

Influence of Organizational Culture & Intellectual Capital on Business Performance in Textile Industry of Pakistan

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Abstract

This paper aims to find out the extent to which organizational culture and intellectual capital influence the textile industry's business performance in Pakistan. The study uses causal and explanatory research design. Several 200 textile industry employees participated in this survey, selected as the study sample using the purposive sampling technique. The study detects that both organizational and intellectual capital directly impact the textile firms' business performance. However, the impact of intellectual capital on business performance is more substantial than that of organizational culture. The mediating effect of technological innovation in the relationship between organizational culture and business performance is also supported. The study can be used by the textile industry managers to set up policies on how to improve business

performance in the textile firms. The study also fills the literature gap as prior studies do not have worked on the mediating aspect of technological innovation.

Keywords: Organizational culture, intellectual capital, business performance, technological innovation.

1. Introduction

The textile and apparel industry is a bulwark of Pakistan's economy. The largest manufacturing industry in Pakistan is the textile industry, which contributes 8.5% of its GDP. The textile industry accounts for about 60 percent of the nation's overall export earnings, contributes 46 percent of entire manufacturing, and uses more than 40 percent of bank loans for manufacturing. It provides 38 percent of the total country labor force with employment [36]. This sector is flourishing and needs to be researched to better the organizations involved in textile manufacturing in Pakistan [35]. Sector significance requires an in-depth study that is required both at the industrial and firm levels.

The textile sector is traditional in the global industrial segment. Its growth depends on its ability to develop its products through advanced and innovative methods, emphasizing competitiveness organizational structure and business practices [38].

Organizational culture is one of the variables that can inspire creativity. Even though it affects the workers' actions, organizational culture may affect their acceptance of innovation as a critical factor for its growth, enhancing its dedication to innovation. Organizational culture is also seen as one indicator of innovation because it can encourage or impede innovation. Moreover, organizational innovation needs to be followed by an appropriate organizational structure [37].

Specifically, Malinowska-Olszowy claimed that I.C. plays a vital part in the textile industry's sustainable growth. To accomplish this, textile companies need to emphasize I.C. strategies' execution and develop new skills and competencies in today's competitive market climate [39].

The purpose of this research is to determine the void in previous studies. This research aims to concentrate on O.C. and I.C.'s influence on firms' performance and stabilize the relationship by cooperating governance. More precisely, the mediator that is technical innovation and mediates the relationship between variables is the problem that was a new subject of measurement in Karachi, Pakistan's textile industry. There have been no studies carried out with these mediators and in this context, specifically in Pakistan's textile sector moderate. The study was helpful to the management of Textile companies, and, through this analysis, people employed at the top management were able to evaluate the significance of these performance functions. The theoretical justification lies in the possibility of understanding how culture influences innovation and business performance results. Given the increase in studies, few works refer to industrial-organizational studies, so this study contributes to filling that void [40]. The following are the objectives made in research.

1. To determine the impact of O.C. and I.C. on business performance.

2. To evaluate the moderating Relationship of corporate Governance between I.C. and business performance.
3. To analyze the mediating Relationship of technological Innovation between O.C. and business performance.

The following are the research questions.

1. What is the impact of O.C. and I.C. on organizational performance?
2. How corporate governance moderates the Relationship of I.C. with business performance?
3. How innovation mediates the Relationship between O.C. and business performance?

The proposed research could be useful as a strategic method for companies to become aware of the activities that affect their technologies' success. This research also influences all textile sector departments' top management to enhance their organizational performance by understanding the Importance of the organizational culture in maintaining better organizational operations and results. It is the first comparative analysis of I.C.'s impact in emerging markets on firm Performance in the textile industry. Secondly, the current textile I.C. literature is mainly descriptive summaries and lacks systematic work. This study also benefits scholars, statespersons, and corporate executives who have a general interest in textile production. This research is limited only to professionals working in the textile industry of Pakistan.

2. Literature Review

Firm performance is a crucial regression coefficient of interest among researchers in every management field; it can reference how significant performance has been in its operations. Moreover, it also refers to an enterprise's ability to attain high profit, quality service, large profit margins, strong financial performance, and predetermined survival [1]. Technological innovation is positively associated with the firm's performance; several studies have shown that both innovation and creativity mediate the Relationship between O.C. and Performance [28], suggesting that technological innovation mediates the relationship between organizational culture business performance.

[3] have concluded that a company's intellectual capital has a positive effect on a firm's performance and can predict potential financial success. [4] suggested that I.C. is related to firm operating performance substantially and constructively; also, I.C. brings value and improved financial performance to a company [2].

Previous studies on this topic have certain limitations, which leads us to research this field [7] and [5] have mentioned that their research limits significant innovation types. Therefore, financial performance must be considered. Other dimensions like customer performance, non-financial & economic performance should also be considered while evaluating a firm's performance.

Richard (1992) evaluated that business performance (profits, assets, return on investment, etc.), product performance (sales, market share, etc.), and shareholder return are incorporating overall organizational performance. The organizational

performance satisfaction level included four items: achieved growth, employee satisfaction, customer satisfaction or quality service, and product quality. Performance measurement included three items: sale, export, and profitability [5]. Various researchers think of performance differently because performance is a complex process among organizational researchers. The word performance was used mainly by researchers to describe the scope of performance efficiency, input & output quality measurements [6]. All these researchers talk about performance efficiency through innovation in an organizational, internal, or external environment in only one specific industry area.

Organizational culture is an essential resource for organizations to stay in their thoughts, principles, standards, practices, and beliefs to ensure their sustainability. Organizational culture plays a significant role in shaping signs of progress within organizations [8]. According to Sackmann, in 1991, Organizational culture can serve as a control mechanism for building organizational engagement, achieving cohesion within organizations, and helping organizations respond to external changes [10].

The literature on innovation claimed that organizational culture plays a vital role in shaping creativity in organizations [11]; Also embracing the idea that companies have a clear need to respond to external threats and change their internal capital, culture, activities, technology, and structure. Strategic Innovation focuses on preparing the organization through proactive innovation to address potential challenges [12]. Corporate organizations would benefit from forming a creative and high-performance organizational culture and improved competitiveness to maintain better market shares and productivity in increasing competition, higher customer demands, and rapid technological growth and change [13].

Kotter and Heskett, in 1992, found that corporate culture has a massive impact on the long-term financial performance of the company. They noticed that businesses with a culture that stressed all the major managerial constituents (customers, shareholders, and employees) and managerial leadership at all levels outperformed businesses that did not have extensive margins [14]. Therefore, organizational culture is the driving factor of organizations. Thus, developing an organizational culture that stimulates innovation and creativity is a vital and strategic choice to improve the organization and make it more competitive [15].

Organizational culture affects the organizational structure and operating structures of a company (Armstrong, 1995). The structure seems to highlight specific values that influence in organizations promoting or restricting innovation. Researchers have noted that organizational culture on an innovation-fostering system, such as versatility, independence, and collective teamwork, can encourage innovation [16]. Various other conditions could influence the study results in internal validity, but researchers have not discussed it. However, these studies examine the relationship between organizational culture and innovation but are more focused on an entirely different sector, including SMEs, educational institutes, health care, and banking sectors. Therefore, these limitations help us to initiate additional research on textile firms.

According to Denison (1984), there is a significant correlation between how an organization works and decision-making methods. Denison's theory of organizational culture supports the link between organizational culture and business performance. The impact of organizational culture on a firm's performance in different sectors is well-researched. However, some research findings outline a cross-sectional relationship between organizations' culture and outcomes [17]. These recent studies have begun to provide insights into how organizational culture may positively or negatively affect the firm's performance.

Hypothesis: H₁ (a) = Organizational culture has a positive impact on firm performance.

The *Intellectual Capital* model was initially discovered in 1969 through a letter from John Kenneth Galbraith to Michael Kalecki. And in 1991, it came to light through a Journal by Tom Stewart. The resource-based theory states that intellectual capital (I.C.) is a principal source to improve business performance [29]. As a result, many past researchers have studied in intellectual capital. [33], [30] and [32], who inquired how business performance is influenced by intellectual capital. Nevertheless, almost all previous researchers concentrated on how the individual intellectual capital affects performance while ignoring the impact of particular components of intellectual capital.

Suppose you want to know Intellectual capital in a firm better. In that case, you will need to address its employees to evaluate their core capabilities, especially in those regions where they can attain or have already attained "Best-in-the-world" status. In business, the intellectual capital signifies the fortune of concepts and skills to innovate, determining the business's future. You have to think about why the financial analysts and accountants avoided this area? The only reason is that it is not that easy to quantify. Previously accountants find it very difficult and sometimes impossible to calculate [30]. So we should recognize the significance of intellectual capital as it already exists and has real value [31].

Hypothesis: H₁ (b) = Intellectual Capital has a positive impact on firm performance.

Technology innovation has become a necessary element for organizations in recent times after experiencing various approaches in the concept of innovation, as Schumpeter first identified back in 1934. Innovational development in organizations is published in research articles [18], where this invention's implementation is discussed. After gaining various statistical data regarding technological innovation, it defines this factor as executing an updated process to develop an altered product with better specifications. Moreover, an organization also uses this tool to upgrade their marketing approaches and maintain better relations with external bodies. Concerning the requirement, the Green Paper also considered technological innovation as the source of production. They also comprehend and utilize profitable new solutions for economic and social issues considering the needs of the whole community and individual, thus successfully improving the economy sectors globally on the macro scale [19].

Technology innovation often works as a mediator between organizational culture and firm performance as an organization's culture has a positive impact on the firm's innovation. Mediation is only possible by enhancing creativity among the employees [20]. The culture within the organization that reinforces innovation considers various factors involving the firm's educational level, socio-economic information, two-way communication between the lower and higher management, possible exchange of ideas, and the positive attitude towards the better change [22]. One research article concluded that technology innovation has a weaker link with firm growth if it is large and old [23]. But if the above-discussed factors are considered useful, the productivity in both small and large firms could increase up to a greater extent. Starbucks, Google, and MasterCard are examples of such large firms adopting innovation successfully. Therefore, a firm must develop such an innovative climate within the firm that enables it to think through out-of-the-box and search for the new product or process.

Hypothesis: $H_1(c)$ = Technological Innovation mediates the Relationship between Organizational culture and firm performance.

Corporate governance plays a central role in attracting investors for the firm's capital growth. The transparency in the company's financial structure leads the decision-makers to invest and believe in its goodwill. Corporate governance regulates accountability. Nonetheless, big business enhances a company's capacity to recruit talented workers, take creativity, and maintain a strong relationship with stakeholders and vendors. [24]. A study is undergoing in the banking sector of Pakistan that explains corporate governance's role in a firm's performance. Still, this study is limited to the banking sector and does not showcase its technological giants. [25] Many studies are proven successful in explaining C.G.'s role, but those are not about the Pakistani listed companies.

Corporate governance defines the level of disclosure of Intellectual capital that can create value for the firm as gaining or maintaining a competitive edge [31]. This competitive advantage results in the excellent business performance of the company. But this statement again acts as the limitation because the study is done on Italian listed companies and not on Pakistan's listed companies.

Our Research model entails two independent variables, organizational culture, intellectual capital, and one dependent variable is business performance. The mediator and moderator are, respectively, technological innovation and corporate governance. These variables supported by different theories are discussed below. These theories explain and predict the relationship between variables and organize our ideas.

Hypothesis: $H_1(d)$ = Corporate Governance moderates the Relationship between Intellectual capital and firm performance.

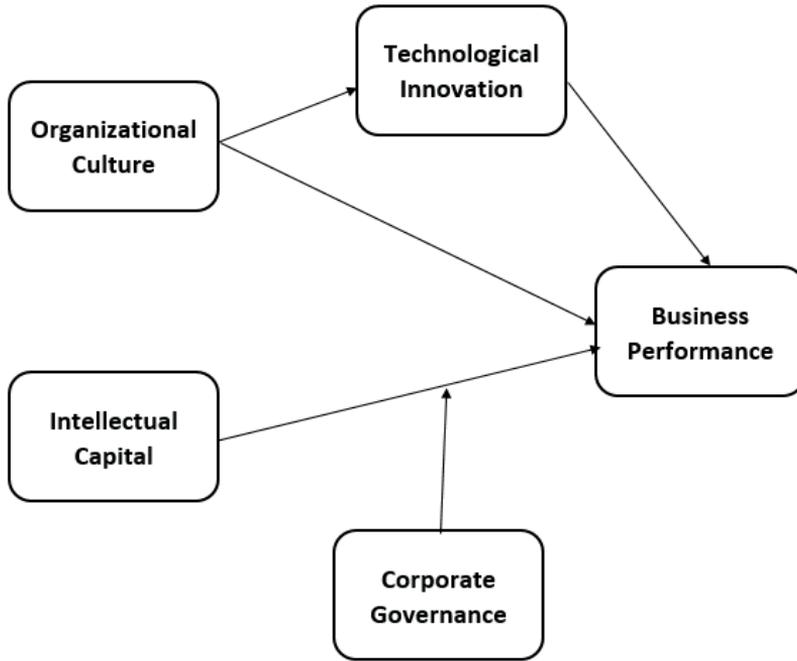


Figure 1. Conceptual Model Regarding Variables Affecting Business Performance

3. Methodology

The philosophy is considered a belief about how the Researchers gathered the research [41]. An investigator aims to utilize positivism philosophy as it directs the minimum bias from the researcher. Researchers play a vital role in the data collection process, and Researchers chose to execute unbiased data gathering. The research perceives truth, reality, and knowledge regarding the research subject to carry out significant results [42]. The researcher’s own opinion was regarded in this research, and only the valid results were acquired through unknown target respondents.

We have selected a Quantitative research paradigm for our research to gather responses and enhance the research process. The positivist philosophy underpins the quantitative paradigm to execute study; hence Pure quantitative research paradigm focuses on measuring data quantitatively [43].

Quantitative design research is dealt with to quantify and analyze variables to get results. It is selected to develop numerical data using statistical techniques to answer the questions set up for this research [44]. All the data exerted is in the form of a numerical basis and numbers through statistical measures.

Researchers used a deductive approach for the quantitative study. The process starts from a theoretical point of view requiring theories; it deals with formulating hypothesis, observation, and confirmation of a new conceptual understanding [45]. It follows the steps to conclude an understanding of the phenomenon.

Non-probability sampling opts for the sampling design. Moreover, the non-probabilistic method is used to take respondents representing the population [46]. A frame is not available for everyone, as specifically, employees from the various managerial levels are chosen from the textile organizations operating in Pakistan.

Purposive sampling technique is used, by researchers, to gather data from the representative of the population. The main aim to choose this technique where randomization is not possible, such as in this case, not every respondent can be reached due to certain limitations [47].

In this research, a sample of 200 was taken that are the whole population's representatives. 90 and 120 men filled the questionnaire. Respondents ranged from the age bracket of 23 to 45. Most of the respondents were between 23-30. (67% of all the participants are between the age of 23-30). 28.5% are between the ages of 31-37. Lastly, 3.3% lie between the age bracket of 38-45). The reported textile industry experience level of respondents included 1-4 years (64%), 5-8 years of experience (21%), 9-15 years of experience (15%). Of all the responses, 13% belonged to Alkaram (28 Participants), 13% belong to Artistic, 11% to Feroze, 32% to Gul-Ahmed, 7% to Soorty, 6% to Younus, the remaining 7% belonged to 'Other' category in textile firms. All the respondents belonged to the different departments in the textile organizations of Pakistan. Such a spread of respondents in various departments helped the researcher to maintain variance in the data set.

The research purely forms quantitative design; therefore, utilizing Partial least squares structural equation modeling as a statistical technique is vital to analyze the chosen responses. This technique is suitable to analyze each variable dependent, mediator, moderator, and independent variable to produce significant results. The estimation model was used to decide the data's quality and legitimacy and the relationship between constructs [48].

3.1. Measurement

The source questionnaire serves as measures for this study.

Item Code	Items	Citation
WE1	My Firm's mission is to serve society.	
WE2	My organization constantly scans the external environment for inputs such as technology, ideas, information, knowledge, etc.	
WE3	My organization valued employees' opinions.	[54]
MS1	The management style emphasizes on team building.	
MS2	Our management promotes consideration among employees.	

OL1	Top management is actively involved in communication and planning of organizational goals.	
OL2	Top leadership provides powerful means to improve & maintain quality.	
OL3	Top leadership anticipate changes and make plans to accommodate them.	
L1	My organization strongly emphasizes on the profit of the customer.	
L2	My organization shows social responsibility.	
L3	My organization provides sincere services.	
LE1	My organization promotes teamwork within the firm.	
LE2	The company's employees undergo continuous training programs every year.	
LE3	My Firm Promotes a sense of learning within Employees.	
LE4	Employees are experts in their respective areas.	
CPP1	Employees' experience and expertise affect the company's productivity.	[55]
CPP2	Employees' experience and expertise affect the company's profitability.	
FPI1	The market share of my firm is higher among the competitors.	
FPI2	Our firm has a higher debt to equity ratio.	[56]
FPI3	My firm takes care of short-term liabilities.	
FPI4	Our firm has high Cash flows.	
OPI1	The inspection of incoming material is essential.	
OPI2	We are delivering inputs on time.	
OPI3	In my firm, there is a low level of absenteeism.	[57]
OPI4	Are your firm has a higher rate of new product development?	
BI1	The priority of our firm is to gain customer satisfaction.	
BI2	My firm has a reputed image in the market.	[58]
BI3	We have higher public demand.	
BI4	Our firm has gained higher customer loyalty.	

A1	Our firm has sufficient resources to develop new products/processes.	
A2	Our product has sufficient technological capabilities to develop new products/processes.	
A3	For my organization, vision assessment is necessary for innovation.	
A4	Our firm continuously tests new ideas.	
RE1	In my organization, multi-disciplinary collaboration and training are essential.	[59]
RE2	Responsibilities are redefined among employees in my organization.	
RE3	Reflexive capacity within scientists should be carried out.	
I1	Establishing a Sense of Belonging is Necessary.	
I2	A top-down approach is not enough.	
I3	Inclusion is a continuous on-going process.	
I4	My organization always encourages its employees.	
RL1	Our firm's governance follows legal frameworks.	
RL2	My organization protects human rights.	
RL3	We are providing freedom-to-speech to employees.	
RL4	Our firm always avoids illegal activities.	
T1	Our firm always reports financial position to investors.	(Abrha, J Civil Legal Sci 2016, 5:3) [60]
T2	My firm provides a strategy outline for investors.	
T3	We always disclosed a conflict of interest.	
R1	We are serving stakeholders within a reasonable period.	
R2	How approachable is your company?	
R3	We Delivered the services timely.	
AC1	My firm upholds proper accountability for operations.	
AC2	We are answerable to our stakeholders.	
AC3	Our firm is always responsible for avoiding social injuries.	

Table 1. Questionnaire.

4. Results & Discussion

4.1. Descriptive statistics

Descriptive statistics are used to define the fundamental characteristics of the data in a sample. They provide simple summaries of the model and the steps. As stated earlier, this research data is analyzed using the PLS-SEM technique, which is best suited for data of this nature. The results and conclusions shall proceed in the following stepwise explanation of the whole process of study.

Any data whose skewness and kurtosis remain within ± 3 are considered to be normally distributed [50]. All sample data gathered in this research is usually distributed based on the parameters shown in Table 2.

	Age	Gender	Education	Organization	Experience	Department	Managerial Level
Skewness	1.231	-0.291	0.804	0.204	1.075	0.536	1.344
Std. Error of Skewness	0.168	0.168	0.168	0.168	0.168	0.168	0.168
Kurtosis	0.547	-1.934	-0.957	-1.566	-0.342	-0.384	0.499
Std. Error of Kurtosis	0.335	0.334	0.334	0.334	0.334	0.334	0.334

Table 2. The above table shows the normality of demographic indicators, which is within the limits of ± 3 .

The below cross-tabulation results indicate that 56.9 percent of employees are males, and the remaining 43.1 percent are females. The findings show that 67.9 percent of employees belong to the 23–30 age group, 28.7 percent of employees belong to the 31–37 age group, and just 3.33 percent of employees are in the 38–45 year age group.

The results also indicate that 69.9 percent of employees have graduation education qualifications in various fields such as engineering, science, and arts, and 29.7 percent of employees have postgraduate educational qualifications.

		Gender					
		Female			Male		
		Age		38-45	Age		38-45
23-30	31-37	23-30	31-37				
Education	B.E.	4.8%	1.9%	0.0%	6.7%	1.9%	0.0%

BS	21.1%	2.4%	0.0%	23.0%	3.3%	0.0%
BBA	3.3%	0.5%	0.0%	0.0%	1.0%	0.0%
ME	0.0%	1.4%	0.0%	1.0%	0.0%	0.0%
MS	1.9%	1.4%	0.0%	1.9%	3.3%	0.0%
MBA	1.9%	2.4%	0.0%	1.9%	9.1%	3.3%
BA	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%
Total	33.0%	10.0%	0.0%	34.9%	18.7%	3.3%

Table 3. The above table shows the cross-tabulation of the socio-economic profile of textile industry employees.

As a purposive sampling technique was used to gather data from the population-representative, below table 4 shows that many respondents sent are from Gul Ahmed textile. The main objective is to use this technique where randomization is not feasible, as in this case, not every respondent can be reached due to some constraints. Therefore, less data was collected from the most experienced employees.

Organization Name	Gul Ahmed	Managerial Level			Total
		Middle Manager	Senior Manager	Executive	
	Gul Ahmed	50	9	7	66
	Alkaram	14	9	5	28
	Soorty	11	3	0	14
	Yunus	6	5	2	13
	Artistic	21	4	3	28
	Feroze	18	4	1	23
	Other	24	11	3	38
	Total	144	45	21	210

Table 4. The above table shows the cross-tabulation of the organization and the Managerial level of the respondent. This table indicates that from which textile organization data is collected and how much the respondent is experienced.

4.2. Measurement Model

The measurement model is the ultimate destination of any quantitative analysis method evaluating data using PLS-SEM techniques [52]. The outer loadings evaluate all study constructs' indicator reliability with the desired range of 0.7, and above that, all external loadings indicators below 0.7 should be discarded [50].

	B.P.	CG	I.C.	OC	TI
A					0.839
AC		0.808			
BI	0.868				
CPP			0.798		
FPI	0.761				
I					0.879
L				0.832	
LE			0.896		
MS				0.828	
OL				0.877	
OPI	0.896				
R		0.878			
RE					0.899
RL		0.816			
T		0.737			
WE				0.85	

Table 5. Note: The above table indicates item loadings/external loadings, and all of the outer loadings are above the threshold of 0.7 [51]. Therefore, none of the above indicators was discarded, as all are having extreme loading values greater than 0.7.

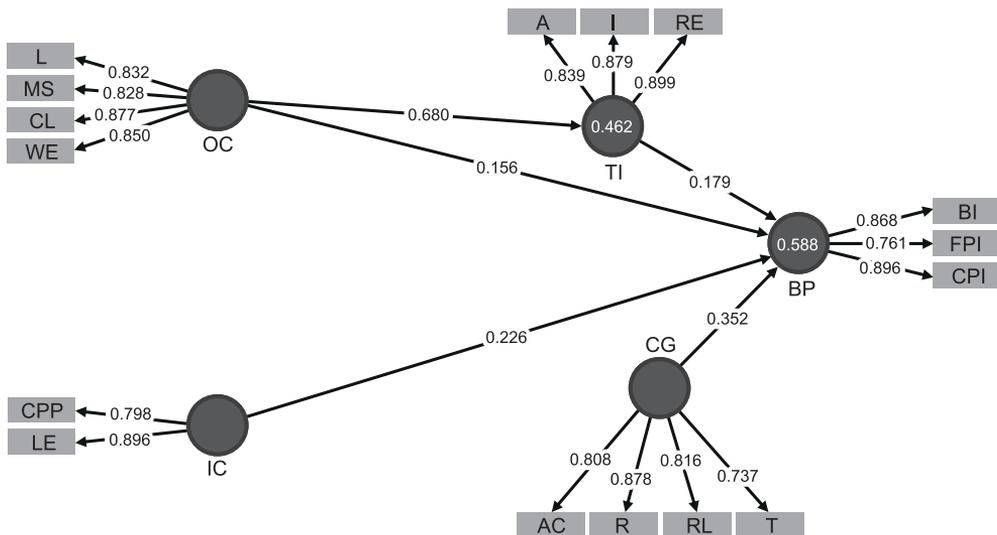


Figure 2. Conceptual Model after PLS Algorithm

Multiple regression analysis is performed to explore the reliability and validity factors that affect the textile industry's business performance, and the findings are presented in Table 5. Reliability and validity are principles, which are used to determine research quality. They state how well something is calculated by a process, technique, or examination. Reliability is about a measure being consistent, and validity is about an action being reliable. According to the thumb rule, composite reliability is tested for data to be deemed reliable when its composite reliability is > 0.7 [51]. The composite's reliability establishes the internal stability and reliability of constructs. Table 6 shows that all the constructs have composite reliability greater than 0.7.

	Composite Reliability
BP	0.88
CG	0.885
IC	0.837
OC	0.91
TI	0.905

Table 6. The above table indicates that all the constructs have composite reliability greater than 0.7 [51].

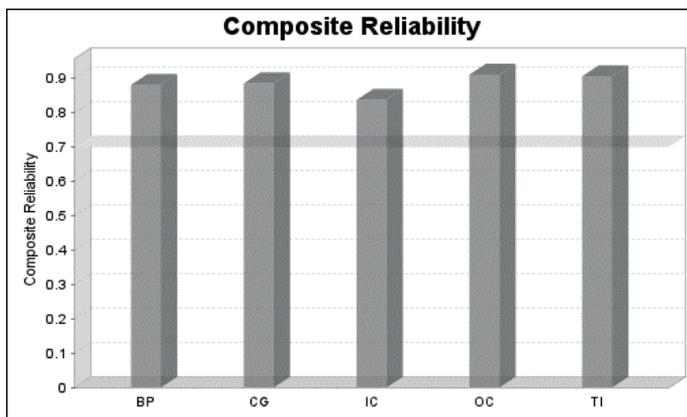


Figure 3. Composite Reliability

Validity refers to the accuracy with which a system calculates what it is supposed to measure. If research is highly credible, it produces real properties, characteristics, and physical or social environment variations. (Taherdoost, Hamed, 2016). All indicators must have AVE (Average Variance Extracted) greater than or equal to 0.5 [51] for testing convergent validity.

Average Variance Extracted (AVE)	
BP	0.711
CG	0.658
IC	0.72
OC	0.717
TI	0.762

Table 7. The above table indicates that all the constructs have an average variance extracted greater than 0.5 [51].

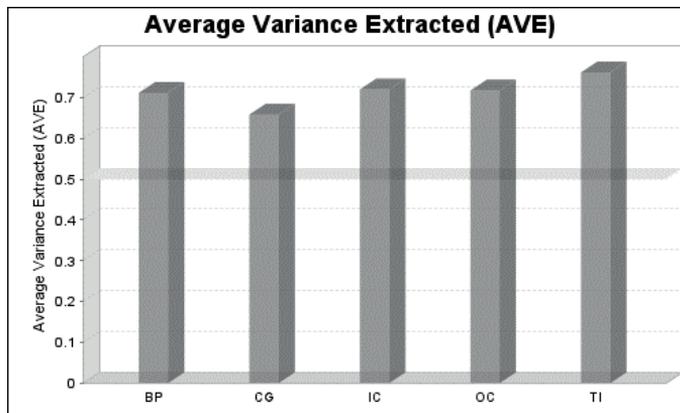


Figure 4. Convergent Validity

Discriminant validity specifies the differentiation or uniqueness between all the constructs in the model, and only those constructs with a discriminating validity value of 0.85 or less are considered valid [51].

	B.P.	CG	I.C.	OC	TI
BP					
CG	0.861				
IC	0.993	0.823			
OC	0.823	0.656	1.133		
TI	0.853	0.805	0.988	0.79	

Table 8. Discriminant validity

The above table indicates that all constructs in this research are very well valid except Business Performance-Corporate governance, organizational culture-intellectual capital & intellectual capital-technological innovation having borderline exceeding values greater than 0.5 [51].

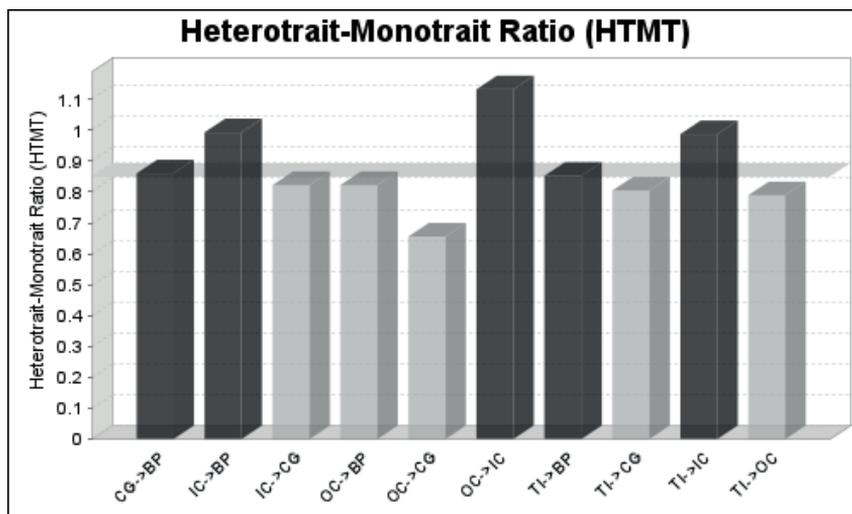


Figure 5. Discriminant validity

4.3. Structural Model Evaluation

After the measurement model, the data set’s structural model is measured on PLS, establishing the internal model’s predictive validity and the relationship between the proposed constructs. All proposed hypotheses that are evaluated and verified based on the results of that method. All hypotheses with a P value of less than 0.05 is accepted in quantitative analysis; the remaining are rejected [53].

	Original Sample (O)	Standard Error	T Statistics (O/STDEV)	P Values	Decision
IC -> BP	0.224	0.098	2.286	0.011	Supported
OC -> BP	0.17	0.089	1.901	0.029	Supported

Table 9. Direct Relationship Testing

The above table highlights the direct relationship between an independent and dependent variable based on results from these model hypotheses H1 and H2 are accepted.

The mediation relationship is evaluated through path coefficient and specific indirect bootstrapping effects. The results indicate that the H3 hypothesis is accepted.

	Original Sample (O)	Standard Error	T Statistics (O/STDEV)	P Values	Decision
OC -> TI -> BP	0.121	0.052	2.339	0.019	Supported

Table 10. Mediating Relationship Testing

This table indicates the relationship between mediator, independent and dependent variables; from the above results of bootstrapping and two-tailed testing, the hypotheses H3 supports the model.

To find the moderating effect of corporate governance between intellectual capital and business performance, bootstrapping is the sun on one-tailed testing after creating a moderating impact on smart PLS.

	Original Sample (O)	Standard Error	T Statistics (O/STDEV)	P Values	Decision
IC*CG -> BP	0.042	0.057	0.742	0.229	Not Supported

Table 11. Moderating Relationship Testing

Table 11 indicates the relationship between the moderator (corporate governance), the independent variable (intellectual capital), and the dependent variable (business performance). From the above results of bootstrapping and one-tailed testing the hypotheses, H4 not supports the model.

This study aimed to evaluate and compare the influence of organizational culture & intellectual capital on business performance, which is Karachi’s textile industry (Pakistan). The results show that corporate culture, intellectual capital, and technology innovation significantly influence the textile industry’s production. Therefore, the null hypothesis that there is no critical impact on the textile industry’s output by organizational factors is dismissed.

The textile industries should implement advanced technology and creative methods, increasing their competitiveness level. The industrial textile units must have effective leadership, an effective communication system, and a good governance structure to enhance industrial textile units’ efficiency.

5. Conclusion

Through this research, it is concluded that the organizational culture within the firm and Intellectual capital both directly impact the business performance of the textile firms. With the help of Smart PLS Software, the hypothesis that the firm culture and intellectual capital has a positive impact on business performance is found to be supported. Moreover, it is also proved that technological innovation works as a mediator between the organizational culture and business performance. However, corporate governance does not affect moderation between the textile industry’s intellectual capital and business performance. The findings discussed here will benefit researchers and textile industries. This study will contribute to the valuation of companies and serve as a comparison between textile industries. Managers may use the model to define and compare the most relevant metrics to industry-wide benchmarks.

This research has a few limitations as well. It is tough to study every textile industry of Pakistan. Surveying the country is not possible within a limited period; therefore, this research is only based on Karachi's textile industries having a better reputation and market demand. Analysis of the textile industries in other cities of Pakistan could be carried out in the future. The moderator could be rapid changes in technology, business strategy, or environmental dynamism.

References

- [1] S. Paudel, "Entrepreneurial leadership and business performance: Effect of organizational innovation and environmental dynamism," *South Asian Journal of Business Studies*, Vol. 8 No. 3, pp. 348-369, 2019.
- [2] Q. L. Kweh & I. W. K. Ting & L. T. M. Hanh & C. Zhang, "Intellectual capital, governmental presence, and firm performance of publicly listed companies in Malaysia," *International Journal of Learning and Intellectual Capital, Inderscience Enterprises Ltd*, Vol. 16(2), pp 193-211, 2019.
- [3] D. Zeghal and A. Maaloul. "Analyzing value-added as an indicator of intellectual capital and its consequences on company performance," *Journal of Intellectual Capital*, Vol. 11 No. 1, pp. 39-60, 2010.
- [4] L. June. "Are personal innovativeness and social influence critical to continue with mobile commerce?," *Internet Research*, Vol. 24 No. 2, pp. 134-159, 2014.
- [5] V. Singh, A. Kumar, T. Singh, "Impact of TQM on organizational performance: The case of Indian manufacturing and service industry," *Operations Research Perspectives*, Vol. 5, pp 199-217, 2018.
- [6] P. Stannack "Perspectives on Employee Performance," *Management Research News*, Vol. 19 No. 4/5, pp. 38-40, 1996
- [7] Y. Zhang & U. Khan & Seoyeon Lee & M. Salik, "The Influence of Management Innovation and Technological Innovation on Organization Performance. A Mediating Role of Sustainability," *Sustainability, MDPI, Open Access Journal*, Vol. 11(2), pages 1-21, 2019.
- [8] Y. Muchtar, & I. Q. Lubis, "The Influence of Transformational Leadership Style on Innovation Mediated by Organizational Culture." *Journal of Management Research*, Vol. 6(4), 176, 2014.
- [9] Y. Muchtar, & I. Q. Lubis, "The Influence of Transformational Leadership Style on Innovation Mediated by Organizational Culture." *Journal of Management Research*, Vol. 6(4), 176, 2014.

-
- [10] N. H. Abdullah, A. Shamsuddin, E. Wahab, & A. H. N. Aziati, "The Relationship between Organizational Culture and Product Innovativeness." *Procedia - Social and Behavioral Sciences*, 129, 140–147, 2014
- [11] E.C. Martins and F. Terblanche, "Building organizational culture that stimulates creativity and innovation," *European Journal of Innovation Management*, Vol. 6 No. 1, pp. 64-74, 2003.
- [12] Y. Godiwalla "Making MNC Competitive Through Effective Cross-Cultural Negotiations," *International Journal of Social Science Studies*. Vol. 7(1)21, 2018.
- [13] M. Greco, M. Grimaldi, & L. Cricelli, "An analysis of the open innovation effect on firm performance." *European Management Journal*, Vol. 34(5), pp. 501–516, 2016.
- [14] A.M. Marampa, R. W. V. Khananda, A. I. Anggraeni "The Effect of Organizational Culture on Organizational Performance," *International Conference on Rural Development and Entrepreneurship*. Vol. 6, Issue 1, pp. 65-72, 2019.
- [15] S. M. Hazem & S. Zehou, "Organizational culture and innovation: A literature review," *Advances in Social Science, Education and Humanities Research*. Vol. 344, 2019.
- [16] L. T. Tuan, "Organizational culture, leadership and performance measurement interestedness," *International Journal of Management & enterprise development*. Vol. 9, Issue 3, pp. 251-275, 2010.
- [17] S. H. Wahyuningsih, A. Sudiro & E. A. Troena , D. W. Irawanto "Analysis of organizational culture with Denison's model approach for international business competitiveness," *Problems and Perspectives in Management*. Vol. 17(1) pp. 142-15, 2018.
- [18] L. Miller, R. Miller, J. Dismukes, "The Critical Role of Information and Information Technology in Future Accelerated Radical Innovation," *Information, Knowledge System, Management, IOS Press*, Vol. 5, Nr. 2, pp. 63-69, 2006.
- [19] A.Jolly, Team to Teach: "A Facilitator's guide to professional learning teams," Oxford OH: *National Staff Development Council*, 2008
- [20] T. Buschgens, A. Bausch, D. B. Balkin, "Organizational culture and innovation: A meta – analytic review." *Journal of Product Innovation Management*, 30 (94), 1-19, 2013.
- [21] G. J. Tellis, J. C. Prabhu, and K. C. Rajesh, "Radical innovation across nations: the preeminence of corporate culture," *Journal of Marketing*, Vol. 73 No. 1, pp. 3-23, 2009.

- [22] J. Perenc, J. H. Iwan, "Innovation in developing companies' competitiveness, importance, support and examples of applications," 2011.
- [23] B. Hall, F. Lotti, J. Mairesse, Innovation and Productivity in SMEs— Empirical Evidence for Italy. *Small Business Economics*, Vol. 33, issue 1, pp. 13–33, 2009.
- [24] A.MA. M. Ahlia University. "Corporate Governance and Intellectual Capital: Evidence from Gulf Cooperation Council Countries," *Academy of Accounting and Financial Studies Journal*, Vol. 22, Number 1, 2018.
- [25] I.Sohail, Z. Murtaza, M. B. Saeed, Corporate Governance and Firm Performance: A study on moderating effects of firm size and leverage on the relationship between corporate governance and firm performance in banking sector of Pakistan. *Jinnah Business Review*, Vol. 1, no. 2, pp. 40-46, 2013
- [26] M. A. Baldini, G. Liberatore, "Corporate governance and intellectual capital disclosure: An empirical analysis of the Italian listed companies." *Corporate Ownership & Control*, vol. 13, issue 2, 2016.
- [27] Dr. S. B. Ahmad, A. B. Mushraf, "The Relationship between Intellectual capital and Business Performance: An empirical study in Iraqi industry" *International Conference on Management and Artificial Intelligence*. vol.6, 2011
- [28] J. J. P. Jansen, F. A. J. V. D. Bosch, H. W. Volberda, "Exploratory innovation, exploitative innovation, and performance: Effects of Organizational Antecedents and Environmental Moderators," *Management Science*, Vol. 52 No. 11, pp. 1661-1674, 2006.
- [29] J. Roos, G. Roos, L. Edvinsson, "Intellectual Capital: Navigating in the New Business Landscape," *Macmillan Publications*, 1997.
- [30] N. Bontis "Intellectual capital disclosure in Canadian corporations," *Journal of Human Resource Costing and Accounting*, Vol. 7 No. 1, pp. 9-20, 2003.
- [31] M. D. R. Cabrita, J. L. D. Vaz, N. Bontis, "Modelling the creation of value from intellectual capital: A Portuguese banking perspective," *International Journal of Knowledge and Learning*, Vol. 3, Nos 2/3, pp. 266-80, 2007.
- [32] Y. An, H. Davey, I. R. C. Eggleton, Z. Wang, "Intellectual capital disclosure and the information gap: Evidence from China" *Advances in Accounting*. Vol. 31(2), pp. 179-187, 2015.
- [33] C. D. Ittner and D. F. Larcker, "Enhancing the Financial Reporting Model." *Journal of Accounting Research Studies*. Vol. 36, pp. 1-35, 1998.

- [34] E. Amir, B. Lev, "Value-Relevance of Nonfinancial Information: The Wireless Communications Industry." *Journal of Accounting and Economics*. Vol. 22(1-3), pp. 3-30, 1996.
- [35] S. Jabbar and T. Afza, "Relationship between intellectual capital and financial performance of Pakistani non-financial firms" *Vidyabharati International Interdisciplinary Research*, Vol. 3(1), pp.67-80, 2014.
- [36] M. A. Tanveer, S. Zafar, "The stagnant performance of the textile industry in Pakistan." *European Journal of Scientific Research*, Vol. 77, Nos.3, pp.362-372, 2012.
- [37] G. Gomes, D. D. P. N. Machado, J. Alegre, "Determinants of Innovation Culture: A Study of Textile Industry in Santa Catarina," *Brazilian Business Review*. Vol. 12, Nos.4, pp. 99-122, 2015.
- [38] C. K. Padilha & G. Gomes, "Innovation culture and performance in innovation of products and processes: a study in companies of textile industry," *RAI Revista de Administração e Inovação*, Vol. 13, Issue 4, pp.285-294, 2016.
- [39] M. Malinowska, Olszowy, "The choice of appropriate tools for measuring intellectual capital as a determinant of success with special emphasis on the textile and clothing market," *Autex Research Journal*, Vol. 13, No. 4, 2013.
- [40] J. Xu, B. Wang, "Intellectual Capital Performance of the Textile Industry in Emerging Markets: A Comparison with China and South Korea." *Sustainability*. Vol. 11(8):2354, 2019.
- [41] M. N.K. Saunders, P. Lewis, A. Thornhill, "Understanding research philosophies and approaches. Research methods for business students," Vol. 4 pp.106-135, 2019.
- [42] G. Ryan, "Introduction to positivism, interpretivism and critical theory," *Nurse researcher*, Vol. 25(4), pp. 41-49, 2018.
- [43] S. K. Antwi, H. Kasim, "Qualitative and quantitative research paradigms in business research: A philosophical reflection," *European journal of business and management*, Vol. 7(3), pp. 217-225, 2015.
- [44] O. D. Apuke, "Quantitative research methods: A synopsis approach," *Kuwait Chapter of Arabian Journal of Business and Management Review*, Vol. 6(10), pp. 40-47, 2017.
- [45] S.M. A. Burney, H. Saleem, "Inductive and deductive research approach." *Soft Computing Applications for Decision Making in Supply Chain Management*, 2008.

- [46] N. Showkat, H. Parveen, "Non-probability and probability sampling," *Media and Communications Study*, pp. 1-9, 2017.
- [47] Etikan, S. A. Musa, R. S. Alkassim, "Comparison of convenience sampling and purposive sampling," *American Journal of theoretical and applied statistics*, Vol. 5(1), pp. 1-4, 2016.
- [48] J. F. Hair Jr, M. Sarstedt, L. Hopkins, V. G. Kuppelwieser, "Partial least squares structural equation modeling (PLS-SEM)," *European business review*, Vol. 26, Issue. 2, pp. 106-121, 2014.
- [49] H. Taherdoost, "Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research," *International Journal of Academic Research in Management*. Vol. 5. pp. 28-36, 2016.
- [50] J. F. Hair, M. Sarstedt, C. M. Ringle, J. A. Mena, "An Assessment of the Use of Partial Least Squares Structural Equation Modeling in Marketing Research," *Journal Academy of Marketing Science*, Vol. 40, pp.414–433, 2012.
- [51] C. Fornell, D. F. Larcker, "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." *Journal of Marketing Research*, Vol. 18, Issue. 1, pp. 39–50, 1981.
- [52] G. Dastgeer, A. U. Rehman, W. Rahman, "Examining Data and Measurement Model Specification in SEM: An Illustration from Management Development," *Journal of Business Economics and Management*. Vol. 4, pp. 62-88, 2013.
- [53] S. Hussain, A. Siddiqi, Z. Ali, Z. Fangwei, "Structural Equation Model for Evaluating Factors Affecting Quality of Social Infrastructure Projects," *Sustainability*, Vol. 10(5):1415, 2018.
- [54] M. Naqshbandi, S. Kaur and P. Ma, "What organizational culture types enable and retard open innovation?", *Quality & Quantity*, vol. 49, no. 5, pp. 2123-2144, 2014. Available: 10.1007/s11135-014-0097-5.
- [55] A. Sharabati, S. Naji Jawad and N. Bontis, "Intellectual capital and business performance in the pharmaceutical sector of Jordan", *Management Decision*, vol. 48, no. 1, pp. 105-131, 2010. Available: 10.1108/00251741011014481.
- [56] E. Anderson and V. Mittal, "Strengthening the Satisfaction-Profit Chain", *Journal of Service Research*, vol. 3, no. 2, pp. 107-120, 2000. Available: 10.1177/109467050032001.
- [57] A. Fernandes, P. Sampaio, M. Sameiro and H. Truong, "Supply chain management and quality management integration", *International Journal of*

- Quality & Reliability Management, vol. 34, no. 1, pp. 53-67, 2017.
Available: 10.1108/ijqrm-03-2015-0041.
- [58] F. Bergeron, The concept of fit in information systems research. Québec: Faculté des sciences de l'administration, Université Laval, 1999.
- [59] F.W. Geels and J. Schot, "The dynamics of transitions: a socio-technical perspective—a multi-level perspective on transitions," in *Transitions to Sustainable Development: New Directions in the Study of Long Term Transformative Change*, J. Grin, J. Rotmans, J. Schot, Eds. New York: Routledge, 2010, pp. 18-28.
- [60] F. Weldu Abrha, "Assessment of Responsiveness and Transparency: The case of Mekelle Municipality", *Journal of Civil & Legal Sciences*, vol. 05, no. 03, 2016. Available: 10.4172/2169-0170.1000191.