

The Mediating Role of Organizational Culture in the Effect of Business Intelligence on Corporate Performance Management

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ABSTRACT

In this era, organizations are more modernize, complex and dynamic with the exposure to technology development and globalization, business are developing, and every change pressurizes the business to earn success. In this context, the current research aims to investigate the impact of business intelligence on corporate performance management, as well as mediating role of organizational culture. The study attempts to explore the relationships in the context of IT companies in developing countries, namely Pakistan, which is under investigated case in academic literature. The contemporary study uses primary data, and quantitative research design is used in this research. The technology firms of Pakistan are the population in this research and total of 380 managers of the firms are the sample size. Further on, AMOS is used for the analysis of the data and testing hypothesis. The study results reveal that in IT companies in Pakistan, business intelligence has a significant positive effect on corporate performance management, and organization culture partially mediates this relationship. It is recommended to the managers of the IT companies that they initiate the positive BI into the processes with respect to their culture, and then the company could perform better.

Keywords: pigment corporate performance management, Business intelligence, Organizational culture, IT Sector, Pakistan.

INTRODUCTION

In Contemporary world, the change in information technology and the processes are realized at all stages. Consequently, the progressions, methods, and strategies are changed and transformed in the different aspects. The changes and the performance are needed to sustained and managed so the competitiveness to be advanced. Business Intelligence (BI) is one of the latest terms that is considered by different businesses (Chaiporn & Tongurai, 2015). The latest technologies are used by the different businesses and the transformations are carried out. It is better to perceived that decision making is easier and the complexities are increased.

The literature shows absence of empirical studies on the effect of BI on CPM (Corporate Performance Management). Therefore, current study concerns the relationship of BI and CPM. Bartel, Freeman, Ichniowski, & Kleiner, (2019) state however the technology is changed and the

overall better suitable aspects are renowned. This is the reason the changes are implemented for improvement of the companies. The tangible and intangible benefits are augmented with time and for these enhanced options are expressed. It is considered that the changes are needed to maintain the outcomes have changed. The usability of the BI and CPM is important as changes are made with time the efficiency of the BI and CPM is tested. The holistic management approaches are formed at all levels and need realized at a better point. Therefore, the passion of the usability and the connection between BI and CPM are increased, the changes are prepared accordingly.

The dimensions are created over time to time and globalization has been increased. The cultural aspect is not much deliberately used from the perspective of business intelligence. It is further noticed that the changes are made and for enhanced consequences will be considered (Madueke & Emerole, 2017). By looking at the above facts, it is seen that the organizational

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culture is an important factor and effects are determined. Therefore, the mediation of OC is taken in this research so that the effectiveness in-between the BI and CPM recognized.

It is observed that all over the globe different aspects are reviewed and the performance issues are reduced since 2010, which is the reason performance is increased. Many different factors are discussed, found with time and that is needed reviewed as well (Quinn, 2016). This is the reason the testing of BI is done. The BI and CPM considered that there is a strong linkage between them.

Moving towards the contribution of the research, it is obvious that the BI in Pakistan is a new term and not in various researches. The research on BI contributes to top management for decision making, BI technology attract many organizations because of its progressive results, ease to use, user friendly, Accuracy and transparency in procedures. (Nicolson 2016) Therefore, examining BI will create new horizons. The literature on CPM contributes to maintain and improve the employee skills and ensure the maximum utilization of resources. (Gallup, 2016) Therefore, the effect of BI and CPM will create the significance and the better outcomes will be delivered. Organizational Culture is the term that is normally used in the organizations and it states the life style and the overall culture of one organization. It is actually the basic patterns and the assumptions that are being developed at the start or with the passage of time that is being floated (Afifah & Asnan, 2015). The proper understanding of the BI with the CPM will recognize with the mediation of the OC.

The country with the most technological firms spends most resources on R&D in recent years is Pakistan. Therefore, in the research Pakistani technology-based firms are taken as it is an untouched population. The CPM is not considered by the Pakistani firms and maybe strong relations are portrayed after the analysis (Morabito, 2017). Pakistan is one of the most versatile countries in Asia and it has sector plays a significant importance. From the last 20 years the IT sector have been increased over time to time and it is clear that today it have become Pakistan's largest sector in 2019. It is also noted that the industrialization have been increased growth rate have been increased dramatically all over it (Acar & Zehir, 2018). It might be the case that the BI's negative effects are there but, in

this research, new dimensions might be unfolded, hence investigations could fold new dimensions. The researches in the past have clearly shown that the changes are to be made. It is further notified that the management and the overall owners of the companies are to be inline in order to make the culture better at all points (Maier, 2017).

The BI and CPM are linked in a way that the vice versa effect is considered (Constantinescu, 2014). It is determined that the BI is a whole new procedure that is reviewed in the research and the practicality is defined that how come it is efficient for the CPM. On the other hand, the direct effects of BI and CPM both are seen in different studies (Bereskin, Byun, Officer, & Oh, 2018). It is also intended seen that the cultural aspects are really important as well by the BI and CPM.

Two research questions are answered and they are as is there an effect of BI on CPM? And is there a mediating role of OC in-between BI and CPM?

LITERATURE REVIEW

Business Intelligence

Business Intelligence (BI) with an increased availability and use of information technology, it is widely used in organizations that aim for a better performance in the age of technology (Constantinescu, 2014). BI is a complex term, "covering different activities, processes and technologies for collecting, storing, analyzing and disseminating information to improve decision making". BI is known to effective tool in the day to day business activities that are carried out in the companies (Charles & Kumar, 2014). It is the systematic order that is used in the companies for the external and internal information dissemination (Acar & Zehir, 2018), increasing the firms' competitive value and creating valuable knowledge to support knowledge sharing and decision making

BI transforms the raw data into streamlined and useful information and is known to provide complex and competitive information contributions. Different systems and processes are included, e.g. data mining, scorecards, data analysis tools, and the prediction and forecasting, used by business executives and professionals that aim to "navigate large datasets by means of sequences of analytical queries elaborated through user-friendly interfaces". Therefore the purposeful meanings

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are drawn by business experts and much information and usefulness is stated so that the better and improved business processes could be grasped (Bento, Bento, & White, 2014).

Organizational Culture

From the managerial perspective, organizational culture (OC) is defined as “*as companies are structured by organizations, including groups, teams, and units, they create or build their values, beliefs, and customs to shape norms, which are then followed by employees conducting their tasks*”. The new members that are joining the organizations need to cope up with the rules and the regulations that are created, the values that are to be provided and the overall procedures (Hartl, Jacob, Mbep, Budree, & Fourie, 2019). The rules and the shared values are to be considered at all levels of organizational chart (Gramatnikovski & Serafimovic, 2015) and are generally unwritten guidelines that are followed (Altindag & Karkacier, 2018). It is an extraordinary power that guides the employees what to do and what are the viewpoints that should have been dealt with, and because OC is dynamic process, it helps to transform the members (Afifah & Asnan, 2019). OC is extremely significant for the performance of the organization (Quinn, 2016) as organizational culture and leadership will lead the process of applying knowledge within the organization.

Corporate Performance Management

In organizations, it is the corporate level management that set the organizational strategy and executes it to successful performance. CPM is the tool of organizations to strategically deal with challenges. Many management practices and technological changes are combined so that the overall performance of the company may possibly be increased (Bento, Bento, & White, 2014). If the CPM is incorporated, then the better performance of the company is expected. It is seen that the execution of the CPM is practiced by the Top 500 companies all over the globe making them stand out due to the fact that transformation and changes are created at all levels (Schein, 2010). CPM can also be defined as the set of activities or the concepts that the business use for the strategy-making so that they could be derived out in better manner and legitimate speed (Acar & Zehir, 2018). CPM could be defined as the umbrella that consists of different management processes and the useful matrices that are linked so that better business

performance could be initiated (Gramatnikovski & Serafimovic, 2020). Overall, CPM plays a key role in managing and evaluating the (Quinn, 2006).

HYPOTHESIS DEVELOPMENT

Business Intelligence and Organizational Culture

The progressions are made for the better restriction will be appreciated for the management and the progressions will be resolved here. Henceforth the general parts of the BI and OC as for the social measurements are to be kept up and for progressions will be concerned. The banking industry has been taken of Turkey as the population. The organizations that are for the most part in contact and are influenced by the innovation and particularly by the BI are the innovation firms as they are in an excessive amount of innovation and need to update their framework with the progression of time so the better result could be reasoned. 587 Employees were tested for the regression analysis. This is the explanation the progressions should have been overseen and hence the adjustments in the procedures will be made. It clearly shows strong and positive relationships in-between BI and OC (Fadzilah, 2017).

H1= There is a significant relationship between BI and OC.

Business Intelligence and Corporate Performance Management

The concept of BI has emerged in recent years and the overall linkages with different management concepts are observed. BI is certainly not another term now anyway various perspective should have been tended to and to be investigated. The product applications that are utilized in the distinctive business, to convey the data all finished and the BI builds the performance of the business (Constantinescu, 2014). Different researches and investigation included and reviewed. It is resolved that the subsets of the information are incorporated and the general adequacy is expanded because of that. BI is extremely helpful in the everyday business exercises in the organizations (Charles & Kumar, 2014). The CPM should have general linkage with the BI is to be resolved right now. Organizations everywhere throughout the globe are hoping to build their performance however they are to be estimated. The nation with the struggling innovation is said to be as Pakistan

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and a huge number of tech organizations are there in the nation. In this manner the BI is being utilized and executed in Pakistan at all levels. This is the explanation the examination expects to research the impact of BI on the CPM in the German firms (Chaiporn&Tongurai, 2015).

It is the efficient request to utilize organizations, to connect the exercises. The resolution on the occasions sorted out and made with the goal outer and interior dispersed and because of that importance of the exercises are expanded and business dynamic is expanded because of that at all potential levels (Acar&Zehir, 2018).

H2= There is a significant relationship between BI and CPM.

Organizational Culture and Corporate Performance Management

Organizational culture (OC) and corporate performance management (CPM) are two significant figures to contemplate while running an organization. While various studies' focal point is OC and CPM individually, the objective of this study is to elucidate the complexity of the relationship between OC and CPM. The conclusion after the mathematical, theoretical,

Theoretical Model

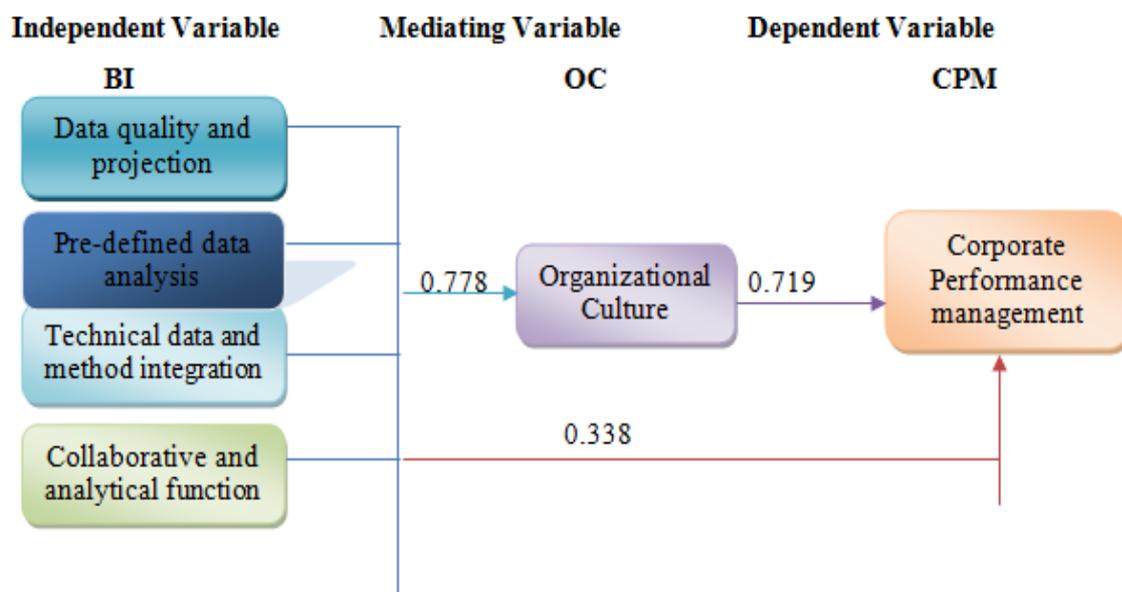


Figure1.1 Conceptual Model

Business Intelligence, Organizational Culture & Performance Management

The globe different perspectives assessed the performance issues lessened with the movement of time. That is the clarification the performances are not be extended. There is a

and experimental analysis of various great scientists was that the analytical capabilities, provision, and authenticity of data have a huge impact on the alignment and excellence of an organization. Since this study substitutes the vacated area among OC and CPM, it enlightens us with the fact that neither one can be made the center of attention leaving the other out.

A wide scope of strategies and the examination are incorporated into this research. It settled the subsets of the data are incorporated and the general sufficiency extended hence. OC is very useful in the regular business practices the associations (Charles & Kumar, 2014). To check the relationships, a sample of 328 firms has taken out. It is the proficient solicitation associations with the activities, and solicitation settled of the events sifted through and made with the objective that the external and inside the two information could be scattered and in light of that significance of the activities are extended and business dynamic is extended at all potential levels. Therefore the positive relation observed and is important as well (Acar&Zehir, 2018).

H3= There is a significant relationship between OC and CPM.

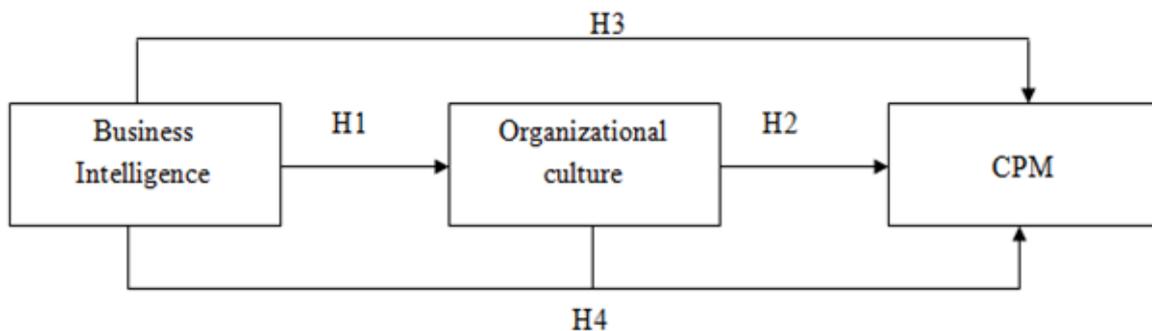
wide scope of components are discussed and found with the movement of time and that is ought to have been investigated likewise (Hartl, Jacob, Mbep, Budree, &Fourie, 2016). 189 IT firms taken into the consideration in this research so that the effect could be noticed. This is the clarification of the improvement and the

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techniques are to be kept up. The BI and CPM have been assessed customarily and it is seen as that there is a strong linkage in them. The BI and CPM are genuinely associated with the end goal that the tight clasp versa sway.(Evans, 2003).

H4= OC will mediate the impact of BI and CPM.

The conceptual model is shown in Figure 1



METHODOLOGY

Research Design, Approach, and Philosophy

Research design states the nature of the research conducted. Quantitative research designs are used to test the hypothesis and the quantification noticed in these types of researches. Therefore, it is the best design that used in this research. The Quantitative research design is being used in this research which means that the data will be treated in numbers. The close-ended questionnaire is used to collect the data from the respondents and then tested. The hypothesis testing is to be done as the effect of BI on CPM is to be tested in the research.

The research approach plays an important role in the determination of the methodology that is needed to be used. Looking at the requirement the deductive approach is being used in this research as hypothesis testing is needed to be done and here the effect of the BI on the CPM is needed to be ensured (Coldwell & Herbest, 2016).

Looking at entire research elements, it is clear that the deductive approach used the quantitative research design checked the hypothesis to test. Therefore, positivism research philosophy is the best one that is needed to be picked up after the consideration overall (Coldwell & Herbest, 2016).

Data Collection Method

To collect the data primary data collection completed in Pakistani firms for the analysis, will be facing this type of research for the first time and that is the reason primary data collected (Bryman & Bell, 2015). The objective

types questions are close-ended questions are to be used starting from strongly agree till strongly disagree. 5 point Likert scale has been used so that the respondents could mark their viewpoint so that the better responses could be gathered.

Population and Sampling

The technology firms of Pakistan are the population in this research and the sample is drawn from them. It is clear that the medium to top-level management is taken into the consideration and the data is filled from them. The main reason is that the overall BI effect will be considered individually (Bryman & Bell, 2015). The population of the technology firms has been taken as they are the ones taking part in the BI and they are the main users at this point.

The managers of the IT companies are taken and the data is gathered. There are almost 2476 IT-related companies in Pakistan and that is the reason the sample size is needed. Using the Raosoft calculator the recommended sample size is 380 and that is the reason it will be taken in this research. Looking at the sample of the research it is mainly taken from the Lahore city in Pakistan and the main reason is that Lahore is the metropolitan and developed city in the country and possesses most of the businesses here. The samples of 200 firms are taken on an average and the main reason is it will fulfill the need and the requirement of the research. On an average two managers were taken from each company as the operations manager and the administration manager were given the questionnaires. Another reason is that the data that will be collected could be generalized in the

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overall country and population as the big sample is being taken in here. Hence the better sample is needed for authenticity will be improved. Therefore, in the sampling, a simple random sampling technique will be used in this research. The main reason for that is the randomization is seen. Here the equal chances prevail for the organization selected and that is the reason simple random sampling is the best method to used (Hair, 2015).

Measurement Instrument

In this research, the questionnaire has been adapted and the BI, OC, and CPM aspects are taken from previous researches. The instrument that will be used in the research is opted from (Hartl, Jacob, Mbep, Budree, & Fourie, 2016) as there are 21 questions for the measurement of BI as they are split into four different variables like Data Quality and Provision, Pre-defined Data Analysis, Technical Data, and Method Integration and Extended Collaborative and Analytical Functions. On the other hand, CPM has 20 questions that were also adopted from (Hartl, Jacob, Mbep, Budree, & Fourie, 2016).

Further for the mediation variable of the Organizational Culture questionnaire consisting of 24 questions is taken from (Quinn, 2006).

Data Analysis Strategy

For the analysis of the data, the AMOS statistical tool is used. Under that Reliability of the variables, the validity, correlations, and regressions are tested, and by doing that the overall effect of the BI on the CPM instead. Tests regarding the validity of the variables are done. The correlation will be used for the effect in-between the entire variables and the overall effect of the independent variables on the dependent variables, Regression will be used. It is further seen that mediation is also there and due to that mediation is being tested effectively.

RESULTS

Model Validity and Reliability

Reliability and validity have been checked overall and the results are shown in the Table 1 consisting of AVE, CR, Cronbach's alpha, Loadings, and T value as well.

Table1. Validity and reliability test

Constructs	Measurement items	AVE	CR	Alpha	Standardized loadings	T values
Business Intelligence	BI2	0.854	0.821	0.878	0.608	
	BI3				0.528	8.967
	BI4				0.521	9.629
	BI5				0.568	9.154
	BI6				0.534	10.178
	BI7				0.609	9.105
	BI8				0.531	9.543
	BI9				0.562	9.278
	BI10				0.543	9.642
	BI11				0.569	10.756
	BI12				0.654	10.479
	BI13				0.632	10.269
	BI14				0.616	10.747
	BI15				0.653	9.557
	BI16				0.563	10.311
	BI17				0.619	10.094
	BI18				0.603	10.265
	BI19				0.616	9.364
	BI20				0.549	10.98
	Organizational Culture	OC1	0.866	0.952	0.899	0.672
OC2					0.667	9.068
OC3					0.487	8.967
OC4					0.751	9.629
OC5					0.606	9.154
OC6					0.567	10.178
OC7					0.639	9.105
OC9					0.587	9.543
OC11					0.505	9.278
OC12					0.601	9.642

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	OC13				0.622	10.756
	OC14				0.562	10.479
	OC16				0.571	10.269
	OC17				0.632	10.747
	OC18				0.641	9.557
	OC19				0.639	10.311
	OC20				0.665	10.094
	OC21				0.662	10.265
	OC22				0.642	7.683
	OC23				0.659	8.512
	OC24				0.604	8.212
Corporate Performance Management	CPM1	0.987	0.963	0.885	0.647	
	CPM3				0.638	8.326
	CPM4				0.625	7.638
	CPM5				0.578	8.471
	CPM6				0.587	8.634
	CPM7				0.591	8.157
	CPM8				0.611	8.229
	CPM9				0.589	8.705
	CPM10				0.628	8.774
	CPM11				0.545	8.756
	CPM12				0.589	8.938
	CPM13				0.639	7.683
	CPM14				0.675	8.512
	CPM15				0.661	8.231
	CPM16				0.619	8.76
	CPM18				0.557	8.376
	CPM19				0.651	7.636
	CPM20				0.625	8.457

It is seen that the overall Constructs, Measurement items, AVE, CR, Alpha, Standardized loadings, and T values are shown above and all have satisfying values like all T values are above 2 which is an acceptable range. Further, standardized loadings are more than 0.4 which is an acceptable range. Further, AVE,

Table1. Discriminant validity

Variables	M	SD	Business Intelligence	Organizational Culture	Corporate Performance Management
Business Intelligence	3.624	0.544	0	860	0.821
Organizational Culture	3.255	0.654	0.860	0	0.861
Corporate Performance Management	3.212	0.675	0.821	0.861	0

It is realized that all three variables used in the research are significant to each other as the values are 0.000. The significance values need to be less than 0.05, the result is satisfactory and significant. On the other hand, looking at the strength and the direction, it perceived from the table above that all three aspects which are relation in-between BI- OC, BI- CPM, and OC- CPM all values are positive. In the last, it could

Table2. Effect table

Variables	Estimates	S.E	CR	P
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CR, and Alpha values are again more than 0.8 and they are also acceptable.

Discriminant Validity

The Discriminant validity is tested in the research through correlations and the table 2 is shown under.

be noticed that all values of BI- OC, BI- CPM, and OC- CPM are above 0.8 and that shows that there is a strong relationship in-between the variables.

Hypothesis Testing

After reliability and validity, the effects have been checked and the results are shown in table

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OC←BI	.778	.101	7.684	0.000
CPM←OC	.719	.127	5.651	0.000
CPM←BI	.338	.093	3.622	0.000

Moving to the mediation testing, if the effect in-between BI and CPM became insignificant from full mediation, but this is not the case as the relationship in-between BI and CPM have just slightly changed due to the mediation. Another option could be that if the relationship in-between the BI and CPM does not change at all, then it might be said that there is no mediation in-between BI and CPM of the OC. However, the third option is that there is a slight difference in-between the BI and CPM with the addition of mediation while having the positive significant effect of both other relationships, then it is called partial mediation. As this is the case, therefore it is said that there is partial mediation of OC in-between BI and CPM in this research.

CONCLUSION

The overall relationship in-between BI, OC, and CPM have been tested. The overall Constructs, Measurement items, AVE, CR, Alpha, Standardized loadings, and T values are shown above and all have satisfying values like all T values are above 2 which is an acceptable range. Further, standardized loadings are more than 0.4 which is an acceptable range. Further, AVE, CR, and Alpha values are again more than 0.8 and they are also acceptable. It is noticed that the CMIN value is 3110.565 which states that the model discrepancy and lower is better at all levels. Looking at the next column that is P denotes the significance value of the model and it needs to be less than 0.05 and it is shown that it is good enough as it is 0.000 and it is less than the level of less than 0.05. Further looking at CMIN/DF value and it denotes the model good fit and it is seen that the value is needed to be less than 5. It is the discrepancy divided by degrees of freedom. The value is 1.961 and that is less than 5 and due to that, it is said that it is good enough. Moving further to the GFI and AGFI it is said to be the goodness of fit index and adjusted goodness of fit index. By looking at all these values, it is clear that the CFA is now good enough for further tests applied to this data set. Therefore H1, H2, and H3 are accepted in the research as estimates, and P values are good enough. It shows that Business intelligence has a positive influence on corporate performance management. Moreover, looking at H4, it is also accepted as Culture partially mediates between BI and CPM in this research.

Research Limitations And Future Research

In every research there are some kind of limitations as well that are needed to be addressed. For this research under the methodology the limitations are stated below. The research is conducted only in Lahore city. Whereas data can be collected from other cities gathered as well. Only quantitative aspect has taken under the consideration and hypothesis testing is being done. The qualitative part could be an option in order to explore the relationships. Only limited sector in this research have been taken for the considerations. However it could be expanded further to get more accurate and legitimate results. The sampling technique could be changed in order to have changed results as it might be one of the limitations in order to reach the desired respondents. In this research there are three main aspects that are taken which are CPM, OC and BI. In future more dimensions could be added in this research and by doing that the error term could be reduced and the unexplored aspects could be viewed. Not only in this city but in future different cities as well as different countries could be used in this research regarding CPM, OC and BI so that the better results could be explored. on top of the quantitative aspects, qualitative dimensions could be added in order to verify the results in the certain dimensions.

REFERENCES

- [1] Acar, A. Z., & Zehir, C. (2018). The harmonized effects of generic strategies and business capabilities on business performance. *Journal of Business Economics and Management*, 11 (4), 689-711.
- [2] Afifah, N., & Asnan, A. (2019). The Impact of Corporate Social Responsibility, Service Experience, and Intercultural Competence on Customer Company Identification, Customer Satisfaction, and Customer Loyalty (Case Study: PDAM Tirta Khatulistiwa Pontianak West Kalimantan). *Procedia - Social and Behavioral Sciences*, 211, 277-284 <http://www.sciencedirect.com/science/article/pii/S1877042815053756>.
- [3] Altindag, E., & Karkacier, M. (2018). The Effect of Business Firms' International Activities on the Firm Performance: A Central Black Sea Region Case. *International Review of Management and Marketing*, 4 (2), 108-122.

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- [4] Alvesson, M. (2012). *Understanding Organizational Culture*. https://books.google.com.pk/books?id=BDsV8eHp0_MC&dq=Organizational+culture+and+leadership&source=gbs_navlinks_s: SAGE.
- [5] Bajpai, N. (2016). *Business Research Methods*. Pearson Education India, https://books.google.com.pk/books?id=wY2bSaEm8l8C&dq=business+research+methods&source=gbs_navlinks_s.
- [6] Bartel, A. P., Freeman, R. B., Ichniowski, C., & Kleiner, M. M. (2019). Can a workplace have an attitude problem? Workplace effects on employee attitudes and organizational performance. *Labour Economics*, 33, 411-423.
- [7] Bento, A., Bento, R., & White, L. F. (2018). Strategic Performance Management Systems: Impact on Business Results. *Journal of Computer Information Systems*, 54 (3), 25-33.
- [8] Bereskin, F., Byun, S. K., Officer, M. S., & Oh, J.-M. (2018). The Effect of Cultural Similarity on Mergers and Acquisitions: Evidence from Corporate Social Responsibility. *Journal of Financial and Quantitative Analysis*, 53 (5), 1995-2039.
- [9] Bhattacharyya, D. K. (2015). *Research Methodology*. Excel Books India.
- [10] Bryman, A., & Bell, E. (2015). *Business Research Methods*. Oxford University Press, https://books.google.com.pk/books?id=l7u6BwAAQBAJ&dq=business+research+methods&source=gbs_navlinks_s.
- [11] Chaiporn, & Tongurai, J. (2015). The effect of leverage on performance: Domestically-oriented versus internationally-oriented firms. *Research in International Business and Finance*, 34, 265–280.
- [12] Charles, V., & Kumar, M. (2014). *Business Performance Measurement and Management*. https://books.google.com.pk/books?id=5yxQBwAAQBAJ&dq=Dubai+Corporation+for+Ambulance+Services&source=gbs_navlinks_s: Cambridge Scholars Publishing.
- [13] Coldwell, & Herbest. (2016). *Business Research*. Juta and Company Ltd https://books.google.com.pk/books?id=APlxTUo7qjgC&dq=business+research+methods&source=gbs_navlinks_s.
- [14] Cole, L. E., & Cole, M. S. (2015). *Employee satisfaction and organizational performance: a summary of key findings from applied psychology*. Retrieved Oct 17, 2017, from <http://www.teammax.net/files/LiteratureReview.pdf>
- [15] Constantinescu, M. (2014). Knowledge Management and Business Process Reengineering for Business Performance Improvement. *Spiru Haret University*, 1-33 http://www.cesmaa.eu/awards/BestPaper_ConstantinescuMadalina.pdf.
- [16] Crowther, D., & Lancaster, G. (2012). *Research Methods*. Routledge https://books.google.com.pk/books?id=A95bojM0hO8C&dq=Research+methods+business&source=gbs_navlinks_s.
- [17] Daniel, P. S., & Sam, A. G. (2011). *Research Methodology*. Gyan Publishing House.
- [18] Dantzer, Hunter, R. D., & Quinn, S. T. (2016). *Research Methods for Criminology and Criminal Justice*. Jones & Bartlett Learning.
- [19] Duggan, K. (2016). *Six Companies That Are Redefining Performance Management*. Retrieved April 25, 2018, from <https://www.fastcompany.com/3054547/six-companies-that-are-redefining-performance-management>
- [20] Evans, N. D. (2018). *Business Innovation and Disruptive Technology: Harnessing the Power of Breakthrough Technology ... for Competitive Advantage*. FT Press https://books.google.com.pk/books?id=JgJZtOvqcDYC&dq=business+innovation&source=gbs_navlinks_s.
- [21] Fadzilah, N. S. (2017). The impact of accounting software on business performance. *International Journal of Accounting & Business Management*, 5 (1), 1-7.
- [22] Gadd, D., Karstedt, S., & Messner, S. F. (2011). *The SAGE Handbook of Criminological Research Methods*. SAGE.
- [23] Giaccardi, E. (2012). *Heritage and Social Media: Understanding Heritage in a Participatory Culture*. https://books.google.com.pk/books?id=62FebXpeRtMC&dq=social+media&source=gbs_navlinks_s: Routledge.
- [24] Gramatnikovski, S., & Serafimovic, G. (2020). Business communication in the function of improving the organizational culture of the company. *UTMS Journal of Economics*, 6 (2), 267–279.
- [25] Greener, D. S. (2018). *Business Research Methods*. Bookboon https://books.google.com.pk/books?id=mR2sPdK0BIUC&dq=business+research+methods&source=gbs_navlinks_s.
- [26] Hair, J. F. (2015). *Essentials of Business Research Methods*. M.E. Sharpe https://books.google.com.pk/books?id=MpAAAnXiBTW4C&dq=business+research+methods&source=gbs_navlinks_s.
- [27] Hartl, K., Jacob, O., Mbep, F. L., Budree, A., & Fourie, L. (2019). The Impact of Business Intelligence on Corporate Performance

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- Management. *Hawaii International Conference on System Sciences*, 1-11.
- [28] Harvey, M., & Land, L. (2016). *Research Methods for Nurses and Midwives: Theory and Practice*. SAGE.
- [29] Haydu, J. J., & Hodges, A. W. (2017). *Basic Marketing Strategies for Improving Business Performance in the Turf and Lawncare Industry1*. Retrieved Oct 17, 2017, from <https://edis.ifas.ufl.edu/pdf/FE/FE70900.pdf>
- [30] Hendrith, M. (2018). The Effects Culture and Communication have on Businesses. *Integrated Studies.*, 1, 10-19.
- [31] Inmyxai, S., & Takahashi, Y. (2019). Firm resources and business performance in the Lao PDR: implications for SMEs in the LDC context'. *Journal of Indian Business Research*, 1 (2/3), 163-187.
- [32] Khan. (2011). *Research Methodology*. APH Publishing.
- [33] Kibe, C. W. (2020). Effects of Communication Strategies on Organizational Performance: A Case Study of Kenya Ports Authority. *European Journal of Business and Management*, 6 (11), 1-6.
- [34] Madueke, C. V., & Emerole, I. C. (2017). Organizational Culture and Employee Retention of Selected Commercial Banks in Anambra State. *Saudi Journal of Business and Management Studies*, 2 (3), 244-252.
- [35] Maier, S. (2017). *How 3 Companies Benefited by Changing Performance Management*. Retrieved April 25, 2018, from <https://www.cmswire.com/digital-workplace/how-3-companies-benefited-by-changing-performance-management/>
- [36] Morabito, V. (2017). *Business Innovation Through Blockchain: The B3 Perspective*. Springer
https://books.google.com.pk/books?id=wSEDDgAAQBAJ&dq=business+innovation&source=gbs_navlinks_s.
- [37] Murgatroyd, S., & Simpson, D. G. (2018). *Rethinking Innovation - Driving Dramatic Improvements in Organizational Performance Through Focused Innovation*. Lulu.com, https://books.google.com.pk/books?id=kerbAwAAQBAJ&dq=organizational+improvements&source=gbs_navlinks_s.
- [38] Parveen, F., Jaafar, N. I., & Ainin, S. (2020). Social media usage and organizational performance: Reflections of Malaysian social media managers. *Telematics and Informatics*, 32 (1), 67-78.
- [39] Philippe, Z. (2017). *Entrepreneurship and Business Innovation in the Middle East*. IGI Global,
https://books.google.com.pk/books?id=OJrgDQAAQBAJ&dq=business+innovation&source=gbs_navlinks_s.
- [40] Post, R. C. (2001). *High Performance: The Culture and Technology of Drag Racing, 1950-2000*. JHU Press.
- [41] Quinn, K. S. (2016). *Diagnosing and changing organizational culture: Based on the competing values*. USA: Addison-Wesley.
- [42] Samat, N. b. (2019). The relationship between total quality management (TQM) practices, service quality, market orientation, and organizational performance. 1-33
[http://eprints.usm.my/25862/1/the_relationship_between_total_quality_management_\(TQM\)_practices,_service_quality,_market_orientation,_and_organizational_performance.pdf](http://eprints.usm.my/25862/1/the_relationship_between_total_quality_management_(TQM)_practices,_service_quality,_market_orientation,_and_organizational_performance.pdf).
- [43] Schein. (2010). *Organizational Culture and Leadership*. https://books.google.com.pk/books?id=DIGhIT34jCUC&dq=leadership&source=gbs_navlinks_s: John Wiley & Sons.
- [44] Wang, H., Tsui, A. S., & Xin, K. R. (2019). CEO leadership behaviors, organizational performance, and employees' attitudes. *The Leadership Quarterly*, 22 (1), 92-105

APPENDIX

Questionnaire

1. Gender

- (a) Male (b) Female

2. Age

- (i) 20 to 25 (ii) 25 to 30 (iii) 30 to 35 (iv) 35 to 40
(v) 40 to 45 (vi) 45 to 50 (vii) More than 50

3. Managerial level

- (a) Lower (b) Middle (c) Upper (d) Other

4. Total Experience in IT sector

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- (i) Less than 1 year (ii) 1 to 2 years (iii) 2 to 3 years (iv) 3 to 4 Years (v) 4 to 5 Years
 (vi) More than 5 years

		1	2	3	4	5
Section A: Business intelligence Questions						
1	Clear roles and responsibilities for operating the business intelligence (BI) systems are available					
2	Data consistency (“Single Version of the Truth”) is there in the company					
3	24/7 operation of the business intelligence System are being applicable in the company					
4	Use of compulsory business intelligence tools are there in the company					
5	Data integrity during simultaneous use is there in the company					
6	Clear roles and responsibilities between departments and Information Technology throughout the whole enterprise together					
7	Traceability of master data changes within the company					
8	Use of feature set for predictive forecasting is done in the company					
9	Use of feature set for describing data analysis is used in the company					
10	Use of feature set for information visualization is used in the company					
11	Use of feature set for statistical analysis is there in the company					
12	In the company Standardized business intelligence meta-models are					

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	used					
13	In the company Interoperability of business intelligence tools are used					
14	Standardized meta-model terminology are used in the company					
15	Master Data storage in different versions are used in the company					
16	In the company use of feature set for scenario modeling are used					
17	Use of feature set for adding describing comments is there n the company					
18	Use of feature set for sharing comments throughout the enterprise are practiced					
19	Use of feature set for automatic content processing and analyzing of texts (e.g. Text Mining) are used					
20	Use of feature set for alerts linked to automated workflow data in strategic business processes are used					
21	Use of feature sets of alerts linked to automated workflow data in operational business processes for the betterment					
Section 2: Organizational culture						
1	The organization is a very personal place. It is like an extended family. People seem to share a lot of them.					
2	The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.					
3	The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement-oriented.					
4	The organization is a very controlled and structured place. Formal procedures generally govern what people do.					
5	The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.					
6	The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.					
7	The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.					
8	The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency					
9	The management style in the organization is characterized by teamwork, consensus, and participation.					
10	The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.					
11	The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.					
12	The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.					

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13	The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.					
14	The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.					
15	The glue that holds the organization together is the emphasis on achievement and goal accomplishment.					
16	The glue that holds the organization together is formal rules and policies. Maintaining a smooth running organization is important.					
17	The organization emphasizes human development. High trust, openness, and participation persist.					
18	The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.					
19	The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.					
20	The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.					
21	The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.					
22	The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.					
23	The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.					
24	The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.					
Section 3: Corporate performance management						
1	Data currency in Business Management Processes are important					
2	Effective use of external data (Market Data) is practiced in the company					
3	Effective use of measurable indicators in business areas are practiced					
4	Effective use of measurable indicators in operational business processes are there in the company					
5	Effective use of measurable indicators in strategic business processes are there					
6	Existence of feedback loops in the operational business processes (e.g. complaint management) are seen usually					
7	Existence of feedback loops in the strategy development					

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	(Adjustment of vision, mission and strategy to environmental changes) are there					
8	Process transparency is seen in the company					
9	In the company Process documentation is practiced					
10	Communication of processes throughout the organisation is obtained					
11	Alignment of strategic planning across all business units are there					
12	Alignment of strategic and operational planning is obtained in the company					
13	Operationalization of the business strategy across all business units are provided					
14	Feedback loops exist in strategic planning processes in the company					
15	Data integration exists in the company					
16	Automatic seamless exchange of data in the company is provided					
17	Data completeness is seen in the company					
18	Data maintenance effort is done by the employees in the company					
19	Alignment of strategic planning across all business functions are there					
20	Data relevance is observed in the company.					

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