From Learning to Effectiveness: The Strategic Value of Knowledge Management in the Real Estate Sector

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Abstract

In a context marked by increasing competition and digital transformation, real estate firms in Ciudad Juárez face the challenge of enhancing their organizational effectiveness. This study aims to examine the relationship between learning orientation, knowledge management, and organizational effectiveness, while also assessing the moderating role of knowledge management within this relationship. A quantitative, non-experimental, cross-sectional, and correlational design guided the research. The sample included 235 real estate agents. Validated instruments supported the data collection, and structural equation modeling using partial least squares (PLS-SEM) enabled the analysis. Findings revealed a strong, positive, and statistically significant impact of knowledge management on organizational effectiveness. Additionally, learning orientation significantly influenced knowledge management, although it did not directly affect organizational effectiveness. Nevertheless, the results confirmed a meaningful indirect effect mediated by knowledge management. The study concludes that organizational effectiveness in the real estate sector largely hinges on the systematic management of knowledge. Promoting a learning-oriented culture and translating it into effective knowledge management practices strengthens both the competitiveness and sustainability of real estate firms.

Keywords: Knowledge management, learning orientation, organizational effectiveness, real estate firms.

Introduction

Organizations constantly confront challenges in their pursuit of process improvement, enhanced effectiveness, and the delivery of high-quality services to clients. Real estate firms remain no exception to this reality, particularly when considering the dynamic nature and specific conditions inherent to each property market.

Real estate markets—and, by extension, the firms operating within them—play a pivotal role in both regional and global economies. These firms not only address the basic human need for housing, but also facilitate economic activity (Biletskyi, 2022) and serve as instruments for implementing public policy, shaping urban planning and local development (Biletskyi, 2022). Their operations connect with both direct and indirect employment (Puttaraska & Phoopatpon, 2020) and reflect broader economic conditions, functioning as indicators of regional economic health (Liubarskaia & Glazkov, 2023). In many countries, real estate market value even surpasses financial market capitalization, positioning the sector as a major source of economic wealth (Tymieniecka-Cichoń, 2019).

In the Mexican context, estimates suggest over 80,000 real estate agents and more than 320,000 individuals work in the sector (Alamilla, 2019; INEGI, 2021; Tapia Ramírez, 2020), generating revenues exceeding 7.9 billion pesos and contributing 11.1% to the national gross domestic product (Takahashi, 2021).

Despite the sector's global relevance, real estate markets exhibit strong regional variation influenced by local factors such as GDP, economic policy, and geographic characteristics (Brzezicka et al., 2019). Consequently, real estate agents must develop comprehensive knowledge of market values and master the processes of gathering, analyzing, and using information to properly identify and commercialize real estate for prospective buyers (Ferreira et al., 2017). The lack of reliable information becomes especially critical given that agents primarily earn income through sales commissions (Puttaraska & Phoopatpon, 2020). Alamilla (2019) estimates commissions ranging from 4% to 5% in transactions between private parties and approximately 3% when developers participate in the negotiation.

Therefore, organizational effectiveness remains essential in real estate firms. Agents must consistently deliver quality and efficient services by leveraging sound knowledge of real estate markets, thereby enhancing the firm's competitiveness (Ferreira et al., 2017), which, in turn, translates into financial benefits for both the business and its agents. However, certain limitations hinder agent performance and effectiveness—namely, the lack of training, market knowledge, and systematic client information management (Alamilla, 2019; Hernando, 2022).

Enhancing real estate firms may depend on their organizational capabilities to improve agent performance. These capabilities enable firms to deploy tangible and intangible resources more effectively, thus improving outcomes (Rehman et al., 2019). Hakala (2011) identifies strategic orientations as a subset of organizational capabilities, reflected through the behavior of members and the firm's performance. Among these orientations, learning orientation refers to the firm's intent to create and leverage knowledge in pursuit of competitive advantage (Baker & Sinkula, 1999). Another concept frequently discussed in organizational literature as a mechanism to boost effectiveness, improve performance, and build competitive advantage is knowledge management (Kusa et al., 2024), which emphasizes communication, collaboration, and continuous learning.

This article seeks to examine the relationship among learning orientation, knowledge management, and organizational effectiveness, with a specific focus on understanding how the first two influence the third within the real estate sector of Ciudad Juárez, Mexico.

By focusing this analysis on real estate firms, the study introduces a novel perspective to the sector. Existing scientific literature tends to explore real estate from financial and investment standpoints (Haran et al., 2021; Hongxia & Yuting, 2021; Wijburg et al., 2018), property ownership (Seger, 2021; Stokłosa, 2023), regulatory adaptation (Hoesli et al., 2020; Ploessl et al., 2021), market analysis (López-Morales & Orzco, 2019; Robertson & Rogers, 2017; Stelk & Zumpano, 2017), or social issues linked to the housing market (Fernández, 2017; Hernández, 2017). Therefore, analyzing real estate firms through the lens of organizational studies contributes an innovative academic approach.

This study aims to deliver insights of practical value to real estate businesses, enabling the design of more informed organizational strategies. It also contributes to the literature on organizational effectiveness, knowledge management, and strategic orientations, while offering an organizational lens through which to study the real estate sector. The remainder of this paper begins with a literature review and the development of specific hypotheses, culminating in a structural equation model based on PLS. It then presents the research methodology, discusses the results, and concludes by outlining the study's contributions and limitations.

The Real Estate Sector

Previous studies have established the real estate sector as a cornerstone of regional economies, as it drives both direct and indirect employment, attracts investment, and fosters urban development (Díaz-Kovalenko et al., 2023; Marín Apolo et al., 2023; Ochoa Vásquez & Nagua, 2024). Additionally, the World Economic Forum (2024) recognizes the sector's dual function in meeting basic housing needs and creating as well as preserving wealth.

In Mexico, government data (n.d.) recorded 50,981 registered real estate companies by the end of 2024. During the fourth quarter of the same year, the sector contributed 2.94 trillion pesos to the national gross domestic product (GDP), reflecting a 1.75% increase compared to the previous quarter. Moreover, housing demand in the country exceeds 450,000 units per year, including both new and used properties (Tinsa, 2024). According to Funds Society (2024), projected investment in the sector for 2025 surpasses 650 million pesos, with an annual growth rate above 15%, driven by demand in residential, industrial, and hospitality segments.

In the state of Chihuahua, the sector holds comparable importance, having contributed approximately 4% to the state's GDP (Gobierno del Estado de Chihuahua, 2019). By 2025, forecasts anticipate a 46% increase in demand and construction of vertical housing (Garces, 2025). Ciudad Juárez, in particular, stands out as a city of high economic and social relevance due to its geographic proximity to the United States. The city has witnessed significant growth in real estate activity, including rising demand for residential properties (SiiLA, 2023) and industrial spaces. In 2019, it ranked as the second fastest-growing city in the country in terms of industrial development, following only Monterrey (Gobierno del Estado de Chihuahua, 2020).

Unfortunately, the real estate sector in Ciudad Juárez—and in Mexico more broadly—continues to face structural issues that hinder competitiveness and organizational effectiveness. These include high levels of informality, limited professionalization and training of real estate agents, and inadequate information management within firms (Alamilla, 2019; Llera et al., 2009; Tapia Ramírez, 2020). Such challenges become even more critical when considering Ferreira et al. (2017), who argue that each real estate market exhibits unique characteristics, often leaving agents to operate under conditions of incomplete or biased information. These informational asymmetries may directly impact income levels, given that agents rely heavily on commissions—typically ranging from 1% to 5% per transaction (Alamilla, 2019; Puttaraska & Phoopatpon, 2020).

Hence, real estate firms that succeed in managing knowledge effectively and fostering a learning-oriented culture may increase their agents' sales performance, thereby enhancing organizational effectiveness and achieving sustainable competitive advantage (Ferreira et al., 2017).

Organizational Effectiveness

A wide range of factors shapes the concept of organizational effectiveness, stemming from the complexity and variety of organizational goals, the diversity of measurement criteria, and even differing understandings of what constitutes an organization (Martínez et al., 2020). However, Martínez et al. (2020) identify three distinct approaches to conceptualizing and measuring effectiveness: (1) the goal-based approach, which focuses on fulfilling product or service specifications; (2) the systems resource approach, which examines whether the organization acquires sufficient resources to execute its required processes; and (3) the internal process approach, which assesses performance against internally defined indicators.

González et al. (2021) and Lee & Sucoko (2007) argue that organizational effectiveness represents a multidimensional construct measurable through improved organizational coordination, the frequent introduction of new products or services, and the organization's capacity to manage crises and adapt to change. Moreover, González et al. (2021) emphasize that effectiveness may rely not only on tangible indicators but also on intangible metrics derived from employees' or members' perceptions.

This study conceptualizes organizational effectiveness as an outcome reflected in improved coordination, frequent market offerings, enhanced anticipation of market shifts, and financial performance, assessed primarily through intangible indicators based on members' perceptions.

Strategic Orientations

Strategic orientations refer to long-term approaches that guide organizational actions in competitive environments. These orientations encompass various dimensions that, according to the literature, influence and enhance organizational outcomes (Hakala, 2011; Sierra & Melgar, 2021).

Over time, scholars have proposed multiple conceptualizations. Narver and Slater (1990) viewed strategic orientations as directives designed to improve performance. Gatignon and Xuereb (1997) described them as entrepreneurial competencies that enable firms to allocate resources to satisfy customers, respond to competitors, and develop new technologies. Noble et al. (2002)

considered them embedded cultural guidelines. Alternatively, researchers such as Manu & Sriram (1996) and Hakala (2011) interpreted them as mechanisms that foster organizational adaptability in response to environmental shifts.

This conceptual diversity has led to the identification of various types of strategic orientations, including market and technology orientation (Gotteland et al., 2020), entrepreneurial orientation (Hughes & Morgan, 2007), and customer orientation (Gatignon & Xuereb, 1997). Acknowledging this diversity, Hakala (2011) grouped them into four main categories: (1) market orientation (including customer, competitor, and marketing orientation); (2) technology orientation (encompassing product, production, and innovation orientation); (3) entrepreneurial orientation; and (4) learning orientation.

Learning Orientation

Learning orientation constitutes an internal process that promotes learning activities and reflects the extent to which leadership supports, encourages, and utilizes employee learning (Bae & Choi, 2021; Iyiola et al., 2023). For Baker and Sinkula (1999), learning orientation represents an organization's propensity to create and apply knowledge in pursuit of competitive advantage. They proposed three dimensions for measuring the construct: shared vision, open-mindedness, and commitment to learning. Calantone et al. (2002) later added intra-organizational knowledge sharing as a fourth dimension.

Commitment to learning implies that the organization fosters a learning-oriented culture among employees (Sierra Carpio et al., 2022). Hakala (2011) associated open-mindedness with the concept of "unlearning," meaning the organization remains willing to question existing practices, adopt new knowledge, and replace outdated processes to enhance performance. According to Sierra & Melgar (2021), shared vision ensures that all members understand what knowledge they must acquire and how to apply it effectively.

Although past research has consistently demonstrated a positive and significant relationship between learning orientation and organizational performance (Bae & Choi, 2021; Iyiola et al., 2023; Wang et al., 2024), its influence on organizational effectiveness remains insufficiently explored. Consequently, this study proposes the following hypothesis:

H1: Learning orientation exerts a positive and significant effect on organizational effectiveness.

Knowledge Management

Knowledge constitutes a resource developed by organizations either through employee experience or external training (Lubishtani et al., 2022). Thought leaders such as Drucker (2000) and Senge (2010) already anticipated its organizational relevance, asserting that knowledge represents both power and capital, and would eventually replace labor as the primary metric in the economic structure of society. Consequently, organizations capable of managing employee knowledge effectively would most likely thrive amid constant change.

Following this perspective, Chaithanapat et al. (2022) argue that knowledge ranks among the most critical assets requiring active management within contemporary organizations. Companies must therefore manage not only the knowledge utilized in daily operations but also the knowledge demanded by clients.

Despite its strategic relevance, knowledge management remains a relatively new field of study, lacking a universally accepted definition. Its meaning often depends on the specific discipline or domain in which it is applied (Al-Tit et al., 2022; Iqbal et al., 2023; Lubishtani et al., 2022). Nevertheless, scholars such as Nonaka & Takeuchi (1995), Al-Tit et al. (2022), Iqbal et al. (2023), and Tu (2024) generally agree that knowledge management originates with individual knowledge and involves intentional efforts by employees to engage with others in the organization, thereby facilitating knowledge exchange.

Accordingly, knowledge management may be understood as the process of creating, sharing, and applying knowledge (Tu, 2024) across the workforce to achieve organizational objectives (Iqbal et al., 2023), enhance performance, strengthen competitiveness, and support long-term organizational survival (Yap et al., 2022).

By implementing an effective knowledge management system, firms gain the ability to generate and circulate information both internally and externally, identify areas for improvement, and uncover new innovation opportunities. This, in turn, helps cultivate a culture of learning and continuous improvement (Tu, 2024), while leveraging the experience of employees and strategic partners to improve organizational effectiveness (Yap et al., 2022). Based on this rationale, the following hypothesis is proposed:

H2: Knowledge management has a positive and significant relationship with organizational effectiveness.

Furthermore, learning orientation functions as an enabler of knowledge management, as it incorporates key components such as commitment to learning, shared vision, and open-mindedness (Calantone et al., 2002; Kordab et al., 2020; Yang, 2007). Prior research has documented the interconnection between these two constructs (Khan, 2023), leading to the formulation of the following hypothesis:

H3: Learning orientation exerts a positive and significant effect on knowledge management.

Finally, building on the findings of Real et al. (2014) and Zheng et al. (2010), who examined knowledge management as a moderating variable between strategy and organizational effectiveness, the following hypothesis is proposed:

H4: Knowledge management functions as a moderating variable in the relationship between learning orientation and organizational effectiveness.

Methodology

This study employed a quantitative approach with a non-experimental, cross-sectional design and a descriptive-correlational scope. Additionally, the research adopted an exploratory character due to the limited application of administrative sciences to the analysis of real estate firms. Data

collection relied on a survey technique, while data analysis utilized structural equation modeling via partial least squares (PLS), conducted through the Smart PLS 4 software (Ringle et al., 2024).

The variables under study were measured using previously validated instruments tested in earlier research. Learning orientation was assessed using the scale developed by Farooq and Vij (2019), which consists of nine items rated on a 5-point Likert scale. In contrast, knowledge management and organizational effectiveness were measured through the questionnaire designed by Lee and Sukoco (2007), comprising 12 Likert-scale items for knowledge management and nine for organizational effectiveness.

The translation and cultural adaptation of the aforementioned scales into Spanish were performed by the author, in collaboration with and under the supervision of two Ph.D. scholars specializing in administrative sciences, along with the head of the language center at a public higher education institution located in northern Mexico.

The original questionnaire included 30 items to assess the three model constructs. However, following a pilot test, four items from the knowledge management scale and five from the learning orientation scale were discarded. These items were excluded due to statistical criteria—specifically, item-construct correlation weights below 0.70, as recommended by Chin (1998)—or to enhance discriminant validity between constructs. The final instrument consisted of four items for learning orientation, eight for knowledge management, and nine for organizational effectiveness, totaling 21 items.

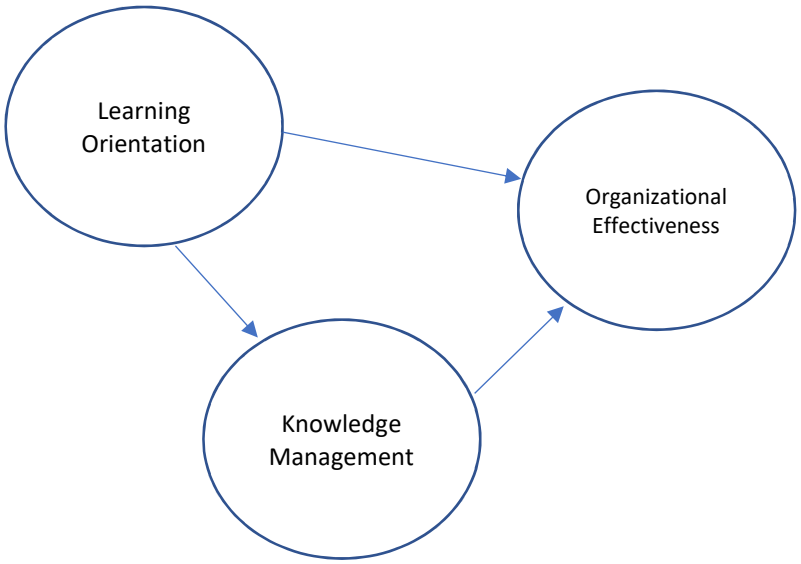
The target population comprised real estate agents working in companies classified as real estate firms or brokers operating in Ciudad Juárez, Chihuahua. The final sample included 235 respondents, a size deemed sufficient for PLS analysis based on Chin's (1998) guidelines. This sample size ensures 80% statistical power to detect R^2 values of at least 0.25 with a 1% margin of error, as suggested by Hair et al. (2017).

The sampling frame was established using the database of the Directorio Estadístico Nacional de Unidades Económicas (DENUE), managed by the Instituto Nacional de Estadística y Geografía (INEGI, n.d.). This database enabled the identification of businesses engaged in real estate and leasing services. According to DENUE, 2,236 companies were registered under the category "Real estate and rental services for tangible and intangible assets" in the state of Chihuahua, of which 694 were located specifically in Ciudad Juárez.

The unit of analysis consisted of real estate agents employed at firms operating in Ciudad Juárez. It was not possible to determine the exact number of agents in the region due to the lack of a consolidated database. A non-probabilistic purposive sampling strategy was implemented, selecting typical cases—an approach particularly suited to exploratory research (Scharager & Reyes, 2001). This method relies on the deliberate selection of participants who exhibit key characteristics representative of the studied phenomenon—in this case, real estate agents with direct experience in the local market.

Figure 1 presents the structural model used to conduct the PLS analysis based on the hypotheses proposed in the previous section.

Figure 1. Proposed PLS-SEM Model



Source: Authors' own work

Results

Among the 235 respondents, 51.5% (n = 122) identified as male. The average age was 33.33 years, with a range from 18 to 60. In terms of marital status, 42.2% (n = 100) reported being married, and 38.4% (n = 91) single. Regarding educational attainment, 35.9% (n = 85) held a bachelor's degree, 31.2% (n = 74) had completed high school, and 19.4% (n = 46) had only secondary education. Furthermore, 77.2% (n = 183) had three years or less of tenure within their current agencies.

With respect to the proposed model, values for composite reliability and Cronbach's alpha exceeded 0.91, while the average variance extracted (AVE) for all constructs surpassed the 0.50 threshold—indicating that the model meets accepted reliability and validity standards (Chin, 1998; Hair et al., 2017). Table 1 presents these results.

Table 1. Model Reliability

Variable	Cronbach's Alpha	Composite Reliability (ρ_a)	Composite Reliability (ρ_C)	AVE
Organizational Effectiveness	0.947	0.948	0.962	0.863
Knowledge Management	0.958	0.959	0.964	0.727
Learning Orientation	0.918	0.943	0.936	0.633

Source: Authors' own elaboration based on results

The Heterotrait-Monotrait (HTMT) ratio of correlations was used to assess discriminant validity. All values fell below the recommended 0.850 cutoff, providing evidence that the constructs were sufficiently distinct from one another (Henseler et al., 2014). Table 2 displays the HTMT matrix.

Table 2. Discriminant Validity (HTMT)

	Organizational Effectiveness	**Knowledge Management**	**Learning Orientation**
Organizational Effectiveness	–		
Knowledge Management	0.837	–	
Learning Orientation	0.653	0.821	–

Source: Authors' own elaboration based on results

To evaluate collinearity, the Variance Inflation Factor (VIF) values were calculated. According to Hair et al. (2017), acceptable VIF values fall between 1 and 5, indicating moderate correlation without multicollinearity. All indicators fell within this range. Table 3 presents the VIF values.

Table 3. VIF Values

	Organizational Effectiveness	**Knowledge Management**	**Learning Orientation**
Organizational Effectiveness	–		
Knowledge Management	2.472	–	
Learning Orientation	2.472	1.000	–

Source: Authors' own elaboration based on results

To assess the model's predictive accuracy, adjusted R^2 values were computed. As Table 4 shows, both outcome variables fall within the range of 0.5 to 0.75, indicating moderate predictive power (Henseler et al., 2009).

Table 4. Predictive Accuracy (R^2)

Variable	**Adjusted R^2**	**Standard Error**	**T Statistic**	**P Value**
Organizational Effectiveness	0.637	0.062	10.257	0.000
Knowledge Management	0.596	0.101	5.891	0.000

Source: Authors' own elaboration based on results

The model explained 63.7% of the variance in organizational effectiveness based on knowledge management and learning orientation, and 59.6% of the variance in knowledge management based on learning orientation.

Model fit was assessed using the Standardized Root Mean Square Residual (SRMR), with a cutoff value of 0.08 as recommended by Hair et al. (2017). The observed SRMR value of 0.053 suggests a good fit between the observed and model-implied correlation matrices.

After verifying model quality, hypotheses were tested using the F^2 statistic. According to Hair et al. (2017), F^2 values between 0.02–0.14 indicate small effects; 0.15–0.34 moderate effects; and values above 0.35 large effects. Table 5 presents the results.

Table 5. Effect Sizes and Path Coefficients

Relationship	F^2	Mean	S.E.	T Value	P Value	Path Coef.	Mean Path	S.E. Path	T Value	P Value
KM → OE	0.718	0.735	0.342	2.100	0.000	0.799	0.776	0.091	8.759	0.036
LO → OE	0.000	0.009	0.015	0.000	0.982	0.002	0.022	0.098	0.023	1.000
LO → KM	1.472	1.664	0.745	1.975	0.000	0.772	0.771	0.066	11.633	0.048

Note: KM = Knowledge Management; OE = Organizational Effectiveness; LO = Learning Orientation.
Source: Authors' own elaboration

Results indicate a strong, statistically significant effect of knowledge management on organizational effectiveness. Learning orientation strongly influences knowledge management as well. However, no direct statistically significant relationship emerged between learning orientation and organizational effectiveness.

Therefore, H1—which posited a positive and significant effect of learning orientation on organizational effectiveness—is rejected due to lack of supporting evidence.

Conversely, H2 is supported, as knowledge management demonstrated a strong, positive, and significant association with organizational effectiveness, fulfilling the path coefficient and p-value criteria established by Chin (1998) and Cohen (1992). The same applies to the relationship between learning orientation and knowledge management, supporting H3.

Although learning orientation does not directly affect organizational effectiveness, its indirect effect was evaluated using specific indirect effect analysis. Table 6 presents the relevant data.

Table 6. Indirect Effects

Indirect Relationship	Indirect F^2	Mean	S.E.	T Value	P Value
LO → KM → OE	0.616	0.595	0.067	9.203	0.000

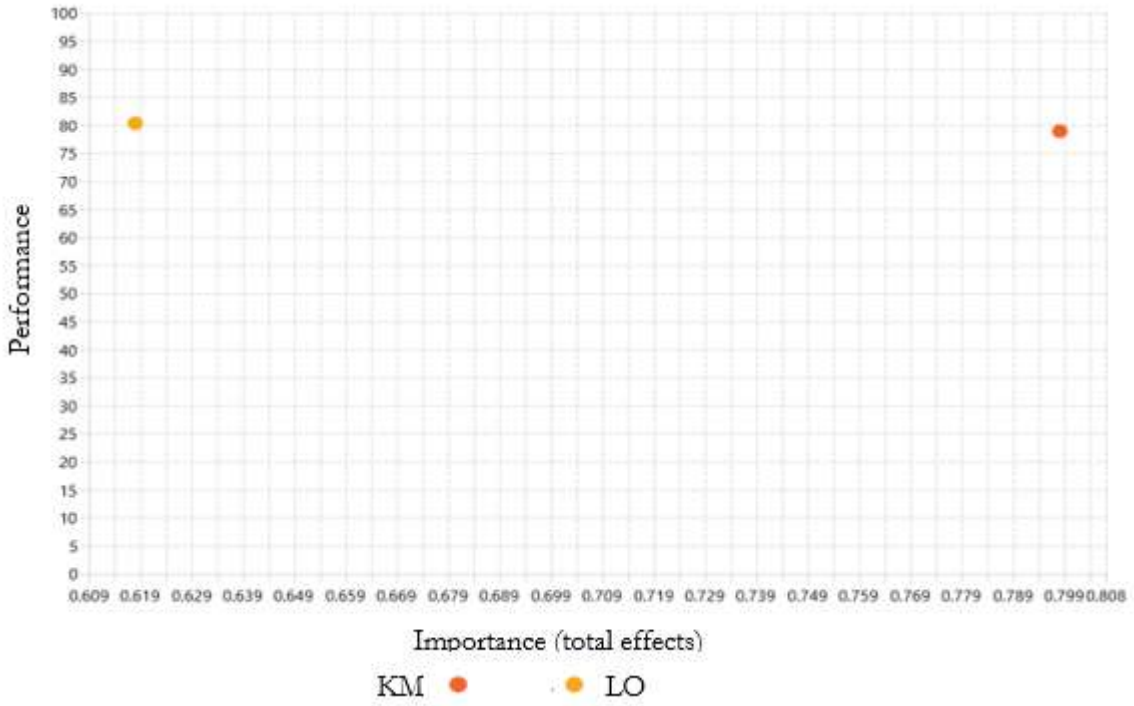
Source: Authors' own elaboration

These findings suggest that learning orientation exerts a large, statistically significant indirect effect on organizational effectiveness through knowledge management. Thus, H4 is not rejected.

To deepen understanding, an Importance-Performance Map Analysis (IPMA) was conducted. This complementary technique to PLS-SEM assists managerial decision-making by evaluating (1) the importance (i.e., impact) of latent constructs, and (2) performance (i.e., average normalized construct value on a 0–100 scale).

The analysis revealed performance scores of 80.301 for learning orientation and 78.910 for knowledge management, with importance values of 0.619 and 0.799 respectively. Figure 2 illustrates these results graphically.

Figure 2. Importance-Performance Map Analysis (IPMA)



In the figure 2, both variables appear in the upper quadrant with high performance levels. Knowledge management lies further to the right, indicating greater importance for achieving organizational effectiveness, while learning orientation appears more to the left. These results suggest that knowledge management plays a more critical role than learning orientation in enhancing organizational performance.

Discussion

The results obtained from hypothesis testing shed light on the relevance of the selected variables within the proposed model. Hypothesis 1 anticipated a positive and significant effect of learning orientation on organizational effectiveness. However, statistical evidence failed to support this direct relationship. This suggests that an organizational inclination toward learning—such as

fostering shared vision, open-mindedness, and a commitment to continuous learning—does not, on its own, translate into effectiveness. In other words, good intentions require formal mechanisms to transform learning aspirations into structured and impactful practices.

Although prior studies (Bae & Choi, 2021; Iyiola et al., 2023; Wang et al., 2024) reported significant associations between learning orientation and organizational performance, this study does not corroborate that link when effectiveness serves as the primary outcome. A plausible explanation lies in the conceptual distinction between performance and effectiveness.

While performance generally refers to short- or medium-term measurable outcomes—such as sales, productivity, or goal attainment—organizational effectiveness encompasses a more holistic, long-term, and qualitative perspective. It involves factors like adaptability, internal cohesion, customer satisfaction, innovation, and sustainability. Moreover, no prior study was found to examine the direct relationship between learning orientation and organizational effectiveness as an independent construct. This highlights a theoretical gap and strengthens this study's contribution. The findings suggest that organizational learning, although necessary, requires structural support to produce visible improvements in effectiveness, aligning with Senge's (2010) systems thinking framework.

Hypothesis 2, which explored the relationship between knowledge management and organizational effectiveness, received full statistical support. The strength of this relationship corroborates findings from previous studies across diverse sectors, such as food manufacturing (Khan, 2023), construction (Yap et al., 2022), and furniture production (Kusa et al., 2024). A suitable interpretation is that real estate firms with more robust and well-implemented knowledge management systems tend to achieve higher levels of organizational effectiveness.

Hypothesis 3, proposing a positive and significant effect of learning orientation on knowledge management, also found support. This affirms the close interdependence between these constructs, consistent with Khan (2023). However, unlike Khan's study—which positioned learning orientation as a moderating factor—our findings suggest it serves as a predictor or antecedent of knowledge management.

Hypothesis 4 posited that knowledge management moderates the relationship between learning orientation and organizational effectiveness. The evidence suggests that this moderating role exists, confirming the strategic importance of knowledge management in converting organizational learning intentions into actionable outcomes. In essence, knowledge management operationalizes the organization's willingness to "unlearn" and adopt new ways of working, enabling the creation, storage, dissemination, and application of knowledge in pursuit of a shared goal: organizational effectiveness.

The IPMA results reveal valuable insights about the sample. On average, participating real estate agencies demonstrate high levels of learning orientation. Agents perceive their firms as fostering cultures that value knowledge acquisition, exchange, and application—through continuous training, openness to change, experiential learning, and responsiveness to market trends. Although learning orientation does not exert the strongest direct effect on effectiveness, its indirect contribution remains significant. Therefore, sustaining and reinforcing learning-oriented practices may continue to yield long-term organizational benefits.

While knowledge management exhibited slightly lower performance scores than learning orientation, its impact on organizational effectiveness proved stronger. This finding underscores its strategic importance. Enhancing formal and informal mechanisms for capturing, organizing, sharing, and applying knowledge—such as internal databases, best-practice manuals, mentorship programs, or collaborative digital tools—could significantly improve overall effectiveness. Since current performance levels have yet to reach their full potential, this construct represents a priority area for development.

Theoretical Implications

Senge (2010) outlines five disciplines essential to developing human talent-based strategies: systems thinking, personal mastery, mental models, shared vision, and team learning. He describes a learning organization as one where individuals continually generate new thinking patterns, enhance their capacity to produce desirable outcomes, and learn collaboratively.

In this light, the present findings align closely with Senge's framework—particularly with the disciplines of personal mastery and mental models. The IPMA results indicate that real estate agents demonstrate a strong learning orientation, reflecting a mindset characterized by openness, reflection, and adaptability.

Furthermore, team learning and systems thinking appear in the mediation effect of knowledge management. Learning orientation does not independently drive effectiveness; its influence only materializes when embedded in a system that manages and harnesses that learning collectively. Moreover, the IPMA analysis positions knowledge management as the organizational system that translates shared vision into a common purpose—namely, enhancing organizational effectiveness.

Implications for the Real Estate Sector

In real estate agencies in Ciudad Juárez, agents perceive a strong learning culture—one that promotes reflection, continuous learning, and openness to change. However, these practices alone do not directly influence organizational effectiveness. Instead, their impact appears to operate indirectly, likely through key organizational capabilities such as knowledge management.

In other words, learning—while essential—does not suffice. Organizational effectiveness improves when firms succeed in transforming learning into systematic knowledge processes. These processes include capturing, formalizing, and utilizing employee knowledge to support strategic goals.

This finding suggests that real estate firms may already foster a workforce inclined toward learning but still lack institutional mechanisms to convert that learning into tangible organizational value. To improve effectiveness, firms must go beyond individual or group learning efforts. They must implement formal knowledge management systems that capitalize on accumulated expertise. Potential strategies include developing internal

knowledge repositories, standardized client service protocols, best-practice documentation, mentoring programs, or collaborative technology platforms.

Conclusions

The results underscore the strategic importance of knowledge management in achieving organizational effectiveness—not only through its direct influence but also by leveraging learning orientation as an integrating mechanism. Learning orientation channels the organization's intentions into tangible actions, reflected in the creation, storage, dissemination, and application of knowledge.

These findings gain additional significance when considered alongside Ferreira et al. (2017), who emphasized the uniqueness of real estate markets. A deep understanding of market dynamics and access to relevant knowledge becomes essential for improving sales performance—and consequently, agent commissions. Therefore, implementing robust knowledge management systems may represent a decisive step toward generating the competitive advantages necessary to stand out in such markets.

Data from Alamilla (2019) and Tapia (2020) also highlight critical challenges regarding the lack of training and professionalization in the real estate workforce. Within the proposed model, learning orientation serves as a key antecedent of knowledge management and must manifest through organizational members who, in turn, produce the informational inputs that fuel the company's knowledge systems.

Hence, the role of human capital deserves particular emphasis. Employees represent the most valuable asset in the real estate industry—acting as both the custodians and creators of organizational knowledge. The ability to attract, develop, and retain talent with the right mindset and skills—such as open-mindedness and a willingness to learn—largely determines the success of any knowledge management strategy. For this reason, the Human Resources function must adopt a strategic role, implementing continuous professional development programs, incentive systems that reward collaboration and knowledge sharing, and cultivating an organizational culture that prioritizes learning. Only through effective human capital management can firms fully harness the potential of knowledge management as a sustainable competitive advantage.

In conclusion, this study provides evidence that organizational effectiveness in the real estate sector depends heavily on firms' capabilities to manage knowledge systematically, foster a culture of continuous learning, and invest in their human potential. In an increasingly dynamic and competitive environment, companies that successfully integrate these components into their business strategy will hold a superior position to navigate market challenges, meet customer expectations, and secure long-term sustainability. The future of the real estate sector will belong to organizations that understand their true competitive edge lies in their ability to learn, adapt, and evolve continuously.

Study Limitations

Several limitations should be considered when interpreting these findings. First, the study relies on self-reported data, making it vulnerable to self-report bias (Schwarz, 1999). Respondents may have provided socially desirable answers or struggled to recall specific details related to organizational effectiveness, potentially influencing observed correlations among the model's variables.

Second, response bias may also be present (Groves, 2006). Although efforts were made to gather a representative sample of real estate agents in Ciudad Juárez, non-respondents may differ systematically from those who participated—thus limiting the generalizability of the results. Additionally, the sample focused on agents with less than three years of experience, which may introduce sample bias. Future research could address this limitation by incorporating multi-source data, such as objective performance indicators, and employing sampling strategies that enhance representativeness.

Third, the study may be affected by self-selection bias (Martín Conejero & Quirós González, 2024). Participation in the survey was voluntary, and agents with higher engagement levels or more favorable views of their organization's knowledge practices may have been more likely to respond. This self-selection could restrict the applicability of findings to the broader population of real estate agents in Ciudad Juárez. Future studies should consider random sampling techniques and employ strategies to maximize participation rates in order to mitigate this bias.

References

Alamilla, P. (2019, agosto 26). Los 5 pecados del asesor inmobiliario mexicano. Obras. https://obras.expansion.mx/inmobiliario/2019/08/26/los-5-pecados-del-asesor-inmobiliario-mexicano

Al-Tit, A. A., Al-Ayed, S., Alhammadi, A., Hunitie, M., Alsarayreh, A., & Albassam, W. (2022). The Impact of Employee Development Practices on Human Capital and Social Capital: The Mediating Contribution of Knowledge Management. Journal of Open Innovation: Technology, Market, and Complexity, 8(4), 218. https://doi.org/10.3390/joitmc8040218

Bae, B., & Choi, S. (2021). The Effect of Learning Orientation and Business Model Innovation on Entrepreneurial Performance: Focused on South Korean Start-Up Companies. Journal of Open Innovation: Technology, Market, and Complexity, 7(4), 245. https://doi.org/10.3390/joitmc7040245

Baker, W. E., & Sinkula, J. M. (1999). The Synergistic Effect of Market Orientation and Learning Orientation on Organizational Performance. Journal of the Academy of Marketing Science, 27(4), 411–427.

Biletskyi, I. V. (2022). Key Characteristics and Structure of the Residential Real Estate Market in the Current Conditions. Business Inform, 7(534), 149–154. https://doi.org/10.32983/2222-4459-2022-7-149-154

Brzezicka, J., Łaszek, J., & Olszewski, K. (2019). An Analysis of the Relationships Between Domestic Real Estate Markets – A Systemic Approach. Real Estate Management and Valuation, 27(1), 79–91. https://doi.org/10.2478/remav-2019-0008

Calantone, R. J., Cavusgil, V., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. Industrial Marketing Management, 31(6), 515–524.

Chaithanapat, P., Punnakitikashem, P., Khin Khin Oo, N. C., & Rakthin, S. (2022). Relationships among knowledge-oriented leadership, customer knowledge management, innovation quality and firm performance in SMEs. Journal of Innovation & Knowledge, 7(1), 100162. https://doi.org/10.1016/j.jik.2022.100162

Chin, W. W. (1998). The Partial Least Squares Approach to Structural Modeling. En N. J. Mahwah & Erlbaum. Lawrence (Eds.), Modern Methods for Business Research (Número April, pp. 295–336).

Díaz-Kovalenko, I. E., Larrea-Rosas, K. P., & Barros-Naranjo, J. (2023). El sector de la construcción en la economía ecuatoriana, importancia y perspectivas. Ciencias Sociales y Económicas, 6(2), 58–69. https://doi.org/10.18779/csye.v6i2.598

Drucker, P. F. (2000). The Age of Discontinuity: Guidelines to our changing society. En The Age of Discontinuity. Transaction Publishing. https://doi.org/10.1016/c2013-0-04383-6

Farooq, R., & Vij, S. (2019). Does Market Orientation Mediate between Knowledge Management Orientation and Business Performance? En Journal of Information and Knowledge Management (Vol. 18, Número 4). https://doi.org/10.1142/S0219649219500394
Fernández, Juan. (2017). Estudio sobre la vivienda social como causante de exclusión en un polígono en Ciudad Juárez, México. Vivienda y Ciudad, 0(4), 31–47.

Ferreira, F. A. F., Spahr, R. W., Sunderman, M. A., Banaitis, A., & Ferreira, J. J. M. (2017). A learning-oriented decision-making process for real estate brokerage service evaluation. Service Business, 11(3), 453–474. https://doi.org/10.1007/s11628-016-0315-4

Foro Económico Mundial. (2024, diciembre 13). Por qué debemos reimaginar el sector inmobiliario para construir un futuro mejor. World Economic Forum. https://es.weforum.org/stories/2024/12/por-que-debemos-reimaginar-el-sector-inmobiliario-para-construir-un-futuro-mejor/

Funds Society. (2024). 2025: Oportunidades en el sector inmobiliario mexicano. Funds Society. https://www.fundssociety.com/es/noticias/alternativos/2025-sera-otro-ano-de-oportunidades-para-el-sector-inmobiliario-en-mexico/

Garces, O. (2025, febrero 24). Vivienda vertical en Chihuahua: Revolución inmobiliaria y crecimiento urbano. Referente.mx. https://www.referente.mx/2025/02/24/razonado-sobre-el-crecimiento-de-la-vivienda-vertical/

Gatignon, H., & Xuereb, J.-M. (1997). Strategic Orientation of the Firm and New Product Performance (pp. 77–90).

Gobierno de México. (s/f). Servicios Inmobiliarios: Salarios, producción, inversión, oportunidades y complejidad. Data México. Recuperado el 18 de abril de 2025, de https://www.economia.gob.mx/datamexico/es/profile/industry/real-estate

Gobierno del Estado de Chihuahua. (2019). Reconoce Gobernador aporte del sector inmobiliario al desarrollo económico del estado | Portal Gubernamental del Estado de Chihuahua. Gobierno del Estado de Chihuahua. https://chihuahua.gob.mx/contenidos/reconoce-gobernador-aporte-del-sector-inmobiliario-al-desarrollo-economico-del-estado

Gobierno del Estado de Chihuahua. (2020). Es Juárez la 2a ciudad con mayor crecimiento inmobiliario industrial a nivel nacional | Portal Gubernamental del Estado de Chihuahua. https://www.chihuahua.gob.mx/contenidos/es-juarez-la-2a-ciudad-con-mayor-crecimiento-inmobiliario-industrial-nivel-nacional

González, Y. F., Hernández, M., & Ávila Vidal, A. (2021). Diagnóstico sociopsicológico de la efectividad organizacional de una empresa biofarmacéutica. Revista cubana de psicología, 3(3), 4–16.

Gotteland, D., Shock, J., & Sarin, S. (2020). Strategic orientations, marketing proactivity and firm market performance. Industrial Marketing Management, 91, 610–620. https://doi.org/10.1016/j.indmarman.2020.03.012

Groves, R. M. (2006). Nonresponse Rates and Nonresponse Bias in Household Surveys. Public Opinion Quarterly, 70(5), 646–675. https://doi.org/10.1093/poq/nfl033

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks. En Sage. Sage Publication.

Hakala, H. (2011). Strategic Orientations in Management Literature: Three Approaches to Understanding the Interaction between Market , Technology , Entrepreneurial and. international Journal of Management Reviews, 13, 199–217. https://doi.org/10.1111/j.1468-2370.2010.00292.x

Haran, M. E., Lo, D., McCord, M., Davis, P., & Lim, L. C. (2021). Impact of firm-level attributes on listed real estate company performance. Journal of Property Investment & Finance, 39(4), 323–348. https://doi.org/10.1108/JPIF-03-2020-0030

Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hernández, F. de J. (2017). El discurso de sustentabilidad utilizado para reorganizar el mercado inmobiliario en México a partir de su crisis en 2013. Cuestión de diselño, 6(18), 7–18.

Hernando, C. (2022, septiembre 23). 5 errores que un agente inmobiliario debe evitar al vender una casa. arrenda. https://blog.arrenda.mx/agente-inmobiliario-errores-vender-rentar

Hoesli, M., Milcheva, S., & Moss, A. (2020). Is Financial Regulation Good or Bad for Real Estate Companies? – An Event Study. The Journal of Real Estate Finance and Economics, 61(3), 369–407. https://doi.org/10.1007/s11146-017-9634-z

Hongxia, H., & Yuting, W. (2021). Analysis of Solvency of A-Share Listed Companies in China's Real Estate Industry. Journal of Finance Research, 5(2), 28. https://doi.org/10.26549/jfr.v5i2.6997

Hughes, M., & Morgan, R. E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. Industrial Marketing Management, 36(5), 651–661. https://doi.org/10.1016/j.indmarman.2006.04.003

INEGI. (s/f). Directorio Nacional de Unidades Económicas. DENUE. Censos Económicos 2014; Instituto Nacional de Estadística y Geografía. INEGI. Recuperado el 5 de mayo de 2025, de https://www.inegi.org.mx/app/mapa/denue/default.aspx

INEGI. (2021). Censos económicos 2019 (p. 353). Instituto Nacional de Estadística y Geografía. https://www.inegi.org.mx/app/biblioteca/ficha.html?upc=889463900139

Iqbal, M., Yanuarni, E., Mawardi, M. K., & Astuti, E. S. (2023). Linking knowledge management to tourism business of SMEs in aftermath of disaster: Implications for open innovation. Journal of Open Innovation: Technology, Market, and Complexity, 9(2), 100054. https://doi.org/10.1016/j.joitmc.2023.100054

Iyiola, K., Alzubi, A., & Dappa, K. (2023). The influence of learning orientation on entrepreneurial performance: The role of business model innovation and risk-taking propensity. Journal of Open Innovation: Technology, Market, and Complexity, 9(3), 100133. https://doi.org/10.1016/j.joitmc.2023.100133

Khan, T. N. (2023). Using Knowledge Management to Enhance Organizational Performance and Effectiveness. International Journal of Advanced Engineering, Management and Science, 9(11), 01–17. https://doi.org/10.22161/ijaems.911.1

Kordab, M., Raudeliūnienė, J., & Meidutė-Kavaliauskienė, I. (2020). Mediating Role of Knowledge Management in the Relationship between Organizational Learning and Sustainable Organizational Performance. Sustainability, 12(23), 10061. https://doi.org/10.3390/su122310061

Kusa, R., Suder, M., & Duda, J. (2024). Role of entrepreneurial orientation, information management, and knowledge management in improving firm performance. International Journal of Information Management, 78, 102802. https://doi.org/10.1016/j.ijinfomgt.2024.102802

Lee, L. T., & Sukoco, B. M. (2007). Knowledge Management Capability on The Effects of Entrepreneurial Orientation and Knowledge Management Capability on Organizational Effectiveness in Taiwan: The Moderating Role of Social Capital. International Journal of Management, 24(3), 549–572.

Liubarskaia, M. A., & Glazkov, K. V. (2023). The significance of regional real estate markets for the modern economy. ECONOMIC VECTOR, 2(33), 46–50. https://doi.org/10.36807/2411-7269-2023-2-33-46-50

Llera, F., López, M. de los Á., Granados, A., Fernández, L., Nesbitt, L., Muñoz, M., Borunda, S., & Chávez, P. (2009). Sistemas de Información Urbana y Competitividad de las Ciudades: El caso del sector de bienes raíces en Ciudad Juárez, México. CULCyT, 35, 22–34. https://erevistas.uacj.mx/ojs/index.php/culcyt/article/view/308/292

López-Morales, E., & Orzco, H. (2019). Ni proletarios ni propietarios: Especuladores. Una radiografía a los agentes de mercado de la gentrificación inmobiliaria en Santiago de Chile. Scripta Nova Revista Electrónica de Geografía y Ciencias Sociales, XXIII(605), 1–33.

Lubishtani, E., Beka, E., & Jahja, A. (2022). The Impact of Knowledge Management and Knowledge Transfer in Growth and Innovation A Study of Business Start-Ups, Business Incubators and Business Accelerators. IFAC-PapersOnLine, 55(39), 54–59. https://doi.org/10.1016/j.ifacol.2022.12.010

Manu, F. A., & Sriram, V. (1996). Innovation, marketing strategy, environment, and performance. Journal of Business Research, 35(1), 79–91. https://doi.org/10.1016/0148-2963(95)00056-9

Marín Apolo, E. M., Vega Jaramillo, F. Y., Herrera Peña, J. N., Salcedo Muñoz, V. E., & Macías Sares, B. C. (2023). Análisis económico del crecimiento del sector inmobiliario en la provincia de El Oro, Ecuador: Periodo 2015 – 2022. Pacha. Revista de Estudios Contemporáneos del Sur Global, 4(12), e230208. https://doi.org/10.46652/pacha.v4i12.208

Martín Conejero, A., & Quirós González, V. (2024). Methodological errors. Biases. Angiología, 76(4), 233–240. https://doi.org/10.20960/angiologia.00665

Martínez, P. Jacinto., Herrera, D., & Díaz, F. (2020). Consideraciones esenciales sobre la efectividad organizacional en la labor educativa. VARONA, Revista Científico-Metodológica, 70.

Narver, J. C., & Slater, S. F. (1990). The Effect of a Market Orientation on Business Profitability. Journal of Marketing, 54(4), 20. https://doi.org/10.2307/1251757

Noble, C. H., Sinha, R. K., Kumar, A., Kaufman, J., Luciano, C., Humphries, E., & Roy, A. (2002). Market Orientation and Strategic Orientations / 25 Market Orientation and Alternative Strategic Orientations: A Longitudinal Assessment of Performance Implications. En Journal of Marketing (Vol. 66, pp. 25–39).

Nonaka, H., & Takeuchi, I. (1995). The knowledge- creating company. Oxford University Press, INC.

Ochoa Vásquez, T. A., & Nagua, A. A. (2024). La inversión extranjera directa en el sector comercio en el Ecuador, Periodo 2016 – 2022. Revista Ciencia y Tecnología para el Desarrollo, 10(20), 96–107. http://dx.doi.org/10.37260/rctd.v10i20.7

Ploessl, F., Just, T., & Wehrheim, L. (2021). Cyclicity of real estate-related trends: Topic modelling and sentiment analysis on German real estate news. Journal of European Real Estate Research, 14(3), 381–400. https://doi.org/10.1108/JERER-12-2020-0059

Puttaraska, T., & Phoopatpon, K. (2020). Critical Success Factors for Real Estate Broker Business. Journal of Educational Innovation and Research, 4(1), 23–28.

Real, J. C., Roldán, J. L., & Leal, A. (2014). From Entrepreneurial Orientation and Learning Orientation to Business Performance: Analysing the Mediating Role of Organizational Learning and the Moderating Effects of Organizational Size. British Journal of Management, 25(2), 186–208. https://doi.org/10.1111/j.1467-8551.2012.00848.x

Rehman, S., Mohamed, R., & Ayoup, H. (2019). The mediating role of organizational capabilities between organizational performance and its determinants. Journal of Global Entrepreneurship Research, 9(1), 30. https://doi.org/10.1186/s40497-019-0155-5

Ringle, C. M., Wende, S., & Becker, J.-M. (2024). SmartPLS 4. SmartPLS. {https://www.smartpls.com/}

Robertson, S., & Rogers, D. (2017). Education, real estate, immigration: Brokerage assemblages and Asian mobilities. Journal of Ethnic and Migration Studies, 43(14), 2393–2407. https://doi.org/10.1080/1369183X.2017.1315865

Scharager, J., & Reyes, P. (2001). MUESTREO NO-PROBABILÍSTICO 1 Escuela de Psicología. En Escuela de psicología (Número 2001, pp. 1–3).

Schwarz, N. (1999). Self-reports. How the questions shape the answers. American Psychologist, 54(2), 93–105. https://doi.org/10.1037/0003-066X.54.2.93

Seger, J. (2021). Corporate Real Estate Ownership Under a Dynamic Business Environment. https://doi.org/10.26083/TUPRINTS-00019742

Senge, P. M. (2010). La Quinta Disciplina: El arte y la practica de la organizacion abierta al aprendizaje. Ediciones Granica S.A.

Sierra Carpio, D. A., Melgar Bayardo, J., & López Torres, V. G. (2022). Strategic orientations, commitment and organizational performance: Scale validation in the creative industry. Regiones y Desarrollo Sustentable, XXII(42), 154–175.

Sierra, D. A., & Melgar, J. (2021). Orientaciones estratégicas, compromiso y desempeño organizacional en mipymes de diseño gráfico: El caso de Ciudad Juárez, Chihuahua. Economia Creativa, 16, 44–74. https://doi.org/10.46840/ec.2021.16.03

SiiLA. (2023). Bienes Raíces en Ciudad Juárez. Un Mercado Floreciente Entre el Desarrollo Industrial y las Oportunidades de Inversión. Bienes Raíces en Ciudad Juárez. Un Mercado Floreciente Entre el Desarrollo Industrial y las Oportunidades de Inversión. https://siila.com.mx/noticias/bienes-raices-ciudad-juarez-mercado-floreciente-desarrollo-industrial-oportunidades-inversion/6617/lang/es

Stelk, S., & Zumpano, L. (2017). Can Real Estate Brokers Affect Home Prices Under Extreme Market Conditions? International Real Estate Review, 20(1), 51–73.

Stokłosa, A. (2023). Securing Companies in Specific Cases of Real Estate Acquisition. Journal of Security and Sustainability Issues, 13(1), 231–237. https://doi.org/10.47459/jssi.2023.13.25

Takahashi, P. (2021, agosto 16). Crecimiento del mercado inmobiliario en México va de la mano de startups. NotiPress. https://notipress.mx/negocios/crecimiento-mercado-inmobiliario-mexico-de-la-mano-startups-8279

Tapia Ramírez, R. (2020, enero 29). ¿Cúal es la situación actual de los asesores inmobiliarios? : Inmobiliare. Inmobiliare. https://inmobiliare.com/cual-es-la-situacion-actual-de-los-asesores-inmobiliarios/

Tinsa. (2024). Panorama actual del mercado inmobiliario en México. Tinsa México by Accumin. https://www.tinsamexico.mx/sala-de-prensa/panorama-actual-del-mercado-inmobiliario-en-mexico/

Tu, Y.-T. (2024). The role of green social behavior in frugal innovation and entrepreneurial success: The moderating impact of knowledge management. Journal of Innovation & Knowledge, 9(4), 100566. https://doi.org/10.1016/j.jik.2024.100566

Tymieniecka-Cichoń, A. (2019). REAL ESTATE MARKET FUNCTIONS AND THEIR CONTRIBUTION TO ECONOMY. sj-economics scientific journal, 34(3), 13–21. https://doi.org/10.58246/sjeconomics.v34i3.19

Wang, M., Chan, R. Y. K., Hwang, K.-S., & Lim, M. K. (2024). The influence of learning orientation on corporate sustainability: Serial mediation of supply chain practices. European Management Journal, S0263237324000070. https://doi.org/10.1016/j.emj.2024.01.007

Wijburg, G., Aalbers, M. B., & Heeg, S. (2018). The Financialisation of Rental Housing 2.0: Releasing Housing into the Privatised Mainstream of Capital Accumulation. Antipode, 50(4), 1098–1119. https://doi.org/10.1111/anti.12382

Yang, J. (2007). The impact of knowledge sharing on organizational learning and effectiveness. Journal of Knowledge Management, 11(2), 83–90. https://doi.org/10.1108/13673270710738933

Yap, J. B. H., Lim, B. L., & Skitmore, M. (2022). Capitalising knowledge management (KM) for improving project delivery in construction. Ain Shams Engineering Journal, 13(6), 101790. https://doi.org/10.1016/j.asej.2022.101790

Zheng, W., Yang, B., & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. Journal of Business Research, 63(7), 763–771. https://doi.org/10.1016/j.jbusres.2009.06.005