



RESEARCH ARTICLE

Strategic Maturity: A Key Driver of Enhanced Organizational Performance- A Study on Private Universities in The Duhok Governorate, Kurdistan Region of Iraq

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ARTICLE INFO	ABSTRACT
<p>Received: Apr 24, 2024</p> <p>Accepted: Jul 5, 2024</p> <hr/> <p>Keywords</p> <p>Strategic Maturity Organizational Performance Private Universities</p> <hr/> <p>*Corresponding Author:</p> <p>jagar.ismail@uoz.edu.krd Zeravan.Omar@uoz.edu.krd</p>	<p>This study explores the relationship between strategic maturity and organizational performance (OP) by examining the perspectives of academic and administrative leaders at private universities in the Duhok Governorate in the Kurdistan Region of Iraq. The primary aim was to explore the strategic maturity impacts organizational performance within the specific context of administrative leadership. The study was conducted at private universities in the Duhok Governorate in the Kurdistan Region of Iraq using a survey methodology. A questionnaire was employed as the primary data collection tool. Data analysis was performed using both SPSS v26 and Smart PLS v 4.0.9. (65) valid responses were collected from the total 72 distributed questionnaires. The research findings reveal a robust and statistically significant positive correlation between strategic maturity and organizational performance. Strategic maturity plays a pivotal role in enhancing the effectiveness of administrative leadership structures. While these results are compelling within the studied context, caution is necessary when generalizing them to other administrative settings. Further research is recommended to delve into the nuances of strategic maturity across diverse contexts. This study contributes valuable insights for organizational leaders seeking to optimize performance through strategic maturity. By understanding and leveraging strategic capabilities, institutions can foster better outcomes and drive success.</p>

INTRODUCTION

Since the Industrial Revolution, strategic management problems have been widely discussed in the specialized literature. Despite the development of this specialty, the concept of strategic control management is constantly changing. In its early days, the focus was on productivity as strategy came to be seen as tied to issues of efficiency and value. With the arrival of configuration technology and the exploration of superior technologies, interests have shifted towards business intelligence and innovation, where ledger chain and analytics become key. Organizations need to enhance their business and activities because of the contradiction in today's world, as the world has become a global village that provides opportunities for prosperity and the acquisition of assets, markets and new areas of work. However, developing business projects locally or internationally faces many challenges that require pooling resources within business organizations. During the process of innovative product manufacturing and service delivery, mature strategic management is needed to handle. Positions to better ensure sustainable management of their groups, hence the desire to define the dimensions by which the maturity of strategic management in companies is determined that allows you to combine creative strategies.

Today, data analysis is no longer enough to gain a competitive advantage, it must also lead to the creation of new products, services and unique business models. However, the strategy literature has not adequately kept pace with this rapid development, with its appreciation of recent transformations going beyond (Demer, 2018).

According to Wittek-Crabbe (2016), there are several divergent perspectives about how to enhance an organization's strategic management. Large corporations provide an excellent illustration of how formalization and effective organization are essential for strategic management procedures. However, using small firms as an example highlights traits like entrepreneurship, adaptability, and flexibility. The idea of strategic management maturity encompasses these two goals.

The "maturity" model holds the key to comprehending, attaining stability, and succeeding in the face of these enduring difficulties. The significance of understanding organizational maturity ideas from a strategic standpoint and creating useful evaluation criteria are the main points of emphasis in this study. Scholars emphasize the significance of creating new determinants and competencies to stay up with the rapid speed of change, with a particular focus on the successful management of these factors (Nogalski & Niewiadomski, 2020).

On the other hand, organizational performance is a comprehensive term that indicates how well an organization meets its objectives in terms of profitability, market share, and general effectiveness. A growing corpus of research has emerged as academics and professionals alike realize the strategic importance of successful organizational strategies and the fact that "strategic maturity is closely linked to organizational performance." Researches in this field endeavor to elucidate the fundamental causal relationships, intermediaries, and contextual specifics that underlie the influence of strategic maturity on organizational outcomes (Sinniah & Mahadi, 2023).

This study discusses the role of strategic maturity in enhancing organizational performance in the context of the broad discussions currently taking place in research and scientific circles. Questioners, whether researchers or practitioners, ask the vital question about the possibility of developing management methods that contribute to enhancing the ability of companies to survive in a constantly changing business environment, and this requires developing appropriate strategies that make them able to improve their operations effectively and provide high performance. Hence, the researcher considered it necessary to address these dimensions in his current research, delve deeply into the concept of strategic maturity, and examine its various dimensions, applications, and implications for the overall performance of the organization's management.

II. LITERATURE REVIEW

2.1 Strategic Maturity

According to the Cambridge Dictionary, "maturity" refers to a vehicle's state of being "fully developed", "complete", or "advanced". As a result, the pursuit of organizational excellence might take the shape of a quest for corporate maturity.

Strategic maturity is a multifaceted concept that includes the formalization of strategic management procedures and structure, as well as entrepreneurial attributes such as flexibility and agility. The discipline is evolving as a result of the transformation of the business environment, where new assumptions have become complex and difficult to predict, making it difficult for companies to direct their strategic management in a planning-based manner. These demands are increasingly demanding, and sometimes appear contradictory, pointing to the need for strategic courage, flexibility, social sense, responsibility, and sustainability (Witek-Crabb, 2016).

Organizational maturity is defined as procedures that are completely aligned with accomplishing strategic objectives (Antunes et al., 2014). Maturity models are simulation tools that emphasize certain skills and identify qualitative traits that define an organization's competency at a given level of performance (Demir & Kocabaş, 2010). These levels are often hierarchical (Kohlegger et al. 2009). Maturity models are based on the overall quality management system, which necessitates a thorough understanding of the organization's economic stream, environment, and desired strategic position in the future (Brooks and Clark, 2009), and maturity provides a framework for systematic and continuous performance improvement.

Research has been conducted over the years to develop frameworks that objectively measure strategic maturity (Cooke-Davies, 2004; Nisenson, 2004; Witek-Crabb, 2016). Organizations that have systems that reflect a mature project management environment based on a culture of continuous improvement appear more prepared to achieve successful projects (Crawford, 2011). Popular frameworks that are widely used are usually complex, requiring significant expertise and time to deploy in actual practice. Their study showed that over the past two decades.

Lopez-Poveda (2011) evolved a maturity model specifically for analyzing strategic IT management from a service standpoint, while Demir (2017) measured strategic management maturity in Turkish public and private sector organizations and discovered that most organizations struggle to improve their capabilities. Strategic management procedures.

On the other hand, Guimarães (2020) has highlighted several aspects, such as communications, acquisitions, stakeholders, time and cost management, and communications, that impact the perception of maturity in strategic project management. When taken as a whole, these studies demonstrate the complexity of strategic maturity and the demand for an all-encompassing method of evaluation and enhancement.

According to the discussion above, strategic maturity can be seen as expressing the complete state of development of the vehicle in the context of strategic management. The definitions question the meaning of this maturity in the context of strategic management, as it shows a contradiction in opinions about enhancing strategic management practices. It refers to the challenges that arise as a result of changes in the business environment and the complexity of new assumptions.

Definitions It also highlights the importance of strategic courage and flexibility in meeting these challenges, along with the need for social sense, responsibility and sustainability. It refers to mature project management systems that increase organizations' readiness to achieve successful projects. In the context of measuring strategic maturity, the text addresses the development of frameworks that objectively measure maturity, recognizing the complexity of these frameworks and the time necessary to implement them effectively in daily practice.

According to the researcher's study of the general situation in private institutions in the Kurdistan Region and previous studies applied in the region, the model identified by Demir (2018) are believed to be the most appropriate for this study in order to obtain the best results. This is due to the lack of studies that addressed these elements in educational organizations in the Kurdistan region. Additionally, this model more comprehensively covers the leading Success and Superiority in the field of strategic and organizational management. The strategic management maturity model, delineated in this article, comprises seven distinct dimensions within the realm of strategic management:

1. **Leadership maturity:** is a term used to describe the level of development of a leader's cognitive, emotional, and behavioural skills. It is a lifelong journey that involves the ability to continually engage in relevant, productive, and uplifting ways with oneself, with others, and with others world. The Leadership Maturity Framework describes nine ways of making meaning in adults and shows how adults mature throughout their lives, making meaning in more meaningful and flexible ways than ever before (Reams, 2020).

- 2. Planning & Executing:** Sustainable success hinges on a well-crafted plan and its effective execution. Without implementation, a strategy remains a mere abstraction. It is imperative to formulate a strategic plan encompassing clear goals, objectives, and actionable steps. The execution of strategies should be followed by diligent monitoring of progress. Leading organizations adhere to their strategic plans, wherein innovation plays a pivotal role. Moreover, strategic plans govern all crucial decisions within these organizations, emphasizing the integral role that strategy plays in shaping their trajectory (Demir, 2018).
- 3. The processes and tools:** The processes and tools in strategic maturity refer to the methods and techniques that organizations use to improve their strategic management capabilities. It is a tool that can be used to evaluate an organization's strategic management capabilities and identify areas for improvement. The SMMM test is designed to help busy managers assess the maturity strategically manage their organization quickly, monitor progress, and compare it to other organizations (Reams, 2020).
- 4. People & Culture:** Maturity is characterized by how effectively these values are communicated, understood and put into practice – by both leaders and all members of the workforce. In this sense, Valencia, Valle, and Jiménez (2010) contend that innovation strategies emerge from an adhocracy culture. Yarbrough, Morgan, and Vorhies (2011) further propose that the correlation between organizational culture and strategy significantly influences the outcomes and performance of an organization. Exceptional organizations exhibit complete alignment between culture and strategies, characterized by reduced bureaucracy, a central emphasis on innovation, and a culture that fosters innovative thinking. In such environments, employees are consistently encouraged to contribute new ideas, promoting a culture of ongoing innovation.
- 5. Structure & Model:** This dimension encompasses the organizational structure and business model, emphasizing the crucial need for alignment with overarching strategies. Outstanding organizations ensure that their structure and business model are intricately linked to corporate strategies. Essentially, the organizational framework and business model are crafted to effectively realize long-term strategic objectives. Furthermore, these components serve as instrumental tools in cultivating innovation. By embracing features such as a low hierarchy, a flat organizational structure, and agility, a dynamic, competitive, and highly innovative business model can be cultivated (Demir, 2018).
- 6. Innovation:** The clarity in designing the technological strategy of a firm is as crucial as ensuring its alignment with the overall business strategy, involving the integration of all departments and consideration of the firm's existing capabilities. Despite being essential for attaining profitable solutions, the strategic alignment often tends to be overlooked in the innovation process, as noted by Zawislak and Marins (2007).

2.2 Organizational Performance:

Performance is a highly significant subject that has garnered considerable attention in management studies overall, owing to its crucial relevance at both individual and organizational levels. The intricate and varied influences impacting performance have been acknowledged by scholars such as Shrouf et al. (2020) and Jad Al-Rab (2010). They emphasize that achieving exceptional job performance among employees is contingent upon the concurrent presence of satisfactory levels of services, working conditions, financial terms, and moral justice.

Organizational performance holds a prominent position within any entity, serving as a conclusive reflection of its activities at both individual and institutional tiers. The stability and longevity of an institution are closely tied to the outstanding performance of its employees. Hence, management, and its leadership, take a keen interest in the level of performance, indicative of their concern for the high standards set for employees.

Performance within organizations is not merely a reflection of the motivations and capabilities of subordinates; it also mirrors the motivations and capabilities of organizational leaders and superiors, as highlighted by Sharif (2004) and Zaied et al. (2015). The conceptualization of

performance as "the primary driver of an organization's activity, aimed at renewal," underscores its pivotal role in fostering innovation. Organizational performance not only leads to innovation but also facilitates renewal, progress, and advancement. It serves as a barometer of an organization's capacity to define and achieve its goals effectively, becoming the driving force behind its ongoing development.

Organizational performance poses challenges due to diverse standards, including sustainability, profitability, group satisfaction, and adaptability to environmental changes. Evaluating organizational performance often involves financial metrics, which, despite being conceptualized on paper, may be challenging to implement in practice. The results are viewed as a combination of various stakeholders and non-output measures (Anwar & Ghafoor, 2017).

Profitability is considered a primary determinant of organizational success. Researchers such as Mousa and Othman (2020) and others have identified efficiency, benefit signals, and turnover as crucial financial performance measurements. To thrive and excel in contemporary business environments, organizations must effectively compete, with customers, inputs, and capital serving as key indicators of organizational performance (Alaali et al., 2021; Alzoubi & Aziz, 2021).

2.2.1 Financial performance

stands out as a primary focus for organizations aspiring to attain superior organizational performance. The key objective is to achieve heightened growth performance in alignment with their financial statements. This goal can be realized through the implementation of inter-organizational information systems, ultimately enhancing supply chain capabilities (Rajaguru and Matanda, 2013).

2.2.2 market performance

In the realm of market performance, businesses prioritize enhancing operational efficiencies and market effectiveness to boost profitability. Gupta et al. (2014) emphasizes the significance of innovation as a driving force behind attaining market success, stressing the mutual reliance between market orientations and organizational learning. Developing a strong brand image requires a synergistic relationship between quality management approaches such as just-in-time and lean manufacturing to achieve better and sustained market performance.

2.2.3 Operational Performance

Operational performance can be achieved when actual performance outperforms expectations, suggesting that the organization's operations are efficient. Developing strong predictive skills enables firms to realize benefits from big data analytics, improving supply chain efficiency by offering insights into its structure (Barratt and Oke, 2007). This, in turn, leads to improved organizational performance (Gunasekaran et al., 2017; Schoenherr and Speier-Pero, 2015; Waller and Fawcett, 2013). The incorporation of big data complements information technology and usage capacities, hence improving organizational performance (Wang et al., 2015).

Organizations aiming for operational excellence, increased market share, and higher profits often pursue expansion both horizontally and vertically. While larger firms have certain advantages, there are situations where smaller firms can surpass the profit levels of their larger counterparts (Lotti & Santarelli, 2004). The impact of the company's size on organizational performance is an issue of intense discussion since it includes operational scale and efficiency. The advantages and drawbacks of firm size are determined by a variety of factors, including market circumstances and the organization's unique goals and strategy.

2.3 Strategic Maturity and Organizational Performance

An organization's degree of strategic maturity can be determined by looking at how much it relies on proprietary performance management tools, how internal performance management processes have developed, how management systems are operated and supervised through

interactions, processes, and relationships, how the performance management system is structured, and how integrated it is.

According to research, implementing strategic maturity practices improves the alignment of strategy and implementation, increases the efficacy of decision-making processes, and strengthens an organization's capacity to adjust to changes in the business environment. These benefits all contribute to improved organizational performance (Walter et al., 2013).

According to ongoing research, improving organizational performance is heavily dependent on strategic maturity, which is demonstrated by agile strategic movement, creative thinking, and the ability to shape organizational strategy (Al-Taweel & Al Hawary 2021; Sinkovics, 2004; O., 2020; Adegboye and opkan 2015). According to research, strategic flexibility and the ability to respond to changes in dynamic situations have a direct impact on organizational performance, with innovation being a vital component in this respect (Al-Taweel and Al-Hawari, 2021). Similarly, improving interorganizational communication effectiveness may be accomplished by cultivating the "right" characteristics, such as operational flexibility and cooperation (Sinkovics, 2004). Achieving exceptional performance has been demonstrated to rely substantially on strategic foresight, which is an important component of strategic flexibility and maturity (O., 2020).

To sum up, in order to improve organizational performance, it is extremely desired to implement suitable business strategies, such as customer orientation, obtaining employee autonomy, and engaging in socially responsible interactions (Adegbuyi, 2015).

Therefore, in the light of the above discussion two hypotheses that lie under the relationship between strategic maturity and organizational performance are proposed:

H1: Strategic maturity has a significant effect on organizational performance, and the following hypotheses are derived from it.

H1a: Leadership maturity significantly effects on organizational Performance.

H1b: Planning and executing effects on organizational performance.

H1c: Process and Tolls significantly effect on organizational performance.

H1d: People and Culture significantly effect on organizational performance.

H1e: Structure and Model significantly effect on organizational performance.

H1 f: Innovation significantly effect on organizational performance.

III. RESEARCH METHODS

3.1 Methodology

The methodology of this study is quantitative, as it uses a survey questionnaire to collect data. The questionnaire consists of four sections. Section (a) focuses on the demographic profile of respondents, while sections (b), (c), and (d) use a five-point Likert scale for respondents to indicate their levels of agreement with statements related to the study. The independent variable is strategic maturity (SM), which consists of seven constructs: leadership management (LM), and planning and executing (PE), process and tolls (PT), People and culture (PC), structure and model (SM), performance management (PM) also innovation with a total of 24 items. The dependent variable is organizational performance (OP), which consists of three components: financial performance (FP), market performance (MP), and operational performance (OP) with a total 12 items.

Questionnaires are distributed on academic and administrative leaders at the at private universities in the Duhok Governorate in the Kurdistan Region of Iraq . Data analysis includes the use of (for data entry and descriptive analysis in Section A. In addition, partial least squares

structural equation modelling (PLS-SEM) is used for comprehensive data analysis, with SmartPLS software facilitating examination of reliability, validity, convergent validity, and composite reliability (CR), discriminant validity, and hypothesis testing.

3.2 Proposed model Conceptual Framework

Based on the previous literature and arguments, and by the study's objectives, questions, and hypothesis, a study model was developed in which a set of variables that comprise the current study were highlighted to provide an initial perception of a group of correlation and influence in the relationship between the variables of the study. The major purpose of current study is to verify the role of strategic maturity in improving organizational performance at the at private universities in the Duhok Governorate in the Kurdistan Region of Iraq . To experimentally assess the model, the researcher used Smart PLS software (version 4.0.7) to do a partial structural equation square (PLS-SEM) modelling (Ringle et al, 2015). Figure 1 illustrates the proposed model of the study.

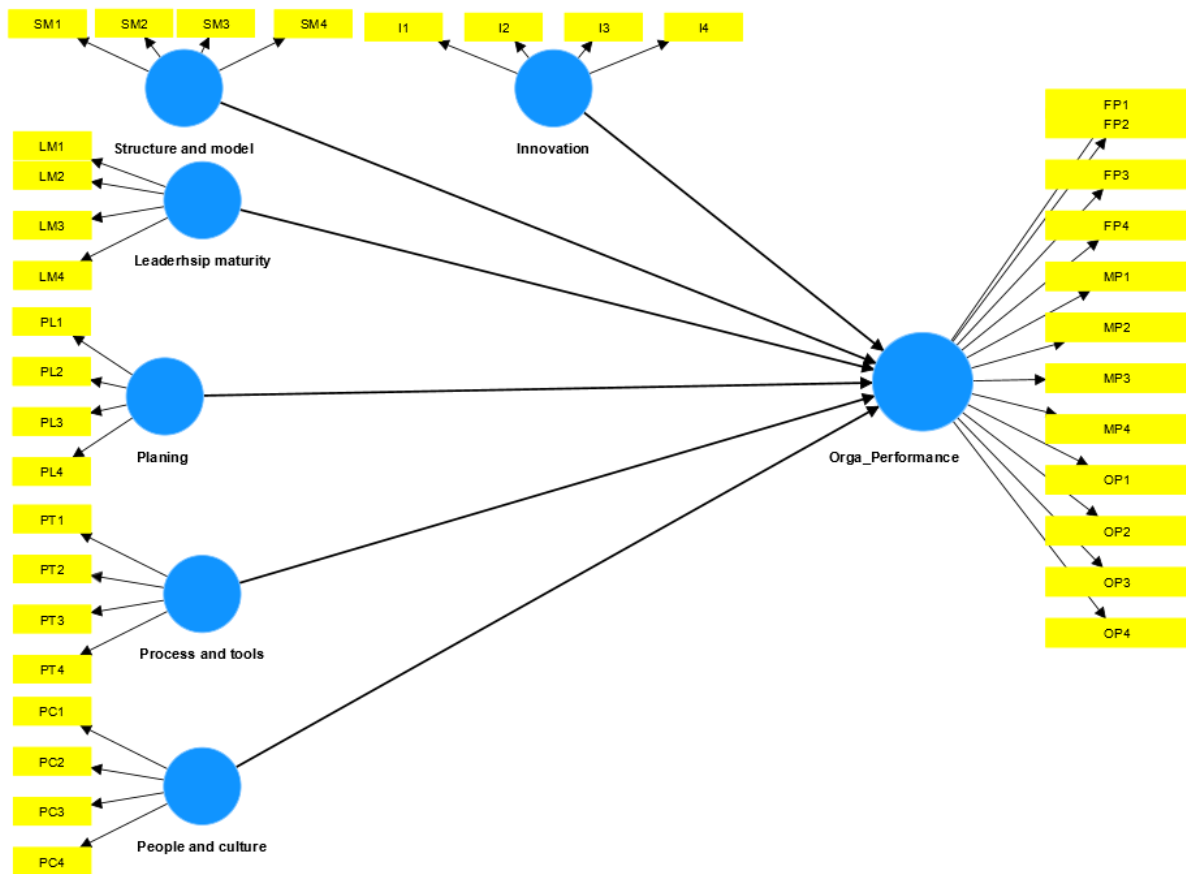


Figure 1. Proposed Model

3.3 Data collection and sample selection

Data utilized to meet the study's objectives; sample data was collected through questionnaires. Both languages (Arabic and English), are the two official languages used by higher Kurdistan Region institutions, to make them obvious to participants. This study included a number of academic and administrative leaders at private universities in the Duhok Governorate in the Kurdistan Region of Iraq. A total of (65) questionnaires were collected from a total of (72), and they are valid for analysis. After data was collected, it was coded. Therefore, the data were

analysed using two programs SPSS (V.26) and SmartPLS (V 4.0.9), and some steps are described in the next section.

IV. DATA ANALYSIS AND RESULTS

To evaluate research models, this study used Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software (version 4.0.7). The study was conducted in two steps: first, a structural model analysis looked at the potential links between the variables, and then a measurement model evaluation assessed the validity and reliability of the research measures. By providing accurate measurement of each construct, producing more robust and reliable results, and eventually fostering a better comprehension of the linkages within the model, this two-step technique provides advantages over single-step assessments.

4.1 Demographic of Respondent Profile

the demographic data of the sample includes: gender, age, years of employment, education qualification, Job title and experience in the current position. All the demographic data of the respondent is shown in Table 1.

In the study, a total of 65 academic and administrative leaders at private universities in the Duhok Governorate in the Kurdistan Region of Iraq participated. Diverse demographic factors characterized the respondents. Table 1 provides an overview of the respondents' profiles. The total number of respondents is 65. In terms of gender, 61.45% were male (40 respondents), and 38.46% were female (25 respondents). The age distribution shows that 38.46% of the respondents were aged 30-40 years (25 respondents), 23.08% were aged 41-50 years (15 respondents), 20% were aged 51-60 years (13 respondents), and 18.46% were 61 years and above (12 respondents). Regarding years of employment, 23.08% had less than 5 years of employment (15 respondents), 38.46% had 6-10 years (25 respondents), 27.69% had 11-15 years (18 respondents), and 10.77% had 16 years and over (7 respondents). Concerning their qualifications, 15.38% had a Diploma (10 respondents), 46.15% had a Bachelor's degree (30 respondents), 15.38% had a Master's degree (10 respondents), and 23.08% had a Doctorate (15 respondents). Finally, for experience in their current job, 21.54% had less than 5 years of experience (14 respondents), 43.08% had 6-10 years (28 respondents), 16.92% had 11-15 years (11 respondents), and 18.46% had 16 years and over (12 respondents). These demographic characteristics provide a comprehensive overview of the study's participant profile, offering valuable insights into the composition of the surveyed academic and administrative leaders.

Table 1: Respondents profiles

Respondent characteristics		Frequency (N = 65)	Percentage (%)
Gender	Male	40	61.45
	Female	25	38.46
Total		65	%100
Age	30-40	25	38.46
	41-50 years	15	23.08
	51-60 years	13	20
	61 and above	12	18.46
Total		65	%100
Years of employment			
	Less than 5 years	15	23.08
	6-10 years	25	38.46
	11-15 years	18	27.69
	16 and over	7	10.77

Total		65	%100
Qualification	Diploma	10	15.38
	Bachelor	30	46.15
	Master	10	15.38
	Doctorate	15	23.08
Total		65	%100
Experience in current job	Less than 5 years	14	21.54
	6-10	28	43.08
	11-15	11	16.92
	16 and over	12	18.46
	Total	65	%100

4.2 The Descriptive Analysis

The descriptive statistics for latent variables, as presented in Table 2, offer valuable insights into the strategic maturity and organizational performance of the surveyed population. The strategic maturity constructs include Leadership Maturity (Mean = 4.3854, SD = 0.83645), Planning and Executing (Mean = 3.4251, SD = 0.74325), Process and Tools (Mean = 3.8560, SD = 0.80395), People and Culture (Mean = 3.6854, SD = 0.78414), Performance Management (Mean = 3.9657, SD = 0.82514), and Innovation (Mean = 4.0237, SD = 0.829321). Meanwhile, the organizational performance constructs encompass Financial Performance (Mean = 4.0497, SD = 0.78654), Market Performance (Mean = 3.7829, SD = 0.79425), and Operational Performance (Mean = 4.0099, SD = 0.84562). Notably, the construct with the highest mean is Leadership Maturity, suggesting a strong perceived maturity in leadership skills. Additionally, Operational Performance exhibits the highest standard deviation, implying greater variability in respondents' perceptions of this aspect within the organizational context. These findings contribute to a nuanced understanding of the strategic and performance dimensions, aiding researchers and practitioners in identifying areas of strength and potential focus for improvement.

Table 2: Descriptives statistics for Latent Variables

Constructs	N	Mean	Std. Deviation
Strategic Maturity			
Leadership maturity	65	4.3854	.83645
Planning and executing	65	3.4251	.74325
Process and Tolls	65	3.8560	.80395
People and culture	65	3.6854	.78414
Structure and Model	65	3.9657	.82514
Innovation	65	4.0237	.829321
Organizational Performance			
Financial performance	65	4.0497	.78654
Market performance	65	3.7829	.79425

Operational performance	65	4.0099	.84562
Total	65	3.52848	0.7727

4.3 Assessment of Measurement Model

Hair et al. (2020), Hair et al. (2021), and Hensler et al. (2009) stated that while assessing a measuring model, researchers should also consider internal consistency, content validity, convergent validity, and discriminant validity in addition to assessing the reliability of individual entries. The following is how the results are shown:

4.3.1 Internal Consistency Reliability

Indicator reliability analysis was performed using loading factors. In this study, the composite reliability coefficient was used to examine the internal consistency reliability of the revised scale. The composite reliability coefficient provides less biased evaluations than Cronbach's alpha, which is why composite reliability was chosen over the other one. In contrast to Cronbach's alpha, which considers that every item contributes equally to a given variable, composite reliability considers the unique contributions of every item (Gotz, Liehr-Gobbers, and Krafft, 2010; Hair et al., 2019).

The Cronbach's alpha coefficients in the present research were unique and varied from 0.607 to 0.922, exceeding the suggested cutoff point of 0.7. It is essential to acknowledge, however, that the scale's reliability may be overstated or underestimated to Cronbach's alpha. Similar results are obtained for the internal consistency reliability coefficient using the composite reliability approach, which takes into account various factor loadings for all indicators. More specifically, a Cronbach's alpha value of 0.70 or higher indicates good dependability, whereas a value of 0.60 or lower implies inadequate internal consistency. A composite reliability coefficient of 0.7 or above is regarded as suitable for understanding the dependability of a particular construct, in accordance with Bagozzi and Yi (1988) and Hair et al. (2011). Table 3 provides information on the dependability of internal consistency.

Table 3: Loading, Composite Reliability and Average Variance Extracted (AVE)

Construct (Item)	Code	Factor Loading	Alpha. C	rho. A	Composite Reliability	(AVE)
Leadership maturity	LM1	0.607	0.829	0.837	0.880	0.694
	LM2	0.729				
	LM3	0.606				
	LM4	0.787				
Planning and executing	PL1	0.805	0.785	0.797	0.853	0.598
	PL2	0.880				
	PL3	0.875				
	PL4	0.865				
Process and Tolls	PT1	0.850	0.829	0.849	0.879	0.590
	PT 2	0.759				
	PT 3	0.839				
	PT4	0.635				
People and culture	PC1	0.794	0.790	0.800	0.857	0.572
	PC 2	0.813				
	PC 3	0.647				
	PC4	0.847				

Structure and Model	SM1	0.739	0.701	0.724	0.812	0.523
	SM2	0.729				
	SM3	0.825				
	SM4	0.922				
Innovation	I1	0.635	0.882	0.886	0.914	0.670
	I2	0.820				
	I3	0.868				
	I4	0.822				
Financial Performance	FP1	0.850	0.826	0.830	0.885	0.690
	FP2	0.800				
	FP3	0.780				
	FP4	0.725				
Market Performance	MP1	0.820	0.850	0.862	0.898	0.670
	MP2	0.775				
	MP3	0.780				
	MP4	0.910				
Operational Performance	OP1	0.841	0.731	0.700	0.712	0.677
	OP2	0.802				
	OP3	0.890				
	OP4	0.725				

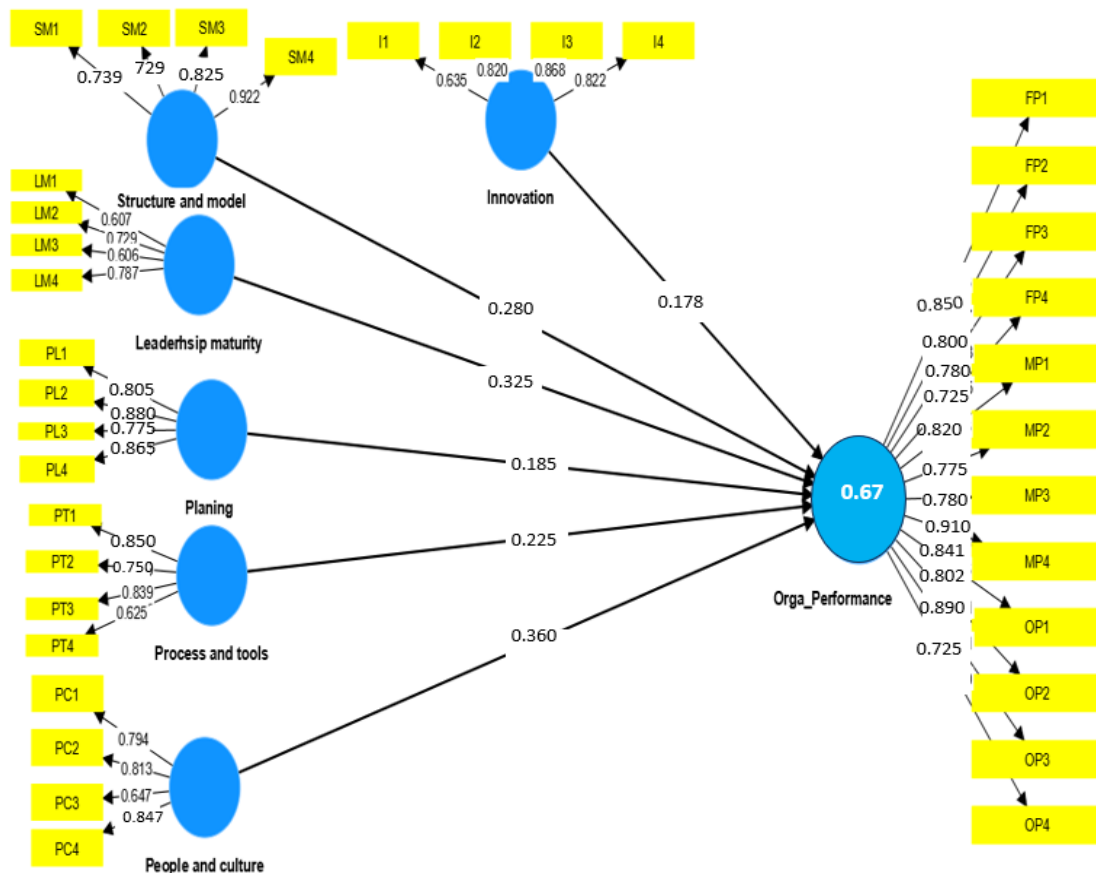


Figure2. Estimation valid model

All Average Variance Extracted (AVE) results above falls within the recommended cutoff point of 0.50, falling between 0.523 and 0.694 (Hair et al., 2010). The composite reliability coefficients for each of the study's distinctive variables are shown in Table 3 and Figure 2. As shown in Table 3, the latent variables' composite reliability coefficients ranged from 0.607 to 0.922. According to Bagozzi and Yi (1988) and Hair et al. (2011), this range indicates positive internal consistency and satisfactory scale consistency.

4.3.2 Discriminant Validity

To confirm discriminant validity, a test should be performed to show that each notion inside each latent variable is unique from concepts in other latent variables. Good discriminant validity is demonstrated when the Average Variance Extracted (AVE) value for each exogenous construct (placed on the diagonal) surpasses the correlation between that construct and the other constructs (located below the diagonal) (Afthanorhan et al., 2021). The Fornell-Larcker criteria, shown in Table 4, determine discriminant validity by comparing the square root of the extracted mean-variance to the correlations between latent variables, providing the AVE value.

Table 4: Discriminant validity (Fornell and Larcker Criterion)

Constant	LM	PE	PT	PC	PM	I	FP	MP	OP
LM	0.771								
PE	0.320	0.735							
PT	0.391	0.712	0.740						
PC	0.379	0.547	0.186	0.771					
PM	0.610	0.386	0.714	0.616	0.722				
I	0.543	0.657	0.276	0.456	0.543	0.825			
FP	0.475	0.550	0.159	0.447	0.678	0.665	0.811		
SM	0.635	0.679	0.268	0.574	0.665	0.671	0.574	0.830	
OP.	0.386	0.591	0.180	0.504	0.550	0.532	0.483	0.560	0.830

Note. LM (Leadership Maturity, PE (Process and executing), PT (Process and Tolls), PC (Process and culture, PM (Structure and model), I(Innovation), FP (Financial Performance), MP (Market Performance) and OP (Operational Performance).

4.4.1 Hypothesis Test

Hypotheses testing of the structural model of this study was performed by bootstrapping using one-tailed instead of two-tailed tests to reduce Type II error (Latan et al., 2018), 5,000 samples, bias correction, and acceleration (Latan et al. Hair et al, 2017). (BCa) SmartPLS V 4. which shown in Table (5). Bootstrapping is a resampling method that takes random samples of data (with Replacement) and uses these samples to predict the path pattern multiple times in slightly varying data towers (Hair et al., 2017). Chen (1998) suggested that PLS-SEM is a non-parametric method, so scholars need to evaluate the bootstrapping process to achieve statistical significance. In short, running the Bootstrapping function in SmartPLS can produce very important results, such as P-value and t-value, to assess whether the path parameters are significant, this value is equal to the probability of obtaining a t-value. If the hypothesis is supported, it is at least as extreme as the observed value. In other words, the p-value is the probability of falsely rejecting the true null hypothesis (ie, assuming a significant path factor even if it is not actually significant) (Hair et al., 2017, p. 206). is the p-value (***P < 0.001, **P < 0.01, *P < 0.05) and the rule of thumb

for experimental t values greater than 1.96. From the bootstrapping findings of the structural model, the following hypotheses can be obtained from:

H1 Strategic Maturity significantly effects on organizational performance.

According to Table 5, the R Square organizational performance (OP) value of 0.67 means that organizational performance can be explained by the strategic Maturity variable (SM) with all dimensions by 67%. In contrast, other variables explain the remaining 33% (not discussed in this research). Table 5 displays the effect between the research variables that have been mentioned, the T Statistics and P-Values.

Table 5 illustrates the structural model evaluation and its results of testing the hypotheses that support the first main hypothesis, which states that strategic maturity has significant effects on organizational performance. Originally, H1 showed that strategic maturity had a significant impact on organizational performance. The path coefficient, T value, and P value ($\beta=0.432$, $t=7.602$, $P=0.000$) indicate that H1 is supported.

Table 5: Hypotheses testing (bootstrapping)H1

Hypotheses Relationship	Beta	standard D.	T-Statistics	P-Values	Decision	R ²
H1 strategic maturity -> OP	0.432	0.082	7.602	0.000	Supported	0.67
H1A Leadership maturity -> OP	0.325	0.048	7.245	0.000	Supported	
H1B Planning and executing -> OP	0.185	0.071	6.135	0.004	Supported	
H1C Process and Tools -> OP	0.225	0.045	7.345	0.000	Supported	
H1D People and culture -> OP	0.360	0.041	4.678	0.000	Supported	
H1E Structure and Model -> OP	0.280	0.055	5.702	0.002	Supported	
H1F Innovation -> OP	0.378	0.074	6.357	0.000	Supported	

At the partial level (see Table 5), the results report positive and significant effects of leadership maturity on organizational performance ($\beta=0.325$, $t=7.245$ $p=0.000$). Thus, H_{1a} is supported. Furthermore, this study hypothesized that planning and execution had an important influence on organizational performance, The results of the study indicated significant impacts ($\beta=0.185$, $t=6.135$, $P=0.004$). Consequently, H_{1b} is approved. The current research hypothesized that there is a significant effect of Process and Tools on Organizational Performance ($\beta=0.225$, $t=7.345$, $p=0.000$). Consequently, H_{1c} is supported. Furthermore, the findings indicate that people and culture have significant effects on organizational performance ($\beta=0.360$, $t=4.678$, $P=0.000$). H_{1d} is thus supported. Furthermore, the result of analysis illustrated significant effects of Structure and Model on organizational performance ($\beta=0.280$, $t=5.702$ $P=0.002$) with these results the H_{1e} supported. Finally, the finding showed significant effects of Innovation on organizational performance by ($\beta=0.78$, $t=6.357$ $P=0.000$).

V. DISCUSSION

The positive relationship observed between Strategic Maturity and Organizational Performance (OP) aligns with previous studies (Luftman et al., 2008; Kalinowski, 2016; Acar & Özşahin, 2017; Kucińska-Landwójtowicz et al., 2024), which emphasize that strategic alignment enhances overall organizational effectiveness and performance. Similarly, the significant positive relationship found between Leadership Maturity and OP corroborates existing literature (El Shal and Kadery, 2021), suggesting that effective leadership practices contribute to organizational success by inspiring and guiding teams. Additionally, the positive correlation between Planning and Executing and OP resonates with previous research (Kosieradzka, et al., 2021), indicating that robust project management practices, including planning and execution, contribute to better outcomes. Moreover, the relationship between process, tools, and optional operation aligns with previous studies (Kucińska-Landwójtowicz et al., 2024), which emphasize how simplified procedures and suitable tools improve operational effectiveness. Furthermore, previous studies have proven the impact of organizational culture on worker engagement, teamwork, and overall productivity (Kucińska-Landwójtowicz et al., 2024). These results are consistent with the beneficial interaction that exists between individuals, culture, and OP. Similarly, prior research demonstrating how organizational structure affects decision-making, communication, and agility is consistent with the positive correlation shown between structure, model, and operational policy (Baars et al., 2016).

Ultimately, the established correlation that exists between innovation and operational procedures suggests that inventive firms can adjust to evolving surroundings and secure a competitive edge. The literature is interested in the connection between innovation and organizational performance. Research on the relationship between organizational innovation and performance has not always supported the hypothesis that it can increase workplace satisfaction and productivity and/or lower administrative costs, which in turn can lead to higher business performance (Phase, 2019).

VI. IMPLICATIONS, LIMITATIONS AND FUTURE DIRECTIONS

The study conducted at the private universities of Duhok city demonstrated that there was a positive relationship between Organizational Performance (OP) and Strategic Maturity. The structured approach known as business process management, or BPM, aims to improve the procedures that businesses use to complete jobs, serve customers, and generate revenue. BPM utilizes a range of methods to improve a business process, including analysis, modeling in several scenarios, change implementation, process monitoring, and continuous improvement in the process's ability to yield desired business objectives and results. The utilization of several units of analysis in this study contributes to the current body of knowledge on the relationship between organizational performance and maturity levels. However, the study has limitations as it was conducted in a single university, and the results may not be generalizable to other universities or contexts. Future directions for research in this field include developing a universally agreed organizational maturity model and investigating the impact of various organizational features on business management maturity. Furthermore, while increased BPM maturity might lead to better performance, it is not always the best degree of maturity for all firms, and various organizations should strive for different levels of maturity based on their unique features.

VII. CONCLUSION

The exploratory research of academic and administrative leaders at private universities in the Duhok Governorate in the Kurdistan Region of Iraq indicates a significant beneficial relationship between Strategic Maturity and Organizational Performance (OP). This emphasizes the crucial role of strategic maturity in improving organizational effectiveness and performance in the university context. However, given the study's exploratory character and focus on a unique institution, caution should be applied when applying these findings to other situations. More

study is needed to improve our knowledge of how strategic maturity affects organizational performance in a variety of academic and administrative settings.

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