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From Identification to Practitioners' Assessment: Factors Influencing Corporate Real Estate Management Performance in Saudi Arabia

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ABSTRACT

Background and Aim. The performance of corporate real estate management (CREM) is a complex process involving the alignment of different resources and activities, meaning that it is influenced by different factors. Knowledge about these factors and their significance in practice remains under-researched. This paper aims to identify and assess the factors influencing the performance of CREM.

Methods and Data. An integrative approach of theory and practice was followed. First, the factors influencing the performance of CREM were inductively identified through a literature study. Second, a questionnaire was developed and conducted to deductively test the significance of the identified factors from the perspective of 33 CRE practitioners in the Eastern Province of Saudi Arabia, using the relative importance index as an assessment indicator.

Results. The literature study identified 33 factors and categorized them into four groups, namely: managerial affairs; physical and spatial aspects; economic and financial aspects; and the real estate market. The questionnaire results indicate that the availability of management plan(s) and strategy of the business, availability of a plan for facilities planning and management, the structural integrity of the properties, and the occupancy (supply and demand) indicators have been perceived as the most influential factors.

Originality. The paper contributes to bridging the gap between the theory and practice of CREM by defining the factors influencing the process, followed by empirical evidence of their significance.

Practical Implications. The results provide CRE practitioners with a knowledge base to enhance CREM.

Type of Paper. Full Research

KEYWORDS. built assets, corporate real estate management, CRE, property management, strategy.

INTRODUCTION

Corporate real estate (CRE) is a wide term used in corporations, referring to the real property held by public or private organizations (Oluwoye *et al*. 2001). Corporate real estate has grown in response to the concomitant changes of the industrial revolution in the 20th century, in which many firms (non-real estate firms) have begun constructing a huge number of accommodation buildings (Krumm 2001). It has also received momentum in the 21st century, following the financial crisis in 2008 (Glatte, 2021). CREM can be described as *"all property-related activities of a company whose core business is not real estate. CREM deals with the economic procurement, support, and utilization of the properties of production, trading, and service companies as part of their corporate strategy. The properties serve to carry out and support the core activities."*(Pfnür, 2014).

CREM concerns the management of buildings and parcels of land at the disposal of a private/public organization that is not mainly involved in the business of real estate (Bon 1992), also known as non-property organizations (Glatte, 2021). Hence, CREM comprises a wide range of managerial activities pertaining to portfolios, spaces, buildings, and land holdings, including planning and management of investment, planning and management of financial affairs, planning and management of construction, and planning and management of facilities (Bon 1998). It has evolved to involve the strategic alignment of these processes and resources in a manner contributing to the organizational effectiveness and efficiency (Wijnja et al., 2021). However, several factors affect the CREM in terms of the asset management in an adverse as well as a positive manner (Veale 1989). Thus, the performance of CREM needs to be comprehended, measured as well as assessed in any organization involved in the real estate business, to achieve the success of the organizational goal (Bon et al. 1994).

Measuring and assessing the corporate real estate performance conceptually refers to the linkage between the strategic goal and the operational status of the real estate in an organization (Nourse 1994). The key goal of measuring the performance of real estate is to assess the progress of the real estate function compared to the main business objectives desired to be achieved (Varcoe 2002). However, several measurement techniques are used to measure the CREM performance, where the perfect techniques would have higher potential in terms of realizing the strategic goals of the business in an organization (Jordan et al. 2009).

However, the performance of the CREM is influenced by several factors from different aspects (Pittman and Parker 1989). Based on a review of relevant literature on CRE and real estate management (REM), we found that few studies have focused on the investigation of the factors that influence the performance of CRE and CREM in a comprehensive manner. Consequently, the goal of this paper is to investigate the factors that influence the performance of CREM and their significance from the perspective of practitioners.

This paper is a literature- and questionnaire-based study. It aims to answer the following research question: What are the factors that influence corporate real estate management performance, and what is their significance in practice? The involved sample is practitioners of CREM in the Dammam Metropolitan Area in the Eastern Province of Saudi Arabia. The development of the survey was based on a literature review as well as pilot testing by local experts. The relative importance index (RII) was the statistical technique used in analyzzing the obtained data from the survey.

RESEARCH METHODOLOGY

The research methodology followed in this paper used literature review and a questionnaire, respectively, as research methods and comprised the following six activities:

1) Review published literature relevant to corporate real estate (CRE) and real estate management (REM) to identify factors affecting the performance of corporate real estate management
2) Develop a questionnaire to assess the factors affecting CREM performance in Saudi Arabia.
3) Conduct a pilot study with local CREM practitioners to validate the questionnaire readability.
4) Distribute the developed questionnaire to different practitioners of CREM in the Dammam Metropolitan Area, Saudi Arabia. To obtain valid and relevant responses, the respondents were selected based on purposive sampling – a non-probability sampling technique used to involve respondents associated with a certain domain and knowledge (Rahman, 2023; Tongco, 2007).
5) Analyse the data received by calculating the relative importance index (RII), then rank the factors in ascending order based on their RII.

The questionnaire was adopted as the primary empirical research method in this paper. It was developed to assess identified factors from the reviewed literature. The survey was both paper-based and online. It was distributed between 2019 and 2023. As purposive sampling was used – a non-probability sampling technique involving respondents associated with a certain domain and knowledge (Rahman, 2023; Tongco, 2007), the questionnaire was distributed among different practitioners managing and operating organizational real estate (CRE). We did not limit our respondents to a specific organizational context, as the focus was on CREM performance as a theme of interest. We also approached respondents from the Dammam Metropolitan Area because of our connections with a wide range of CREM professionals.

The developed survey was divided into three sections: Section A – General Information, Section B – Evaluation Sheet, and Section C – Additional Remarks. Section A was the introductory section. It consisted of two parts: a summary and personal information. The summary section includes a brief overview of the study and its purpose. The personal information section covered demographic questions about the personal profile of the respondents, including name, organization, organization address, job title (position), and number of years' experience with corporate real estate management.

Section B covered an assessment sheet of the identified factors. The factors were sorted in a tabulated format, where the respondents were asked to indicate the importance rate of each factor using a 5-point Likert scale evaluation scheme, namely "Extremely Important", "Very Important", "Important", "Somewhat Important", and "Not Important". Section C was an optional section. It was provided to enable the respondents to add any comments based on their professional experiences.

The relative importance index (RII) was the statistical technique used to analyse the findings of the received responses, due to its provision of a quantified weighted indicator leveraging multiple responses to Likert-scale questions (Holt 2014). It was calculated to determine the significance rate of each factor in terms of its influence on the performance of corporate real estate management. RII was calculated with the help of Microsoft Excel (365), by applying the following equation (Dominowski 1980):

$$\text{Relative Importance Index (RII)} = \frac{\sum_{i=0}^{4} (a_i)(X_i)}{(4\sum X_i)} \times 100$$

Where:

i: Response category index where i = 0,1,2,3,4
ai: Weight given to i response where i = 0,1,2,3,4
xi: is the variable expressing the frequency of i

All importance levels have been given a specific variable expressing the frequency (xi) that indicates their level of significance. Similarly, a specific weight (ai) for each importance level was given. To have an interpretative qualitative description of the RII calculated, each importance level was given a particular class width (importance rate). Table 1 demonstrates the adopted variables expressing the frequency, weights, and importance rates for all importance levels. Based on the received RIIs, the factors were ranked from most to least important to show the perceived significance.

Table 1 Adopted variables expressing the frequency, weights, and importance rates

Importance Level	Variables Expressing Frequency (xi)	Weight (ai)	Importance Rate
"Extremely Important"	x0	4	87.5 - 100%
"Very Important"	x1	3	62.5 -< 87.5%
"Important"	x2	2	37.5 -< 62.5%
"Somewhat Important"	x3	1	12.5 -< 37.5%
"Not Important"	x4	0	0 -< 12.5 %

LITERATURE STUDY

A generic literature study was conducted to identify and categorize the factors affecting the performance of CREM. It is worth noting that the process of obtaining the literature sources was not systematic, but rather theme-specific, focusing on a broad range of publications related to CRE, CREM, CRE performance, and the management of organizational real estate. The reviewed sources include books, peer-reviewed articles, and theses. Some of the books were already available. Google Scholar was used to obtain the digital sources, using the terms "corporate real estate", "corporate real estate management", and "corporate real estate performance". The factors were iteratively identified during the review process and grouped under four categories, namely: "factors related to managerial affairs", "factors related to physical and spatial aspects", "factors related to economic and financial aspects", and "factors related to the real estate market".

Based on this literature study, we identified 33 factors that can influence the CREM performance. We grouped them into four groups – related to managerial affairs, physical and spatial aspects, economic and financial aspects, and the real estate market – to comprehensively consider the interrelated aspects relevant to processes, built assets, and the property market on different levels.

Factors related to managerial affairs

These factors affect CREM performance from an administrative angle. Nine factors were identified:

1) Clarity of the identified goal(s) of the real estate business: Clear identification of the organization's real estate goals is essential for CREM (Pittman and Parker 1989). Goals must align with overall organizational strategy (Bon et al. 1994). CRE may serve either investment or operational objectives (Edwards and Ellison 2009). These goals can change during the holding period (Downs Jr. 1980). Thus, real estate goals should be strategically defined and tracked.

2) Availability of management plan(s) and strategy of the business: Strategic management enhances real estate business performance (Edwards and Ellison 2009). Management plans guide property supervision in physical and financial terms (Downs Jr. 1980), covering portfolios, land, construction, and facilities (Bon 1994; Musa and Baharum 2012). A strategic approach improves effectiveness (Ridzuan 2012), while advanced tools enhance planning (Fayomi 2023). Thus, a management plan coordinating activities is vital for portfolio performance.

3) Computerized inventory of all properties and assets: A digital inventory strongly influences CREM performance (Pittman and Parker 1989). Technology enhances asset management (Roberts et al. 2018), making computerized property data a critical factor.

4) Availability of a plan for facilities planning and management: The subject of facilities management (FM) has a direct connection with REM. Many professional organizations concerned with FM have developed models and tools aligning the FM processes with the property operation, because of the added value by such alignment (Ebinger and Madritsch 2012). This can be attributed to the potential role of FM in improving productivity by facilitating the provision of spaces accommodating organizational activities (Jensen and Voordt 2021).

5) Encouraging and rewarding personnel for excellence and achievement: Human resources are one of the key components that shall be considered in the CREM (Oluwoye et al. 2001). Having a motivation to personnel's excellence and achievements – realized by improving the knowledge and skills through the education and training programs – is considered a factor that could enhance the performance of CREM (Pittman and Parker 1989). This also can include providing an aligned workplace supporting the employees' well-being, behaviors, and their human-related needs (Wäistö et al. 2024).

6) Availability of well-defined performance measurements used for the assessment of the real estate business: Well-defined performance measures help assess CREM (Pittman and Parker 1989). Several systems exist (Jordan et al. 2009), and organizational models include CREM functions (Hartmann et al. 2010). Measures compare performance with objectives (Varcoe 2002), requiring data such as revenue, rent, value, costs, and yields (Edwards and Ellison 2009).

7) Availability of a record of estimated prices of all properties and assets: Despite the direct influence of the availability of the computerized inventory of all properties and assets on the performance of CREM, the market values of these properties are also considered an important factor in the CREM (Pittman and Parker 1989). Value and size of assets are factors affecting the performance of the CREM in terms of asset management (Kaluthanthri 2014).

8) Availability of regional data and statistics about the economic and demographic trends: Understanding the economic regional context and its impact on the business is important for strategic property management (Edwards and Ellison 2009). Information about property prices, occupancy levels, and population trends is important for property planning and management.

9) Maintenance and renovation: Managing maintenance and remodeling activities is within the scope of work of the property managers (Downs Jr. 1980). From the perspective of corporate real estate, the increase in complexity as well as the number of real properties held by an organization increases the need to maintain and operate these properties in a proper way (Krumm 2001). The maintenance of built assets is also one of the concerns of CREM practitioners, because of its vital role in keeping portray performing in line with the desired performance (Bon et al. 1994). Thus, FM can be an effective means to add value to the built assets by providing services for maintaining property operation (Jensen and Voordt 2020).

Factors related to physical and spatial aspects

These factors concern property attributes and location. Eight factors were identified:

1) Location of properties: Location is one of the most important factors in real estate, as it represents the principle of land (Downs Jr. 1980). Selecting the location of a property is crucial as it impacts its performance (Rymarzak and Sieminska 2012). Corporations owning properties in suitable locations can generate profits in case of a recession (Krumm 2001).

2) Relation between the properties and the surroundings: Despite the importance of the location of properties in real estate management, the relation between properties and the surrounding environments is an important factor (Downs Jr. 1980). Numerous aspects fall under this factor, including neighbourhood boundaries, land use, and building design (Edwards and Ellison 2009).

3) Ownership status of properties: Ownership of properties is considered one of the concerns that needs to be looked into in the domain of CRE, as it can influence the value of corporations; in many situations, it can be a risk to a corporation's financial affairs (Graham et al. 2014).

4) Structural integrity of the properties: Survey and evaluation of the physical structure of buildings are principal factors in the planning of CREM (Edwards and Ellison 2009). Further, maintaining the physical condition of these built assets in a safe manner to protect their users is one of the key responsibilities in the profession of real estate management (Downs Jr. 1980).

5) Age of properties: In addition to the survey of the physical condition of properties, information about the age (or what is known as the physical life) of buildings is an important determinant in CREM (Edwards and Ellison 2009). In fact, the age of a property influences its management plan, as the age can affect the desirability and attractiveness of the built assts (Downs Jr. 1980). Property age is also a factor that has other influences on the property management in terms of operational performance, such as energy consumption (Surmann et al. 2016).

6) Design and layout of properties: Design of properties is also a factor that influences the management plan of property in terms of its attraction as well as desirability (Downs Jr. 1980; Assaf et al. 2010). Different aspects are considered under this factor, including boundaries, site, and size of the property (Edwards and Ellison 2009). For instance, the layout of the workplace plays a pivotal role in productivity and knowledge exchange; therefore, CREM practitioners should take design aspects into consideration (Appel-Meulenbroek et al, 2013).

7) Services and amenities offered within properties: Services and amenities, such as equipment, MEP systems, offered within a property play a role in the value of properties (Downs Jr. 1980; Halvitigala and Reed 2015). For instance, previous research has revealed that ICT services can play a key role in adding value to an organizational workplace due to their potential to enhance workers' productivity (van der Voordt and Jensen, 2021).

8) Vacancy level of properties: The vacancy level (also known as vacancy ratio) is one of the operational measures that can be used to identify the performance of CREM (Varcoe 2002). It is one of the determinants in the law of supply and demand applied in the real property profession. It refers to the percentage of the unoccupied property units (Downs Jr. 1980). Moreover, it can affect the selection of property location (Rymarzak and Sieminska 2012).

Factors related to economic and financial aspects

These factors relate to financial conditions at the micro and macro levels. Nine factors were identified:

1) *Economic inflation:* Inflation refers to the relationship between money and goods, where it occurs when the money supply increases against the goods (Downs Jr. 1980). Increases in real estate prices are generally in line with the inflation trend in other markets (Li *et al*. 2009). Property developers should be aware of this factor and its influence on the market (Nazer 2016).

2) *Economic deflation:* Deflation also refers to the relationship between money and goods, but it occurs when the quantity of the money supply declines in relation to the goods (Downs Jr. 1980). Deflation impacts the prices of many markets, including commodity and real estate markets, as the prices of these markets decrease during deflationary periods (Pederson 1999).

3) *Organizational budget:* The budget of a corporation trading in the real estate market is an indicator that can be used to measure the performance of CREM (Bon 1992). Assessing the budget of an organization is a basic task in the CREM, representing a determinant that describes the financial performance of the organization (Jordan *et al*. 2009). Several variables affect this factor, including the expenses of real estate projects and operations (Varcoe 2002).

4) Revenues from real estate investments: Revenue from CRE is among the key considerations used for the strategic planning of the CREM, as well as for measuring the performance of CREM (Jordan *et al*. 2009). In fact, one of the purposes of CRE is to increase the profits of a corporation from property investments (Kaluthanthri 2014).

5) Volume of organizational loans: Volume of loans taken by the organization for the acquisition or development of lands and built assets is one of the competitiveness factors that influence the real estate market (Li *et al*. 2009). The ease of access to loans can affect the investment as well as the performance of commercial real estate (Abel O. and Deborah O. 2016).

6) Purchasing power of people: Purchasing power of people is an important determinant to be explored in the profession of property management, due to its impact on the tone of the real estate market (Downs Jr. 1980). The purchasing power of people influences the performance of the real estate economy, in terms of its impact on the supply and demand trends (Rajwayi 2016). Many corporations consider this during the selection of a property location, due to its direct bearing on their customers' liquidity (Rymarzak and Sieminska 2012).

7) Economic value of properties owned by the organization: The market value of the properties is seen as a factor that influences the performance of real estate (Pittman and Parker 1989). It is an important factor that needs to be determined for all properties, so that the identification of whether a property is overpriced or not can be determined. It supports the decision-making of whether to sell or hold a property (Rajwayi 2016).

8) Financial liquidity of the organization: Liquidity of corporations is one of the main influences on their decision-making to move forward with investing in a project, service, or partnership (Kaksonen 2014). The decision of owning or leasing a real property is often based on the liquidity of the corporation, in which the maximization of the liquidity is considered a criterion for that decision (Hartmann *et al*. 2007). This factor varies from one situation to another, and it mostly constitutes a problem for small businesses (Graham *et al*. 2014).

9) *Prices of the energy market:* The real estate market is a market within a set of markets that impact the property market, and thus, property managers must be aware of and consider the impact of these markets (Downs Jr. 1980). The national economy is a mix of several markets, in which the real estate market is directly influenced by them (Liow and Angela 2017). Thus, the real estate market could grow in response to the development of other markets. For instance, the oil market has contributed to rapid urbanization and development in the Saudi real estate market during the 1970s (Opoku and Abdul-Muhmin 2010).

Factors related to the real estate market

These factors concern market dynamics and competition. Seven factors were identified:

1) Occupancy (supply and demand) in the real estate market: The occupancy of real estate is in line with the law of supply and demand dynamics, similar to what occurs in other commodity markets. The total number of units available is known as "supply", while the number of tenants or buyers able to pay for these units is known as "demand" (Downs Jr. 1980). Both supply and demand are influenced by the economy, land availability, and other aspects (Rajwayi 2016).

2) Ranges of real estate prices: Rates of real estate prices are one of the factors that have a direct bearing on the real estate market, influenced by the occupancy (Downs Jr. 1980). The rental value influences property investments (Abel O. and Deborah O. 2016). Accordingly, understanding market prices is one of the basic functions of CREM (Edwards and Ellison 2009).

3) Construction activities: From a macroscale perspective, the volume of construction activities is considered one of the factors that affect the real estate market (Downs Jr. 1980). However, the rapid increase in construction is not always a positive indication, as it might indicate a huge amount of debt taken on by developers (Pederson 1999). From a corporate perspective, construction activities are one of the concerns of CREM and so costs and types of projects need to be taken into account (Elofsson and Lindstedt 2012).

4) Amount of rents delinquent to be paid by tenants: The dynamic of the real estate market is a cycle of prosperity and recession. The recession occurs in response to several factors, but when it occurs, delinquency of rental payments and vacancy levels increase (Downs Jr. 1980). This can also result in unpaid rents by tenants (Abel O. and Deborah O. 2016).

5) Volume of filed suits in the court due to unpaid rents or deposits: The number of eviction suits raised in local courts is one of the considerations that the property manager shall consider in their management plan (Downs Jr. 1980). In this regard, property and corporate managers shall also be aware of the legal applications and property rights (Edwards and Ellison 2009).

6) Relationship status between users and the organization: Understanding the users' characteristics, including tenants, is one of the responsibilities that need to be comprehended for a strategic CREM (Edwards and Ellison 2009). A sound relationship needs to be maintained between the property manager and the tenant in order to avoid the occurrence of any problems and dissatisfaction between both parties (Downs Jr. 1980). This can help in providing a suitable built environment in a satisfactory manner, which can contribute to enhancing the value of the investment portfolio (Holfert and Villamide 2011; Halvitigala and Reed 2015).

7) Innovations and advancements in other commodity markets: Recall that the real estate market is a market within a set of other markets. Other markets, such as the telecommunications and commodity markets, are always developing sectors where their innovations can contribute to adding value to CRE (Musa and Baharum 2012; Holfert and Villamide 2011).

In summary, Figure 1 summarizes the above-defined factors from our literature study. These factors were used in the questionnaire to assess their significance in practice, from the perspective of practitioners.

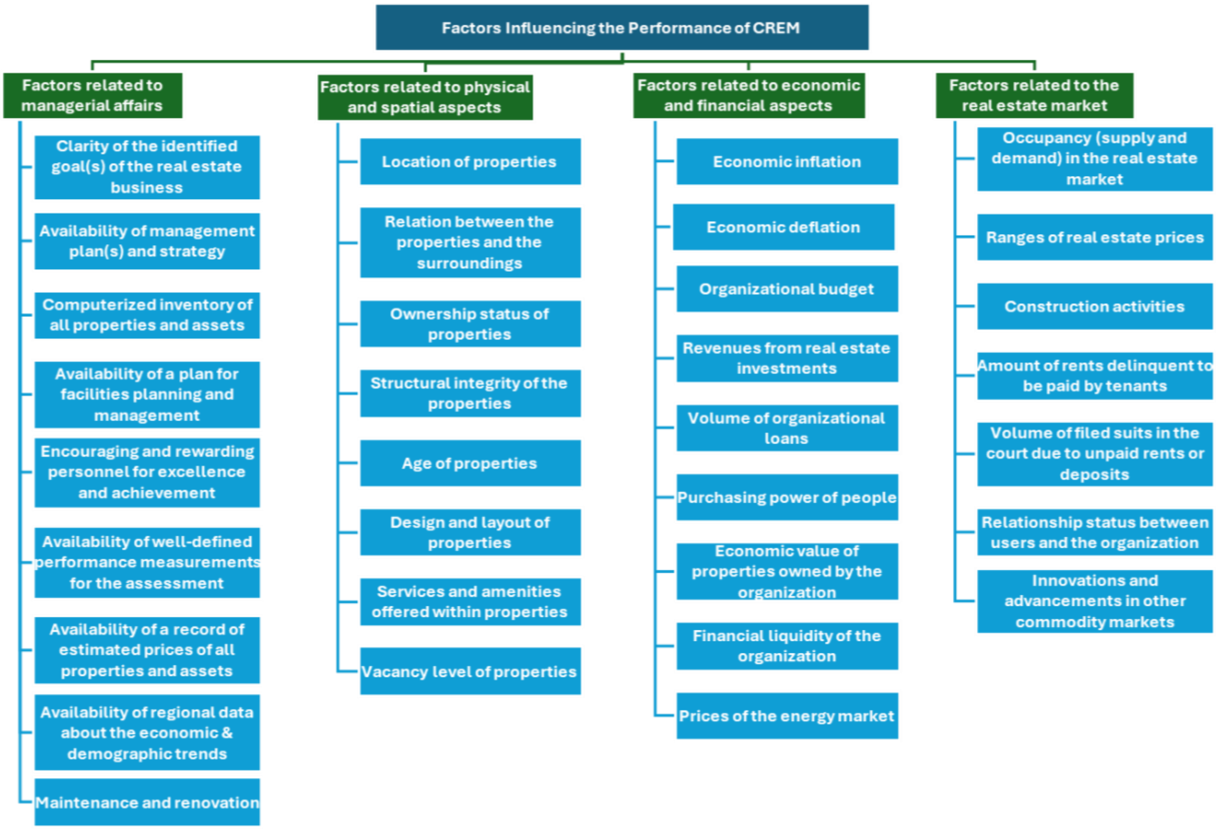

Figure 1 An overview of the identified factors influencing the performance of CREM. Source: Authors' own work

RESULTS

The questionnaire was distributed randomly among 35 practitioners of CREM in the Dammam Metropolitan Area. Due to an extensive follow-up, 33 samples were received and analyzed. Table 2 presents the profile of respondents.

Table 2 Profile of professionals involved in the survey

Category	Frequency	Percentage
Respondent position		
Property manager	6	18.2%
Chief executive officer (CEO)	1	3.0%
Facilities manager	10	30.3%
Financial manager	2	6.1%
Cost control engineer	0	0.0%
Other	14	42.4%
Total	**33**	**100%**
Years of experience		
Less than 5 years	4	12.1%
5 to 10 years	11	33.3%
10 to 20 years	15	45.5%
Over 20 years	3	9.1%
Total	**33**	**100%**
Types of projects practiced by respondents (multiple answers)		
Apartment Buildings	27	81.8%
Single Houses (Villas)	26	78.8%
Shops	20	60.6%
Office Buildings	21	63.6%
Commercial Centers/ Malls	5	15.2%
Other	6	18.2%

Table 3 illustrates the overall responses to the factors' assessment. Overall, the calculation of the average of RII values indicates that all categories are 'Very Important', confirming the significance of the four groups of factors and their direct impact on CREM performance.

Table 3 Overall responses to the assessment of the factors influencing the performance of CREM

Factors Influencing the Performance of Corporate Real Estate Management	Importance Level					Total	RII (%)	Rank	Importance rate
	Extremely Important	Very Important	Important	Somewhat Important	Not Important				
Factors related to managerial affairs							**80.2%**	**1**	**VI**
Clarity of the identified goal(s) of the real estate business	17	11	5	0	0	33	84.1%	4	VI
Availability of management plan(s) and strategy of the business	19	14	0	0	0	33	89.4%	1	EI
Computerized inventory of all properties and assets	15	12	4	1	1	33	79.5%	8	VI
Availability of a plan for facilities planning and management	18	12	3	0	0	33	86.4%	3	VI
Encouraging and rewarding personnel for excellence and achievement	14	15	4	0	0	33	82.6%	5	VI
Availability of well-defined performance measurements used for the assessment of the real estate business	13	15	5	0	0	33	81.1%	6	VI
Availability of a record of estimated prices of all properties and assets	9	13	9	2	0	33	72.0%	13	VI
Availability of regional data and statistics about the economic and demographic trends	7	10	12	3	1	33	64.4%	18	VI
Maintenance and renovation	17	10	5	1	0	33	82.6%	5	VI
Factors related to physical and spatial aspects							**77.2%**	**2**	**VI**
Location of properties	16	14	2	1	0	33	84.1%	4	VI
Relation between the properties and the surroundings	11	13	7	2	0	33	75.0%	10	VI
Ownership status of properties	10	10	8	3	2	33	67.4%	16	VI
Structural integrity of the properties	21	8	4	0	0	33	87.9%	2	EI
Age of properties	10	12	10	1	0	33	73.5%	12	VI
Design and layout of properties	18	6	6	3	0	33	79.5%	8	VI
Services and amenities offered within properties	16	11	4	2	0	33	81.1%	6	VI
Vacancy level of properties	10	10	8	5	0	33	68.9%	15	VI
Factors related to economic and financial aspects							**72.9%**	**3**	**VI**
Economic inflation	12	13	6	2	0	33	76.5%	9	VI
Economic deflation	12	11	7	3	0	33	74.2%	11	VI
Organizational budget	9	15	7	2	0	33	73.5%	12	VI
Revenues from real estate investments	12	18	1	2	0	33	80.3%	7	VI
Volume of organizational loans	8	11	9	4	1	33	65.9%	17	VI
Purchasing power of people	17	9	7	0	0	33	82.6%	5	VI
Economic value of properties owned by the organization	8	12	9	3	1	33	67.4%	16	VI
Financial liquidity of the organization	15	11	6	0	1	33	79.5%	8	VI
Prices of the energy market	5	6	16	4	2	33	56.1%	20	I
Factors related to the Real Estate Market							**70.5%**	**4**	**VI**
Occupancy (supply and demand) in the real estate market	19	11	2	1	0	33	86.4%	3	VI
Ranges of real estate prices	9	18	5	1	0	33	76.5%	9	VI
Construction activities	4	18	8	3	0	33	67.4%	16	VI
Amount of rents delinquent to be paid by tenants	9	15	6	1	2	33	71.2%	14	VI
Volume of filed suits in the court due to unpaid rents or deposits	10	6	11	3	3	33	62.9%	19	VI
Relationship status between users and the organization	14	9	7	1	2	33	74.2%	11	VI
Innovations and advancements in other commodity markets	5	8	11	6	3	33	54.5%	21	I

Factors related to managerial affairs

Under this category, "availability of management plan(s) and strategy of the business," is the most important factor influencing CREM. It received an importance rate of 'Extremely Important', with the first rank among all factors. However, the other eight factors received an importance level of 'Very Impartment'. The second two important factors in this category are the availability of a plan for facilities planning and management, and clarity of the identified goal(s) of the real estate business.

Factors related to physical and spatial aspects

The results show that "structural integrity of the properties" is the most significant factor influencing CREM. It received an importance rate of 'Extremely Important', with the first rank among all factors. The other seven factors received an importance level of 'Very Impartment'. The second two important factors in this category are "location of properties" and "services and amenities offered within properties", respectively.

Factors related to economic and financial aspects

Under this category, eight factors received an importance rate of 'Very Important', namely "economic inflation", "economic deflation", "organizational budget", "revenues from real estate investments", "volume of organizational loans", "purchasing power of people", "economic value of properties owned by the organization", and "financial liquidity of the organization". One factor, "prices of the energy market," received an importance rate of "Important". Based on the RII of the eight very important factors, "purchasing power of people", "revenues from real estate investments", and "financial liquidity of the organization" are the most influential economic factors on CREM performance.

Factors related to the real estate market

Under this category, only one factor received an importance rate of 'Important', "innovations and advancements in other commodity markets". The other six factors received an importance rate of 'Very Important'. Out of these factors, "occupancy (supply and demand) of the real estate market", "ranges of real estate prices", and "relationship status between users and the organization" are the most influential market-related factors on the CREM performance

DISCUSSION AND CONCLUSION

CREM deals with the management of organizational properties. Several factors influence the performance of CREM. This paper focuses on the definition and assessment of these factors.

The methodology followed in this paper is twofold. First, a literature review was conducted to identify the factors inductively. Second, a 5-point Likert scale questionnaire was conducted to deductively assess the significance of the identified factors, using the RII as an indicator.

Thirty-three factors were identified and classified under four categories, namely: (1) managerial affairs, (2) physical and spatial aspects, (3) economic and financial aspects, and (4) real estate market. The results pointed out that these groups have been rated "very important, confirming their importance and influence in practice. Regarding the factors' assessment, the findings indicate that the availability of management plan(s) and strategy of the business, availability of a plan for facilities planning and management, the structural integrity of the properties, and the occupancy indicators have been perceived as the most influential factors on the CREM performance. Accordingly, this study calls scholars and practitioners to adopt and incorporate a multidimensional paradigm into the CREM practices to contribute to enhancing its performance.

Reflecting on the responses, the observations from this study are context-specific, limited to a geographical area – Dammam Metropolitan Area. Yet, these observations are relevant to other contexts, as the respondents to the questionnaire are practitioners who have been involved in CREM. Thus, the results of this paper are not generalizable; they ultimately set the stage for future research and practice by virtue of bringing together theoretical insights from the literature and empirical observations from practice.

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