, had to deal with the H1N1 Pandemic, and developed a crisis management plan, which served as a precedent for the current pandemic. To improve our understanding of work practices put in place during the COVID-19 pandemic, it is necessary to identify the management practices involved in the workplace change development, as well as their impacts on employees' perceptions. In addition, no prior research has appraised employees'

feedback regarding the preparation and implementation of workplace change. This paper aims to explore an organisation's preparation plans and implementation process of workplace change, and to assess their impacts on employees' perceptions, and whether those employees have similar or different responses regarding the management practices in different stages of workplace change. The paper aims to answer the following questions:

Q1. How did PTT plan for and implement workplace change development during the COVID-19 pandemic?

Q2. What was the feedback from employees regarding the preparation and implementation of workplace change?

## RESEARCH METHODS

The research steps comprised a literature review, a field study, and a discussion to draw conclusions. The authors conducted a field study on a blue-chip organisation (PTT) that had implemented workplace change during the COVID-19 pandemic. Data collection involved a questionnaire survey, followed by a semi-structured interview with a facility manager. The 31-question survey addressed workplace management practices in three stages: planning before workplace change, implementation processes, and management after workplace change. Information on the organisation's context and crisis management during COVID-19 was collected from PTT's annual report (Petroleum Authority of Thailand [PTT], 2020). The first criterion for case selection was based on the management practices of the case organisation, covering all three stages of workplace change development (i.e., before, during, and after the change). The second criterion involved the physical characteristics of the case organisation, including location, building characteristics (i.e., single-tenant building), and workplace change characteristics (i.e., the workplace being adapted to respond to the COVID-19 pandemic). Implications aligned with the research objectives are expected to be drawn from these criteria.

The study used a case located in the city centre of Bangkok that was greatly impacted by the pandemic. The case company is PTT, previously

known as the Petroleum Authority of Thailand, which is one of the most profitable state-owned enterprises in Thailand (Table 1). Situated in central Bangkok, workplace practices at PTT's headquarters building were adapted due to the pandemic. Five departments comprising Corporate Social Responsibility, Strategic Corporate Reputation Planning, Green Awareness, the Office of the President, and Office of the Corporate Secretary, which occupied the space on the 4th floor of Building 1, were chosen for data collection.

## Survey Design and Administration

The questionnaire was used to investigate how satisfied employees were about workplace management practices in three stages:

- 1) preparation before workplace change:
- 2) implementation of workplace change:
- and
- 3) management after workplace change.

Responses to all questions were based on a one-to-five-point scale ("very dissatisfied", "dissatisfied", "neutral", "satisfied", and "very satisfied"). Satisfaction levels were then determined from the average scores. Findings from previous studies (Department of Disease Control [DDC], 2013; Department of Enterprise, Trade and Employment [DETE], 2020; Institute of Real Estate Management [IREM], 2020) were used as references to formulate the questions in the questionnaire survey and determine the satisfaction levels that correlated to the average scores. Furthermore, the questionnaire included questions to profile employees based on their positions and frequency of office space use.

The PTT coordinator disseminated the questionnaire online to 127 employees in the five departments that occupied the 4<sup>th</sup> floor office space. The questionnaire was anonymous, and was completed by 95 respondents between January and April 2021, representing a 75% response rate.

## Interview

To gather in-depth information and gain further insights into the case study, an interview was conducted with the facility manager, who was also the head of the workplace change project. The one-hour interview focused on the preparation for and implementation of workplace change, and aimed to answer the following questions:

- 1) What were the objectives of the workplace change?
- 2) How did the organisation prepare for the pandemic?
- 3) Which stakeholders were involved in the preparation for and implementation of the change, and what were their roles?

## Respondents' Profiles

The questionnaire respondents were classified into three groups: executives, managers, and employees. Table 2 shows that the majority of respondents were employees (85 people), of which 74 people occupied the workplace 1-2 days per week. In fact, most of the respondents (79 people) occupied the office 1-2 days per week, followed by 3-4 days per week (10 people), and more than 4 days per week (6 people).

## Workplace Before and After Change

Before the change, the office space was classified into three parts based on use: personal space, meeting rooms, and support space (Figure 1). The largest amount of floor space comprised personal space, which covered a total area of 736.5 square metres, and consisted of rectangular and L-shaped tables arranged in an open plan layout. To encourage communication among employees, there were no screens between workstations, but the interview findings indicate that this arrangement had a negative impact on employee privacy and concentration. Figure 1 displays the workspace layout of the 4th floor, including the work areas for each

department, meeting rooms, support spaces, and the elevator hall. Private offices for the managers are located in the corners of the building, providing external views. The team spaces are arranged into two meeting rooms, one with 16 seats and the other with 32 seats, each covering an area of 45 sq.m. The support space includes a pantry, a printing and photocopying space, and an office supply storage area, comprising a total area of 134.5 sq.m.

There was no change in the total area of the office space after the workplace change. The 4th floor office had a total of 116 workstations for

employees, and the spaces between the 74 L-shaped table workstations were more than one metre apart, which met the minimum physical distance policy requirement (World Health Organization [WHO], 2021); therefore, no adaptations to this layout were needed. However, the other 42 workstations were arranged less than one metre apart, and so required the addition of dividers between the working spaces (Figure 2).

Employees occupied the open-plan layout, with support spaces such as elevators, stairs, and restrooms located in the central area.

**Table 1**

*PTT Company Information*

<b>Company name</b>	PTT Public Company Limited
<b>City</b>	Bangkok, Thailand
<b>Date of establishment</b>	1978
<b>Total asset value - millions USD (2021)</b>	78,782.97
<b>Dimension</b>	Very large company
<b>Number of companies in the corporate group</b>	58
<b>Products and services</b>	Energy and petrochemical business

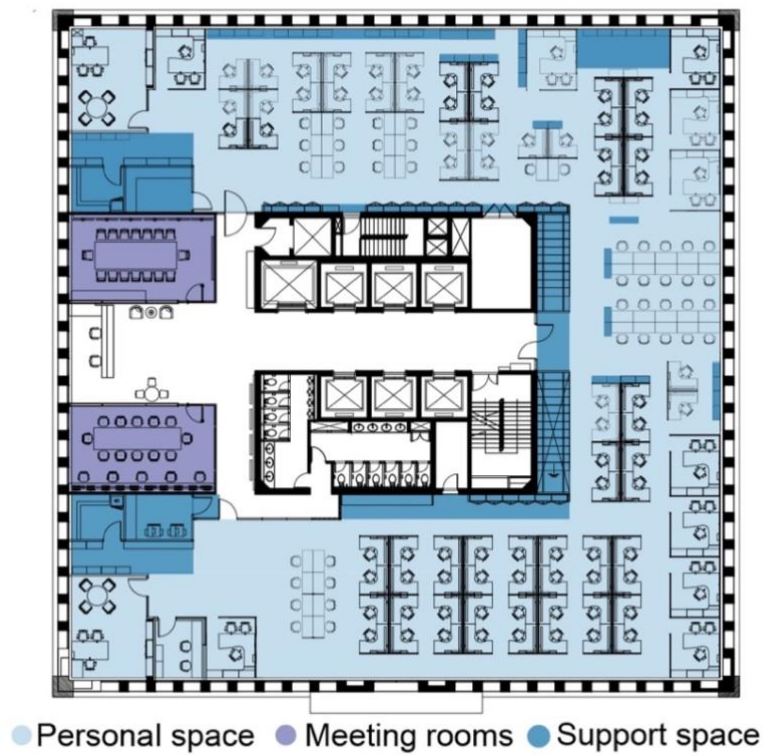
*Note.* Adapted from 56-1 *One Report 2020*, by Investor Relations, 2020 (<https://ptt.listedcompany.com/misc/one-report/20210315-ptt-one-report-2020-en.pdf>). Copyright 2020 by PTT Public Company Limited.

**Table 2**

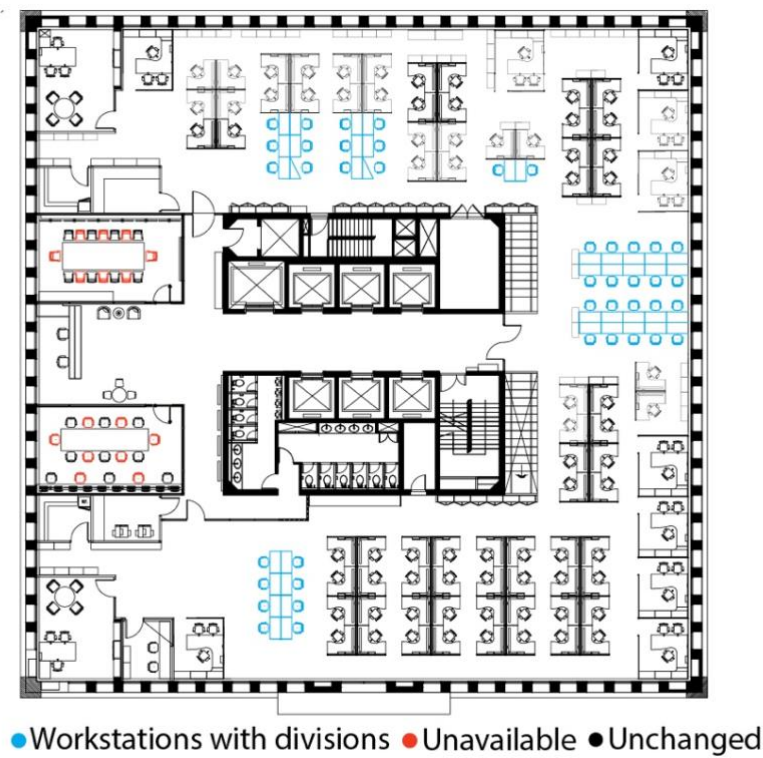
*Number of Respondents With Frequency of Occupying Office Classified by Position*

<b>Position</b>	<b>Number of Respondents with Frequency of Occupying Office</b>		
	<b>1-2 days/week</b>	<b>3-4 days/week</b>	<b>More than 4 days/week</b>
Executives	1	0	0
Managers	4	3	2
Employees	74	7	4
Total	79	10	6

**Figure 1**  
*Spatial Layout of the 4th Floor of Building 1*



**Figure 2**  
*Spatial Arrangement of Workspaces After Change*



## RESULTS AND DISCUSSION

This section summarises the descriptive statistics from the employee satisfaction survey, followed by a discussion of the three key time frames addressed by the case study:

- *employees' satisfaction with the planning before workplace change*
- *employees' satisfaction with the implementation process of workplace change*
- *employees' satisfaction with the management after workplace change*

### Planning Before Workplace Change

The findings reveal the percentage of respondents who were satisfied with the planning and management of building and facilities before the workplace change. Table 3 presents the average satisfaction ratings for various items, with most aspects receiving high appreciation

from the respondents. The top three aspects that received high satisfaction ratings were the crisis management plan (93% of respondents were satisfied or very satisfied), the announcement of rules and regulations regarding health and safety in the workplace (92%), and assessment of the impact on the PTT workplace (91%).

PTT engages in oil and gas exploration and production and was one of the top three most profitable state enterprises in 2019 (State Enterprise Policy Office [SEPO], 2021). To sustain business growth, the company must ensure the stability of its business processes through its strategic direction. Business continuity and crisis management are set at the strategic level to ensure the resiliency of the company's business operations. To this end, the PTT group formed the PTT Vital Centre to deal with the COVID-19 situation. In place are plans to prevent disruptions to site work through work scheduling, and by assigning critical personnel and backup team members, reserving second sites, and monitoring and modifying production plans. Workplace policies on security and safety include control of workplace occupancy regulations and notifications, and the provision of appropriate

**Table 3**

*Percentage of Satisfied Participants With Regard to Different Aspects Before Workplace Change (N = 95)*

Items	Satisfaction percentage
1. Crisis management plan	93
2. Assessment of impact on PTT workplace	91
3. Communication on COVID-19 pandemic prevention guidelines	84
4. The setup of pandemic crisis management team	83
5. Announcement of rules and regulations regarding health and safety in the workplace	92
6. Announcement of the assigned personnel involving the crisis management	83
7. Arrangement of time schedule regarding working in the office and working from home	82
8. Screening check before entering the building	83
9. Social distancing policy	84
10. Information and communication technology (ICT) policy regarding work from home solution	87



communication channels to all employees. The case study highlights how a proactive approach to crisis management involving facility planning and managing change of the workplace (i.e., workplace retrofitting) to deliver facility solutions supports both stakeholders and business needs. This approach aligns with the supply and demand dimension and CREM strategy of CRE alignment.

## Implementation Process

Table 4 presents the percentages of satisfied respondents regarding the implementation process of workplace changes. The respondents highly appreciated the direction, control, and decision-making of the team leader (84%), implementation of workplace adaptation (82%), selection and identification of team leaders (81%), coordination and communication between workers and their representatives (81%), and announcement of workplace adaptation process information (81%).

The high percentage of satisfied respondents (84%) regarding the direction, control, and decision-making of the team leader can be attributed to the hierarchical structure of PTT. The company's board had provided a clear strategic direction, which was then transformed into operational action plans that defined the

roles and responsibilities of the team leaders in implementing workplace changes. To enhance the efficiency of the implementation process, a facility manager acted as an integrator, breaking down strategic plans into manageable tasks and translating the company's policies and strategy into actionable steps. During the lockdown period, public measures such as physical distancing, workplace closure, and stay-at-home requirements impacted the company's operations. However, PTT closely monitored the situation and managed the associated risks by modifying its workplace. To ensure timely completion of the workplace modification, the organisation established a workplace change development team tasked with planning and implementation.

During the organisational change, the implementation of this top-down approach had a negative impact on employee engagement and involvement, as evidenced by the low percentage of satisfaction on this item (63%). Employee engagement refers to efforts to obtain feedback and ideas from employees, while employee involvement prioritises bringing employees into task forces, working groups, or focus groups (Carnall, 2007). Previous studies have shown that stakeholder involvement not only leads to a more comprehensive brief, but also increases stakeholder acceptance and commitment to the

**Table 4**

*Percentage of User Satisfaction With the Implementation Process of Workplace Change (N = 95)*

Items	Satisfaction percentage
1. Arrangement of meetings	80
2. Selection and identification of team leaders	81
3. Direction, control, and decision-making of team leader	84
4. Dissemination of information and public relations of team leader	78
5. Coordination and communication between workers and their representatives	81
6. Employee engagement (e.g., furniture selection, propose of ideas)	63
7. Communication channels to receive suggestion and information from employees	71
8. Announcement of workplace adaptation process information	81
9. Implementation of workplace adaptation	82

project (Van Meel & Størdal, 2017). Laframboise et al. (2003) argue that enabling occupants to influence the development of their future workspace is the key to winning their support and overcoming resistance to change. Regarding sustainability practices on a larger scale during the pandemic, Hartmann et al. (2022) emphasise that involving all stakeholders in the projects helps facilitate the transition towards a 'new normal' that is more circular and inclusive, encompassing larger communities in different geographical locations.

## Management After Workplace Change

Table 5 presents the percentages of satisfied respondents regarding the management of building and facilities after workplace change. Participants highly appreciated health, safety, and wellbeing after reinstatement (91%), preparation of support facilities (88%), readiness to reinstate after workplace adaptation (83%), providing instruction before occupying the workplace (78%), and size of individual workspace after workplace adaptation (77%).

The findings indicate that strategic facilities planning, such as the implementation of the PTT Vital Centre to improve employees' occupational health and safety during the COVID-19 pandemic, contributed to high satisfaction with health, safety, and wellbeing after reinstatement (91%) and the preparation of support facilities (88%). The specific objectives of workplace change were to comply with physical distancing policies and maintain lower workplace density to minimise the risk of virus transmission. In addition to occupational health and safety, the PTT Group remains focused on communicable diseases that may impact the health of staff and their family members. In 2009, the company was affected by the H1N1 influenza pandemic. At that time, PTT provided staff and their families with information, distributed face masks and hand-cleaning equipment, and conducted 5S activities (i.e., sort, straighten, shine, standardise, sustain) at its headquarters to promote flu prevention. The company also developed a flu management plan that included alarm systems and post-event procedures. As part of its crisis management protocols, PTT responded to the flu pandemic by following business continuity management

**Table 5**

*Percentage of Satisfied Participants With Regard to Different Aspects After Workplace Change (N = 95)*

Items	Satisfaction percentage
1. Readiness to reinstate after workplace adaptation	83
2. Health, safety, and wellbeing after reinstatement	91
3. Providing instruction before occupying the workplace	78
4. Training employees on how to use office space when returning to the workplace	61
5. The effectiveness in COVID-19 disease prevention (e.g., furniture and facilities)	76
6. Improving the workplace based on suggestions from employees	64
7. Collecting feedback after occupancy	71
8. Correction of problems after occupancy	67
9. Cooperation from staff involved in workplace adaptation	72
10. Size of individual workspace after workplace adaptation	77
11. Preparation of support facilities (e.g., laptop, internet connection)	88
12. Workplace concept after COVID-19 (e.g., Co-working space)	74

procedures, such as setting up a business crisis team, implementing a business impact analysis, and preparing a recovery plan. These protocols set precedents for similar crises, including the COVID-19 pandemic. For example, ICT and ICT supporting facilities for remote work were provided as part of the crisis management plan to reduce the risk of disease transmission.

The interview with the facility manager revealed that there was no employee involvement in setting up meetings or focus groups to collect feedback from employees after the workplace occupancy. This lack of involvement may explain the low satisfaction percentages for collecting feedback (71%) and implementing suggestions for workplace improvement (64%). Furthermore, training sessions for the use of the building and facilities were skipped due to pandemic restrictions on mass gatherings, which may have contributed to the lower satisfaction with this item (61%).

In terms of social development, collecting feedback from all stakeholders on workplace change policies, especially those involved in the closed-loop supply chains (e.g., cleaning staff) can contribute to the sustainability aspect of broader regional communities (Hartmann et al., 2022).

## CONCLUSIONS

Decisions on CRE of a large organisation greatly impact company success due to the high investment costs and the effect on employees performance. This paper discusses two main issues: how workplace change development is implemented, and what the responses of employees were to workplace management practices during the COVID-19 pandemic. Simple descriptive statistics were applied due to the small sample size of the study. Therefore, it is recommended that future studies require more robust statistical analysis with a larger sample size.

In the case of this company, PTT, crisis management is linked to the company's direction and management approach to planning and implementing workplace change development. This may be a shared condition with other large organisations that integrate crisis management

into their strategic planning (Ali, 2014). The study findings emphasise the importance of crisis leadership competencies (such as emergency preparedness, crisis communication, and leadership skills) that have been developed and utilised at both the strategic and tactical levels. Regarding CREM, strategic planning on crisis management involving facility planning and workplace change management reflects the supply and demand dimension and CREM strategy of CRE alignment. The study findings in light of employees' responses contributes to CREM/FM literature in that they reveal negative impacts of in several aspects caused by a lack of employee engagement and involvement during and after change.

Large organisations with a hierarchical structure benefit from a top-down approach that provides efficient organisation and dissemination of resources, as well as clear assignment of roles and responsibilities to subordinates on respective business units. However, creating communication channels with employees to receive feedback on workplace change that makes them feel like a part of the project reduces negative responses after the change. This evidence-based approach provides insight into how a large organisation can optimise its response to a crisis, and it contributes to FM and CREM research. The findings also emphasise the significance of this kind of study.

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