

# Critical Success Factors for Pharmaceutical Firms: The Case of Pakistan

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## Abstract

Organizational performance is essential for the growth, sustainability, and competitive edge of a business entity. The pharmaceutical industry in Pakistan has become highly uncompetitive due to excess supply, lack of administrative control, and failure to acquire new drugs related knowledge. Thus, this study has focused on the pharmaceutical sector of Pakistan. The authors of the study have collected the data through a self-administered questionnaire distributed in Lahore, Multan, and Islamabad. The study has used Smart PLS version 3.3 for statistical analysis. The study has tested nine hypotheses, and found support for all of them. The study found that knowledge management, organizational control, and organizational performance significantly affect competitive advantage. The results also suggest that organizational performance mediates (i) knowledge management and competitive advantage, (ii) organizational control and competitive advantage, and (iii) organizational image and competitive advantage. Based on the empirical results, the study has proposed several implications for policymakers and practitioners.

**Keywords:** *Organizational performance, competitive advantage, knowledge management, organizational control, pharmaceutical industry, Pakistan.*

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## Introduction

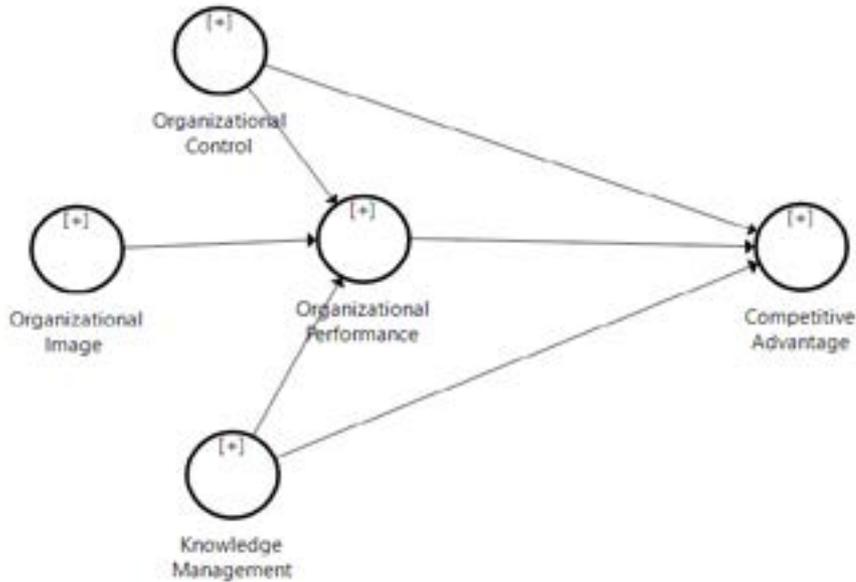
Organizational performance depends on identifying critical success factors and allocating appropriate resources to each factor (Ranjan & Bhatnagar, 2008). Such critical factors are indicators of organizational performance and help firms achieve a competitive advantage (Alazmi & Zairi, 2003). Bruno & Leidecker (1984) argue that critical determinants of organizational performance are administrative control, knowledge management, and corporate image. Organizational performance enhances a firm's productivity, increases its image, and enhances employee trust and loyalty (Jacks et al., 2011). In the early 1900s, researchers focused on understanding organizations for the benefit of all stakeholders (Freeman, 1984). In the early twentieth century, organizations shifted their focus to acquiring knowledge, vitality, improving quality, and delegation of power (Van-Wart, 2003). By the mid-nineteenth century, organizations started giving importance to individual qualities (e.g., motivational, individual, physical, and attitudinal) and aptitudes (e.g., capacity to impact) that are related to authority and power (Van-Wart, 2003; Ranjan & Bhatnagar, 2008; Jenkins, 1947). Administrative control is another key success factor that includes supervisors' perceived behavior. It is an essential precursor to teamwork and collaboration. Administrative control directly relates to employee behavior contributing towards improved organizational performance and sustainability (Severo et al., 2015). Many past studies have documented that neglecting administrative control affects a firm's socio-economic productivity and competitive advantage (Olowogbon et al., 2019). Also, employees shift from one department to another randomly (Haseeb et al., 2019), lose administrative control, demotivates employees, and enhances their turnover intentions (Kuik et al., 2019).

## Objectives of the Study

The research examines the impact of organizational control, organizational image, and knowledge management on organizational performance. It also examines the impact of organizational control, organizational performance, and knowledge management on competitive advantage. The study also examines the mediating roles of organizational performance.

## Conceptual Framework

Given the above objectives, we have developed a framework presented in Figure 1. We have discussed the theoretical support for the relationships depicted in the model in the following sections.



**Figure 1: Conceptual Framework**

## Literature Review & Hypothesis Development

### Knowledge Management and Competitive Advantage

Many past studies have documented that knowledge management give firms a competitive edge (Ruggles, 2000). Knowledge management develops core competencies in a firm, which is a precursor to sustainable growth. Knowledge management helps build intangible assets (i.e. human resources) necessary for increased organizational performance and satisfying customer needs (Johannessen & Olsen, 2003). Realizing its importance, leading firms create an environment of knowledge sharing and knowledge management. Thus, firms encourage their employees to acquire knowledge from internal and external sources and provide formal and informal training (Stevenson, Hojati & Cao, 2014). Employees use this acquired knowledge for relationship-building activities that provide them with a competitive advantage (Stevenson, Hojati & Cao, 2014). Strategically, firms focus on understanding what they know, what they should acquire to develop intangible core competencies, and how they can achieve them (Grant, 1991; Zack, 1999). Sallis & Jones (2002) suggest that an environment of association, partnership, and the inter-firm connection is necessary for “acquisition, leveraging or increasing new capabilities and capital” (Kogut & Chang, 1996; Hagedoorn, 1993; Mowery, et al., 1996).

Petty & Guthrie (2000) and Mouritsen (2003) argue that the government should make regulations that allow firms to declare their intellectual capital in their financial reports. Such practices of showing knowledge-based resources may positively improve a firm's image (Petty & Guthrie, 2000; Mouritsen, 2003). Knowledge acquisition in a firm falls into two broad categories, i.e., knowledge-based and non-knowledge-based. Both strategies have a different impact on an organization. Knowledge-based learning has a stronger impact on firm performance than non-knowledge-based learning (Al-Nawafah, Nigresh & Tawalbeh, 2019). Similarly, Iranban (2017) believes that strategic knowledge is a precursor for sustainability and competitive advantage. Competitors can copy tangible aspects of a firm, but they cannot imitate strategic knowledge and other intangible resources (Im, Kim & Bond-111, 2020). Thus, strategic intangible assets give an edge to a firm on aspects such as "durability, impaired mobility, substitution and imitation (Amit & Schoemaker, 1993; Barney, 1991; Dierickx & Cool, 1989; Wijaya & Suasih, 2020).

*H1: Knowledge management is significantly related to competitive advantage.*

### **Knowledge Management and Organizational Performance**

Kucharska & Bedford (2019) surveyed 3750 participants and 49 organizations and found that knowledge management and organizational performance are highly correlated. Similarly, a study found that organizational practices are positively associated with knowledge management and organizational performance (Hislop et al., 2018). Firms that nurture a knowledge sharing and knowledge management culture improve employee attitude towards work, leading to enhanced organizational performance (Santoro et al., 2018, Mahdi, Nassa & Almsafir, 2019).

Knowledge management promotes knowledge creation and positively affects organizational performance (Messick, 1994; De-Guimaraes, Severo & de-Vasconcelos, 2018). At the same time, knowledge management also has different facets that collectively affect employee attitude and behavior. Employees' positive attitude towards work enhances their performance (Iranban, 2017). Thus, knowledge management practices help a firm to develop protocols for managing organizational performance. Researchers argue that knowledge management is not a static phenomenon. It is dynamic and keeps changing with the changing business challenges and requirements (Al-Nawafah, Nigresh & Tawalbeh, 2019). Hence, we hypothesize that:

*H2: Knowledge management is significantly related to organizational performance.*

## **Organizational Control and Competitive Advantage**

Tessier & Otley (2012) and Kaplan (2009) developed a strategy that assumes that a management control system is highly correlated and interactive, and it gives a competitive edge to a firm. Comparatively, firms whose management control system is not interactive may not create differentiation (Cardinal, Kreutzer & Miller, 2017). Many control mechanisms have a different impact on firm competitiveness (Cobbold & Lawrie, 2002). The classical Porter Five Forces Model (Porter, 1985) suggests that a firm's competitive advantage depends on developing effective strategies to deal with "the intensity of rivalry among existing competitors, the bargaining power of customers and suppliers, the threat of substitute products or services, and the threat of new entrants" (Porter, 1985). The resource-based theory assumes that "competitive advantage cannot be achieved solely through effective decision-making or strategies by managers. Further, managerial competence is a key resource for competitive advantage" (Barney, 1991).

Khandwalla (1972) examined the association between the formal accounting-based control system and competition in an industry. He concluded that increased competition motivates management to enhance control mechanisms. The study found that this relationship is not linear and varies from one type of competition to another. For example, price competition has a weak impact on the management control system. Marketing competition has a moderate impact on corporate control, and product competition has the strongest correlation with administrative control. The study also found that control system design is sensitive to the competitive strategy (Mugwe & Mose, 2020). Conservative control systems and entrepreneurial control systems have a different impact on the competitiveness of a firm. For example, Miller & Friese (1982) found that a firm with a conservative control system has a weaker competitive advantage as it focuses on "low differentiation, homogeneous markets, and a stable environment." A firm that adopts an entrepreneurial control system is more dynamic. It faces a hostile environment and has the edge over competitors (Verburg, Nienaber, Searle, Weibel, Den-Hartog & Rupp, 2018).

*H3: Organizational control is significantly related to competitive advantage.*

## **Organizational Control and Organizational Performance**

Organizational control depends on the participation of all stakeholders in a firm. Employee attitude, behavior, and commitment enhance administrative control. Administrative control must empower employees and assign key duties based on their capabilities and organizational requirements (Mugwe & Mose, 2020). Thus, administrative control depends on the behavioral relationship between employees and organizations. If organizations' and workers' values are aligned, it will contribute to better administrative

control and enhance organizational performance (Feeney & Boardman, 2011). Many studies have concluded that administrative control and organizational performance significantly depend on the collaboration and participation of all stakeholders. Thus, Verburg et al. (2018) and Karabay, Akyuz & Elci (2016) argue that proactive stakeholders and their enthusiasm level are directly and indirectly associated with organizational knowledge and organizational performance.

*H4: Organizational control is significantly related to organizational performance.*

### **Organizational Image and Organizational Performance**

Corporate image has several advantages. It helps in retaining existing employees and attracting a new talented workforce. Consequently, it positively affects employee attitude and behavior, leading towards better organizational performance (Mugwe & Mose, 2020). Similarly, corporate image attracts new customers and retains existing consumers leading toward increased sales and organizational performance (Mugwe & Mose, 2020; Tajfel, Turner, Austin & Worchel, 1979). Madjar et al. (2002) and Kim & Thapa (2018) suggest that corporate image and organizational performance flourish in an environment where employees are encouraged to participate in decision-making and build social interactions.

Dhir & Skula (2018) suggest that a firm's corporate image and organizational culture build a positive employee mindset. Consequently, their motivation level and performance increase. Many authors argue that the corporate image promotes employee identification and aligns their values with the organization. This increases both employee and organizational performance (Alshibani & Azam, 2021; Dutton et al., 1994).

A firm's success depends on employee participation in value-adding activities (Singh & Gupta, 2018). The social identity theory argues that a firm's image develops a sense of belonging in employees, enhances their engagement and accountability, and leads to better organizational performance (Tajfel, Turner, Austin & Worchel, 1979; Trepte, 2006). An organization's external image increases employee commitment, a precursor to organizational performance and turnover intentions (Mishra & Mishra, 2013; Muthueloo, Shanmugam & Teoh, 2017). Thus, positive perception reduces negative outcomes such as burnout, emotional exhaustion, and turnover intentions (Alshibani & Azam, 2021).

*H5: Organizational image is significantly related to organizational performance.*

## **Organizational Performance and Competitive Advantage**

A firm can enhance its competitive advantage within certain limits (Juliana & Edema, 2018). At the same time, Wijetunge (2017) suggests that organizational performance depends on the vision, culture, and organizational practices. Organizational performance has many facets, including management performance, financial performance, and marketing performance. All these facets give an edge to a firm (Baker & Sinkula, 2005; Turner & Simister, 2001). When a firm meets its stakeholders' needs and develops strategies to differentiate its products, it gives a competitive edge. Li & Zhou (2010) indicate that market orientation enhances organizational performance and contributes towards differentiation and cost advantages.

Market orientation has a direct link with organizational performance and competitive advantage (Mahmoud, 2011). Business performance orientation has several facets, including service productivity, return on assets, customer satisfaction, market share, net income, size, and firm age. All these facets affect organizational performance and competitive advantage (Tsiotsou & Vlachopoulou, 2011). Organizational performance has two perspectives which are micro and macro. Both of them are essential for organizational performance and competitive edge (Raju, Lonial & Crum, 2011). The association between organizational performance and competitive advantage is bi-directional. That is, organizational performance affects competitive advantage, and at the same time, competitive advantage stimulates organizational performance.

*H6: Organizational performance is significantly related to competitive advantage.*

## **Mediating Effects**

The discussion in the preceding sections suggests that knowledge management is related to organizational performance, and organizational performance stimulates competitive advantage. Organizational control affects organizational performance while organizational performance and competitive advantage are positively related. Also, corporate image and organizational performance are correlated. Further, organizational performance is also a predictor of competitive advantage. Given this interrelationship, we argue that:

*H7: Organizational performance mediates the knowledge management and competitive advantage relationship.*

*H8: Organizational performance mediates the organizational control and competitive advantage relationship.*

*H9: Organizational performance mediates the organizational image and competitive advantage relationship.*

## **Methodology**

### **Data Collection and Survey Instrument**

We have used a quantitative approach and collected data with a self-administered Likert scale questionnaire. The target audience for the study comprises medical store managers in Multan, Lahore and Islamabad. The study used a purposive sampling technique. We distributed 175 questionnaires and received 150 valid responses. The study has adapted 11 knowledge management items from Karamitri, Kitsios & Talias (2020). Administrative control has three factors and 11 items, all adapted from Verburg et al. (2018). We adapted the corporate image scale from Bingöl, Şener & Çevik (2013). It has two factors and 11 items. The competitive advantage scale has three indicator variables adapted from Days & Nedungadi (1994). The organizational performance scale has two factors and six items (Ho, 2008).

### **Respondents Profile**

The respondents' profile indicates that age ranged from 25 to 65 years. We found that 35% of the respondents were in the age group of 18 to 25 years; 20% were in the age bracket 25 to 35 years. In the age group 35 to 45 years, we have 20% respondents. 15% of respondents were in the age group 45 to 55 years, and the remaining respondents were over 55 years. Female respondents were 10%, and 90% were male respondents. We found that 40% of respondents were single, and 60% were married. In terms of education, we found that 38% of the respondents' had matric level education. 42% of respondents' were intermediate, and 10% had bachelor's degrees. The remaining 10% of the respondents' educational level was Master's.

### **Statistical Analysis**

For statistical analysis, we have used Smart PLS Version 3.3. The advantage of SEM is that it simultaneously tests all the relationships of the model. Before estimating the structural model through bootstrapping, we performed descriptive analysis, reliability, and validity analysis.

## **Results**

The purpose of descriptive analysis is to describe the basic features of the data. The descriptive analysis includes reliability, mean, standard deviation, Kurtosis, and Skewness. Table 1 illustrates the results related to descriptive analysis.

**Table 1: Descriptive Analysis**

	<b>Cronbach's Alpha</b>	<b>Mean</b>	<b>St. Dev</b>	<b>Kurtosis</b>	<b>Skewness</b>
Competitive Advantage	0.884	4.65	1.90	0.790	1.231
Knowledge Management	0.825	3.87	-0.78	1.651	-0.983
Organizational Control	0.843	3.67	2.03	-1.823	-0.787
Organizational Image	0.820	4.07	1.88	1.678	1.678
Org. Performance	0.896	4.17	1.79	0.789	2.001

The results suggest that Cronbach's Alpha value is the lowest for organizational image (Mean=4.07, SD=1.88,  $\alpha=0.820$ ) and the highest for organizational performance (Mean=4.17, SD=1.79,  $\alpha=0.896$ ), suggesting acceptable internal consistency (Henson, 2001). We also found that the Skewness (SK) values ranged from -0.787 to 2.001. It is highest for organizational performance (Mean=4.17, SD=1.79, SK=2.001) and lowest for organizational control (Mean=3.67, SD=2.03, SK=-0.787). Kurtosis values ranged from 0.790 to -1.823. It is the lowest for competitive advantage (Mean=4.65, SD=1.90, KR=0.790) and highest for organizational control (Mean=3.67, SD=2.03, KR=-1.823). The results suggest that the data has univariate normality (Mardia, 1974).

### **Convergent & Discriminant Validity**

Convergent validity and discriminant validity help in ascertaining construct validity. Convergent validity "takes two measures that are supposed to be measuring the same construct and shows that they are related." (Cable & DeRue, 2002). Conversely, discriminant validity shows that the constructs are unique and distinct (Watson et al., 1995). Refer to Table 2 for the results.

**Table 2: Convergent and Discriminant Validity**

	<b>Composite Reliability</b>	<b>AVE</b>	<b>CA</b>	<b>KM</b>	<b>OC</b>	<b>OI</b>	<b>OP</b>
Competitive Advantage	0.884	0.885	0.796				
Knowledge Management	0.825	0.847	0.769	0.808			
Organizational Control	0.843	0.847	0.400	0.382	0.825		
Organizational Image	0.820	0.840	0.581	0.603	0.246	0.809	
Org. Performance	0.896	0.898	0.611	0.624	0.308	0.555	0.873

The results suggest that the composite reliability values range from 0.820 to 0.896, while AVE values range from 0.840 to 0.898. Thus, we infer that the constructs fulfill the convergent validity requirements (Cable & DeRue, 2002). Simultaneously, we found that AVE values' square roots are greater than the Pearson correlation values, suggesting that

the constructs are unique and distinct (Watson et al., 1995).

### Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is a statistical technique that verifies a set of observed variables' factor structure. CFA tests the "hypothesis that a relationship between observed variables and their underlying latent constructs exists." (Brown & Moore, 2012). CFA results are illustrated in Table 3.

**Table 3: Confirmatory Factor Analysis**

	Competitive Advantage	Knowledge Management	Organizational Control	Organizational Image	Org. Performance
CA1	0.76				
CA2	0.762				
CA3	0.843				
KM1		0.749			
KM2		0.749			
KM6		0.864			
KM7		0.863			
KM8		0.879			
KM10		0.885			
KM11		0.789			
OC2			0.806		
OC4			0.834		
OC 6			0.856		
OC8			0.801		
OC9			0.823		
OC10					
OC11					
OI1				0.707	
OI3				0.721	
OI4				0.831	
OI7				0.885	
O18				0.738	
O19				0.768	
OI1				0.789	
OP1					0.874
OP2					0.904
OP5					0.823
OP6					0.876

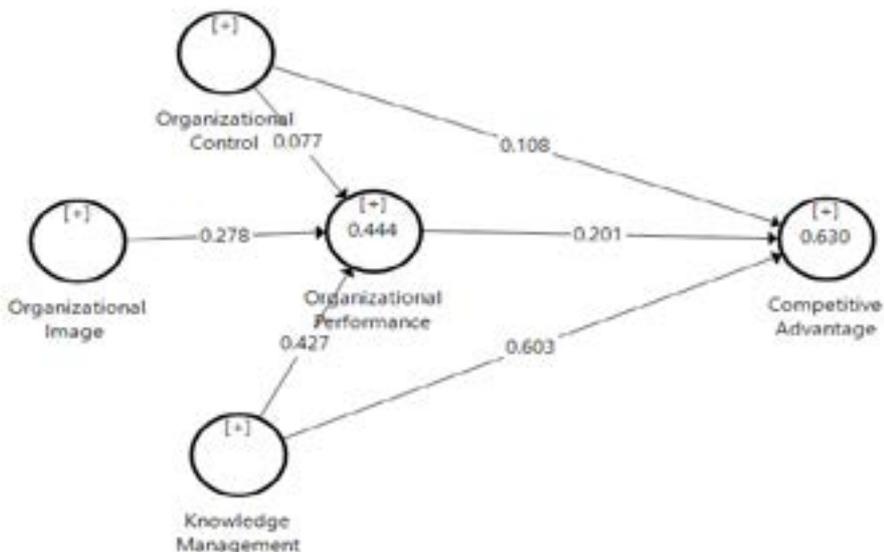
### Direct Hypothesis

Based on the theoretical support, we have proposed six direct and three indirect hypotheses. Table 4 illustrates the results. Figures 2 and Figure 3 show the measurement and structural models.

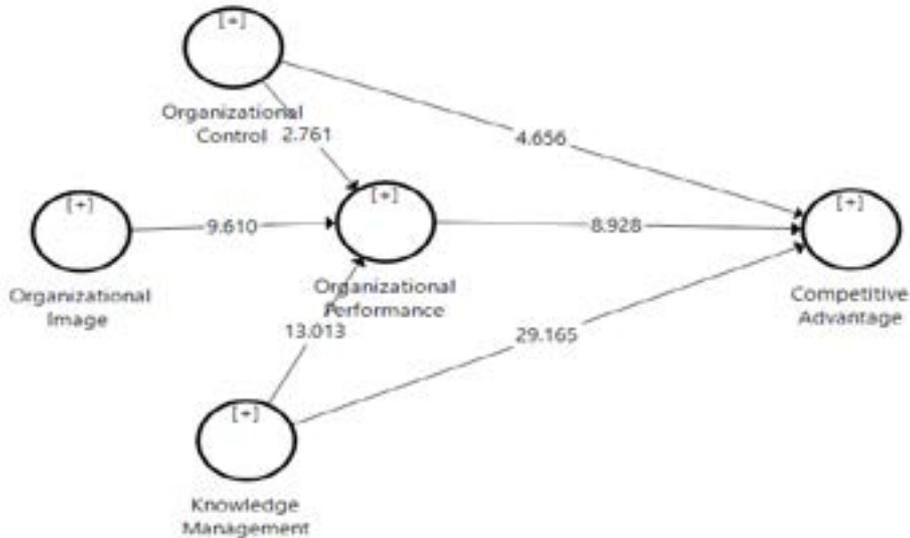
**Table 4: PLS-SEM Results**

Direct Effects	Beta	T Stat.	P Values	Results
Knowledge Man. -> Comp. Advantage (H1)	0.603	26.863	0.000	Accepted
Knowledge Man -> Org. Per. (H2)	0.427	13.697	0.000	Accepted
Org. Control -> Comp. Advantage (H3)	0.108	4.763	0.000	Accepted
Org. Control -> Org. Per.(H4)	0.077	2.824	0.005	Accepted
Org. Image -> Org. Per.(H5)	0.278	9.905	0.000	Accepted
Org. Per. -> Comp. Advantage (H6)	0.201	8.606	0.000	Accepted
Indirect Effects				
Know. Man. -> Org. Per. -> Comp. Advantage (H7)	0.086	7.211	0.000	Accepted
Org. Control -> Org. Per. -> Comp. Advantage (H8)	0.016	2.62	0.009	Accepted
Org. Image -> Org. Per. -> Comp. Advantage (H9)	0.056	6.31	0.000	Accepted

Our results support all six direct hypotheses. We found that the association between knowledge management and competitive advantage is strong ( $\beta=0.603$ ,  $t=28.863$ ,  $P<.05$ ). Further, the association between organizational control and organizational performance is the weakest. Similarly, our results support all three indirect hypotheses.



**Figure 2: Measurement Model**



**Figure 3: Structural Model**

## Discussion and Conclusion

The study found that knowledge management promotes competitive advantage in the pharmaceutical industry (H1). This finding validates earlier studies (Ruggles, 2000; Johannessen & Olsen, 2003). Knowledge management is an intangible asset of businesses that promotes sustainable growth and competitive advantage (Stevenson, Hojati & Cao, 2014). Given its importance, growth firms spend considerable resources on nurturing and building human resources. These firms also create an environment of knowledge sharing and knowledge management. Thus, such firms encourage their employees to acquire knowledge from internal and external sources and impart formal and informal training (Sallis & Jones, 2002). Employees use this acquired knowledge for relationship-building activities that enhance a firm's competitive advantage (Mouritsen 2003). Due to the diffusion of technology, knowledge becomes obsolete in a short period. Therefore Hislop et al. (2018) argue that a firm's sustainability and growth in the present competitive era depends on building a knowledge-based system and continuously updating it.

The study found that knowledge management promotes organizational performance (H2). This finding is consistent with many past studies (Al-Nawafah, Nigresh & Tawalbeh, 2019). Given the significance of knowledge management, Santoro et al. (2018) and Iranban (2017) recommend that firms develop and nurture a knowledge-sharing culture. Knowledge management promotes knowledge creation and positively affects different

facets of an organization (Messick, 1994). Additionally, knowledge management also has different facets that collectively affect organizational performance (Mahdi, Nassa & Almsafir, 2019). Hislop et al. (2018) argue that knowledge management is not a static phenomenon. It is dynamic and keeps evolving with business challenges and requirements.

Our results suggest that organizational control is a significant predictor of competitive advantage (H3). Organizational control and competitive advantage are highly correlated (Tessier & Otley, 2012). Many theories and models are linking administrative control with a competitive advantage. For example, the Porter Five Forces model suggests that firms can develop a competitive advantage by developing effective strategies that deal with “the intensity of rivalry among existing competitors, the bargaining power of customers and suppliers, the threat of substitute products or services, and the threat of new entrants” (Porter, 1985). Similarly, the resource-based theory suggests that “competitive advantage cannot be achieved solely through effective decision-making or strategies. Further, managerial competence is a key resource for competitive advantage (Feeney & Boardman, 2011).

The results indicate that organizational control and organizational performance are positively associated (H4). Organizational control and performance depend on employees’ behavioral relationship with organizational values (Feeney and Boardman, 2011). Verburg et al. (2018) and Karabay, Akyuz & Elci (2016) argue that employee values are an essential precursor to administrative control and organizational performance. The participation and cooperation of all stakeholders are necessary for organizational control and better organizational performance (Mugwe & Mose, 2020).

The study found that corporate image is a significant precursor of organizational performance (H5). Organizations with a strong corporate image can retain and attract talented employees (Madjar et al., 2002; Mikalauskiene & Atkočiūnienė, 2019), resulting in enhanced organizational performance. Additionally, organizational image and organizational performance have a bi-directional relationship. Corporate image has a causal effect on organizational performance, while organizational performance enhances corporate image (Alshibani & Azam, 2021). Organizations with a strong corporate image can retain existing and attract new customers, thereby enhancing corporate image and performance (Trepte, 2006). Dhir & Skula (2018) suggest that a firm’s corporate image and organizational culture build a positive employee mindset. Consequently, their motivation level and performance increase.

We found that organizational performance stimulates competitive advantage (H6).

Baker & Sinkula (2005) argue that precursors to organizational performance are financial, management and marketing capabilities. Thus, if a firm wants to have a competitive advantage, it should have a balanced blend of finance, management, and marketing functions (Raju, Lonial & Crum, 2011). Organizational performance has two perspectives which are micro and macro. Both of them are essential for organizational performance and competitive advantage (Li & Zhou, 2010). The association between organizational performance and competitive advantage is bi-directional. That is, organizational performance affects competitive advantage, and at the same time, competitive advantage stimulates organizational performance.

### **Conclusion**

Based on theoretical support, we have developed a model with six variables (i.e., knowledge management, organizational control, organizational performance, organizational image, and competitive advantage). The model has proposed nine relationships, including six direct and three indirect relationships. We tested the model by collecting data from the pharmaceutical sector in Punjab. Our results support all nine hypotheses, which are also in line with earlier studies. The study found that knowledge management, organizational control, and organizational performance significantly affect competitive advantage and organizational performance. The results also suggest that organizational performance mediates (i) knowledge management and competitive advantage, (ii) organizational control and competitive advantage, and (iii) organizational image and competitive advantage.

### **Limitations and Future Research**

The study has focused on the pharmaceutical sector of a few cities in Punjab. Future studies can extend our model in other sectors and other cities of Pakistan. We have used only five predictors in the model; future researchers may add more variables related to organizational and employee antecedents and outcomes. We have used organizational performance as a mediator in our conceptual framework. Future researchers can extend this conceptual framework by examining the mediating role of citizenship behavior and leadership style. Organizational culture, directly and indirectly, affects competitive advantage and organizational performance. New studies can use organizational culture as a mediating or moderating variable. This study is quantitative; therefore, we advise future researchers to use the mixed-methods approach.

## Annexure-1

### **Knowledge Management**

KM is essential for the performance of an organization

Knowledge acquisition helps the individual's autonomy

I feel content when I share my knowledge with others

When I share my knowledge, my colleagues respect me

I create knowledge through observation of the working environment

I often cooperate with my colleagues to face a new Situation

Knowledge is shared during group meetings.

My supervisor provides the required knowledge to solve my problem

Leadership at this hospital has not understood the Importance of KM (Reverse Coding)

The hospitals' information system does not facilitate KM

### **Organizational Control** (Verburg et al., 2018)

#### **Output Control**

In this organization, employees are clear about their roles and objectives

In this organization, the extent to which objectives are met is monitored.

In this organization, if objectives are not met employees are required to explain why.

In this organization, feedback is given to employees concerning the extent to which they achieve their objectives.

#### **Process Control**

In this organization, there are written rules concerning many organizational activities.

In this organization, written rules are strictly enforced.

In this organization, written rules and procedures are followed.

In this organization, there are clear formalized procedures for resolving conflict in this organization

#### **Normative Control**

When employees violate important norms, peer pressure is used to correct their behavior.

Violations of unwritten norms are punished.

Employees who violate important organization values/ethics are disciplined.

### **Organizational Image** (Bingöl, Şener & Çevik, 2013)

#### **Employee Perspective**

Our employees respect other people

Our employees are customer focused

Employees feel that the firm has transparency in its decision

Employees has a strong brand image of the firm

Employees feel firm's products are reliable

Employees know that the firm focus is on R&D

***Customer Perspective***

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Our customers respect other people

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Our customers feel that the firm has transparency in its decision

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Our customers feel that the firm has a strong brand image

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Our customers feel that firm's products are reliable

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Our customers know that the firm focus is on R &D

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Competitive Advantage (Days & Nedungadi, 1994)

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My firm is essentially competitor centered

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My firm is essentially customer centered

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My firm is both competitor and customer centered

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**Organizational Performance** (Ho, 2008)

***Financial Performance***

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I am satisfied with the profitability of my firm

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I am satisfied with the return on investment of my firm

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I am satisfied with the total sales growth of my firm

***Market Performance***

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I am satisfied with the market share of my firm

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I am satisfied with the profit ratio of my firm

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Our customers are satisfied with our firm

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