

The Moderation Effect of External Environment Turbulence in Tourism Sector: Comparative Analysis of Pakistan & Thailand

Mirza Waseem Abbas*

PhD Scholar (SZABIST-Islamabad), Pakistan

Dr. Masood ul Hassan

Chairman Department of Commerce Bahauddin Zakariya University, Multan, Pakistan

Abstract

Tourism sector in Pakistan is facing a situation of severe crisis, plagued by poor management, lack of infrastructure, weak and ineffective policy and implementation. The looming cloud of terrorism has further diminished the role the sector could play in the country and the region's development. Recent military operations against terrorist elements and the inauguration of China Pakistan Economic Corridor (CPEC) are being hailed as a new phase, bringing more opportunities for business. However, it may also bring new challenges to the existing industry as well. The Thailand tourism industry faced similar kind of situation but it sailed out. The current research paper examined the moderating effect of external environmental factors and relationship of Customer Relationship Management Effectiveness (CRMe) with business performance and business innovation. A sample of 382 respondents was selected. The respondents belonged to Tourism sector in Pakistan and Thailand. The responses were tested and analyzed using Structural Equation Modeling in AMOS. It was observed that Technological Turbulence, Market Turbulence and Competitive Intensity significantly moderate the relation of CRMe with business innovation and business performance. This study is significant as it highlights the importance of external environmental factors for business performance and innovation Vis a Vis the effectiveness of an organization's CRM capability. Results of this study hold significant implications for policy makers and stake holders.

Keywords: CRM effectiveness; Innovation; Performance; Market and technological turbulence; Competitive intensity.



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1. Introduction

There is a consistent and regular increase in the demand for tourism and travel as more and more employed and working classes from developing economies express increased willingness to spend on travel, both domestic and international (Economic Impact 2014 Pakistan, 2014). The hospitality and tourism industry works in a highly competitive environment. Organizations working in this sector are vibrant, complex and segmented. Companies all around the world, in this era are experiencing a rapidly evolving and challenging market environment where products having shorter life cycles, rapidly growing technology market and customer demands are becoming complex, customized and diverse (Shepherd and Ahmed, 2000).

Customers being the prime focus of every organization, maintaining good relations with customers are essential and important for success. These relations affect and get affected directly by organizations and provide competitive advantage by adapting to the changes in environment and meeting future needs (Jones, 1995).

This leads to the premise that in maintaining a relatively stable course for the organization and thus, ensuring its survival and sustainability in the long run and in the presence of disrupting environmental and market factors, organizations may build resilience. Resilience is defined in multiple fields and areas of study such as individual and organizational psychology and strategic management (Hamel and Valikangas, 2003). The concept despite varying contexts remains constant across the board referring to the capacity of an individual and organizational systems to respond to turbulent and disrupting changes and still maintain (or return to) a previously held position of stability. Resilience is based on both weaknesses within an organizational system and its inherent ability and capacity to adjust and adapt to complex environmental changes that may have an impact in the form of reduced performance (Dalziel and McManus, 2004). This adaptive capacity allows an organization to utilize existing resources of an organization to successfully see through any disrupting influence within the system (Staber and Sydow, 2002).

The model discussed in this research draws its basics inspiration from contingency theory, systems theory and stakeholder theory because, service industry specifically (tourism and hotel) characterized by cut-throat competition, cannot operate apart from the external environment, ensuring consistency of internal systems with external systems and influence of stakeholders

For sustainability in growth, continuous learning from within and outside the organization is very essential (Kamal and Abbas, 2011). This creates business resilience that has a significantly positive influence on the effectiveness of Customer Relationship Management efforts (Abbas and Hassan, 2016).

The purpose is to see the moderating impact of Technological Turbulence, Market Turbulence and Competitive Intensity on the relation of CRMe with business innovation and performance.

2. Literature Review

2.1. Contingency Theory, Systems Theory and Stakeholder Theory

Basis of contingency theory can be traced back to early literature of organizational theory (Lawrence and Lorsch, 1967); (Pugh *et al.*, 1968); (Van and Delbecq, 1974); (Van, 1976); (Galbraith, 1977). For organizations, the best structure is the one that is contingent upon the external environment in which they exist. Williams P. *et al.* (2016). Authors suggest that, there is a relationship between environment, organizational structure and performance. External environment means factors like turbulence (innovation, laws and regulations etc.), competitive intensity and complexity. Organizational structure comprises of authority, control, power and work while performance in terms of effectiveness, efficiency and adaptability (Williams P. *et al.*, 2016). A dynamic organization working in uncertain and turbulent environment is the one that is more flexible, greater adaptive capacity and innovation oriented (Ruekert *et al.*, 1985). Contingency theory was applied in the field of marketing (Adler, 1967); (Hunt, 1976). For firms to survive and sustain the increasing environmental complexities and uncertainties, systems (firms) need to increase their complexities as per the external environment. For this purpose, market orientation and continuous learning become significantly important. To respond to the complexities of environmental uncertainties and developments, organizations should respond to these complexities simultaneously (Scott, 1992). Therefore, it is assumed that firms tend to adjust themselves to increasing complexities of environment by modifying their processes, structures, routines and rules (Daft and Lengel, 1986).

It is inferred that organizations performs much better in a situation when organizational priorities coincide with market environment (Lawrence and Lorsch, 1967). From the perspective of contingency theory, organizations tend to improve on their performance by aligning with changing external environment (McAdam *et al.*, 2016). Research regarding approaches to utilize contingency theory found some common independent and dependent variables used in various studies for the last three decades. Independent variables were market competition, culture, technology, uncertainty and bulk of new market information, while dependent variables discussed were organizational performance, management control, innovation, and systems design (Otley, 2016). The application of contingency theory in the field of CRM by marketing researchers remained scarce (Williams P. *et al.*, 2016).

Per systems theory, firms working as a close system have their prime focus on internal activities and have very limited interaction with environment. However, there is no such system that is isolated or perfectly closed from environment. This theory considers organization as a system that can be close or open. However, majority of Johnson *et al.* (1964) approaches consider firm as an open system that interact with its prevailing environment through inputs and outputs (Johnson *et al.*, 1964); (Von B. L., 1968). Therefore, it can be said that firms are considered as open systems and they cannot isolate themselves from external environment (Von B. L., 1989). System theory is significant to discuss as the aim of approaches employing this theory, is to understand interaction between environment and system (Pieper and Klein, 2007). For firms to survive and sustain the increasing environmental complexities and uncertainties, systems (firms) need to increase their complexities as per the external environment. For this purpose, market orientation and continuous learning become significantly important (Schneider *et al.*, 2016).

Customer satisfaction is a continuous target of the organization because it affects the business and performance too. The only way to do this is to pay attention to what the customer is saying and incorporating that into the product or service being offered, because achieving customer satisfaction is the core objective for any organization (Lau, 2011). From instrumental view of stakeholder theory, stakeholder (customers, suppliers, regulatory agencies) relationship management is the most important and influential factor that can affect organization's systems, structures, product design, performance, competitive advantage, innovation and direction (Kull *et al.*, 2016). The major focus of this theory is to consider the entities (individual, group) that can influence or be influenced by organization's objectives and management (Freeman, 1984).

2.2. CRM and CRM Effectiveness (CRMe)

CRM begins with strategy and the strategy begins with the customer. The organizations that succeed in strategically developing their process to deliver maximum value to the customer are the ones that are most successful. Organizations compete constantly to develop processes for value creation and value delivery to make sure that their satisfied customers stay satisfied instead of looking for alternatives (Batt, 2002). Strategies succeed where they are geared to specifically and consistently target a customer's ever changing requirements with a high degree of success. This can only be achieved if information is correctly and accurately accessed and used to ensure that products and services are compliant with the customer's standards. It also requires correct allocation and use of resources to ensure that the investment being done recovers and rewards through delivering the intended value (Knox *et al.*, 2007).

Research shows that specific mechanisms and systems need to be in place in the organization to see the effectiveness of the CRM system; the CRM technology on its own is not a condition of performance. This viewpoint is supported by Boulding *et al.* (2005); and Jayachandran *et al.* (2005). A study by Chang *et al.* (2010) goes some way in providing empirical evidence of this hypothesis.

Three major antecedents of CRM effectiveness have been identified as firm's IT performance, the performance of its Relationship Marketing function and the climate of the organization (Chen and Popovich, 2003).

2.3. Environmental Changes (Market and Technological Turbulence)

As per contingency, systems and stakeholder's theories, organizations cannot be studied without analyzing the impact of external environment in which they operate (Hofer, 1975); (Feldman, 1976); (Lawrence and Lorsch, 1967); (Johnson *et al.*, 1964); (Von B. L., 1968); (Von B. L., 1989); (Jones, 1995). There are seven environmental turbulence factors that are usually out of the control of management of any company, identified in literature (Sharifi and Zhang, 2001). These include competitive intensity, technological & market turbulences (Kohli and Jaworski, 1990); (Jaworski and Kohli, 1993). Moreover, suppliers, product diversity, social factors and customer's diversity are also identified as environmental turbulence factors.

In literature, there are various approaches that define and measure environmental changes or turbulence. Some authors describe it as a Demand-side (Preferences of customers) and Supply-side (Technological) characteristics. Per (Kohli and Jaworski, 1990), when customer preferences are volatile or keep on changing, then there is a greater chance that firm's offerings become incompatible with the needs and wants of customers, unless the firm adjusts its offerings to match customer's preferences and satisfy customer's changing demands and preferences.

With the increase in competition and extensive customer needs, organizations try to distinguish themselves by providing comprehensive customers solutions rather than depending on goods and services alone (Biggemann *et al.*, 2013). Shepherd and Ahmed (2000) while studying characteristics of competition state that market requirements are fluctuating rapidly, reducing the life cycles and viability of available products largely due to ever changing technology and customer requirements. Another study examined about why how a firm can achieve a competitive advantage in a turbulent markets (Lopez, 2005). Environmental turbulence as defined as the environment characterized by unpredictable and frequent technological and/or market changes in the industry posing risk and insecurity to every process of product or service development. The resource-based view incorrectly identifies the locus of long-term competitive advantage in turbulent markets, over-emphasizing the strategic logic of leverage and reaching a boundary condition in these markets. Traditional strategic approaches are inadequate in turbulent conditions and this type of behavior causes organizations to be ineffective (Crossan *et al.*, 1996). An ideal strategic process to be used by businesses operating in a turbulent environment is one that enables the organization to re-allocate available resources as priorities and demands change as well as continuously adapt, innovate, and even change the resources when required to sustain and grow in ever changing market conditions (Galunic and Eisenhardt, 2001). The business environment today is very dynamic (O'Regan and Ghobadian, 2005), This dynamism is reflected by volatile, reactive markets which increase the need for organizations to be more strategically aware (Eisenhardt and Brown, 1999). Obviously, behavioral requirements cannot be accurately predicted for volatile markets and therefore any resource and competence requirements or projections for so-called success may be incorrect.

Organizational level processes, rooted in multi-elements of operations and systems, designed with focused strategic orientation which allows organizations to be flexible and responsive become integral to survival. These processes should aim towards effective resource identification; management and allocation to get maximum economic value by proper identification and capitalization of opportunity offered by environmental changes. In turbulent markets, competitive advantage is created through capitalizing on a series of temporary advantages. This utilizes the concept of opportunity sensing (Lengnick-Hall and Beck, 2009). Sexton and Smilor (1997) describe this process as the creation and recognition of opportunities. They also include the pursuit of these opportunities and converting them into wealth creating businesses within a limited time. In turbulent environments, there is a need for the changing of traditional rules, business models and ways of thinking. This re-invention of industries and business models is about the creation of new bundles of products and services and the re-structuring of value chains. Turbulence can be of several kinds but in this study, we are only focusing on Market and Technological turbulence; part of external environment. There is a visible link between CRM effectiveness, innovation, performance and turbulence in the external environment (Kohli and Jaworski, 1990). The rate and variedness of change in technology is called technological turbulence. Research proves that capacity and ability of a firm and an industry is fundamentally dependent on technology to ensure effective operations maintain competitive integrity (Poon, 1993). It can impair the effectiveness of the organization, if the organization remains ignorant of its market changing trends. As discussed earlier that market oriented firms are more resilient and innovative in creating competitive advantages because it enables them to understand customer's needs, wants, preferences and expectations (Jaworski and Kohli, 1993). To fulfill the needs and wants of customers there can be various ways but one such variable or alternative is technology. Continuously ignorance of organization from technological changes will affect its performance in delivery products and services to customers. Organizations with nascent technologies that are facing rapid changes can obtain competitive advantage. On the other hand, organizations with technologies that are quite stable are relatively poor positioned to leverage technology to attain competitive advantage (Kohli and Jaworski, 1990). Market and technological turbulence tend to reallocate opportunities, alter industrial standing and redistribute power within the industry and among the players (Wellman *et al.*, 1988).

Using a sample size of 162, it is reported that technological turbulence has a significant moderating effect on the relationship between supplier market orientation and customer satisfaction (Terawatanavong *et al.*, 2011). In the study of Wang and Feng (2012), a substantial moderating impact of market, technological and competitive intensity, was reported between quality management practices and business performance. It is also reported that organizations performance boosts up in highly turbulent markets (Yauch, 2010). However, an insignificant moderating impact of competitive intensity, market and technological turbulence has been found between business performance and organizational best practices (Inman *et al.*, 2011); (Dean and Snell, 1996).

2.4. Competitive Intensity

Traditional, conservative research studies [Key \(1942\)](#) define competitiveness in the context of political systems. [Downs \(1957\)](#) Stigler's 1986 Neo-Classical definition refers to competitiveness in an economically rooted concept related to competitiveness of markets.

Competition basically means that multiple organizations are vying for access and ownership of largely similar, if not the same physical and non-physical resources available. However, there must be a compatible equation between these companies, i.e. they should be comparable to one another in terms structure or operational niches. This is called a zero-sum relation and can be direct and indirect in nature. As per [Kohli and Jaworski \(1990\)](#) competitive intensity connotes the level of competition faced by a firm in industry. [Caldart and Oliveira \(2010\)](#) expound this concept by saying that where the equivalency is greater, competitiveness tends to be higher. Increase in number of players in the market tends to increase the competitive intensity as well. It is an environment variable which does mean that it is something that can alter and vary in intensity and dynamics in different contexts.

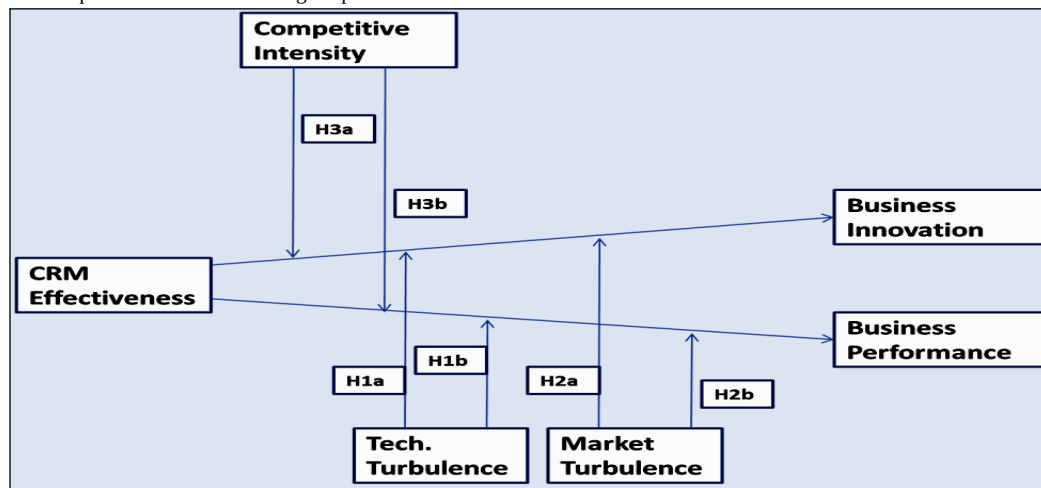
Competitiveness can only be determined once an organization is a competitor in each market. It is always a comparable measure based on how organizations are judged based on the probable dealing of organizations in a competition with one another ([Barnett, 1997](#)). This element of competitive strength is defined as competitive intensity in literature. Technically, it is the extent of impact that one organization has on the chances of another organization's life cycle and survival. Competitive intensity is a macro level variable but is more effectively determined on an inter-organizational level rather than from market to market. Strong competitors can cause serious damage to a company's survival. Competitive intensity in nature is a variable element, characterized by ebbs and flows in the inter-organizational interaction bearing in mind, the influence of the characteristics of the competition in the market and further, competition between multiple markets. These multiple but parallel influences basically define the strength of the competitors in the markets ([Barnett, 1997](#)). Michael Porter, in his Five Forces model, defining the various inputs of competition highlights crucial factors that have an impact on industrial competitive intensity. This model defines the factors that affect the number of companies that compete within an industry ([Porter M., 1980](#)).

Major factors highlighted in this research include cost i.e. high fixed and high storage costs as well low costs associated with switching service providers. It is understood that the greater the number of companies competing in an industry, the more intense will be the competitiveness of individual firms. Limited market availability limits opportunities and increases competitive intensity in an industry. Companies' competitive intensity varies with the possible differentiation and diversification of services and/or products that an industry should offer. Industries characterized by low differentiation are more competitive as the prospects of offering something new or different are greatly reduced. Companies should sell similar products and services to the same customers and therefore, should be more intensely competitive. This does benefit the industry in the way that organizations focus more on the intangible concept of value addition to attract customers ([Caldart and Oliveira, 2010](#)). In another research perspective, it has also been found in literature that higher diversity especially in terms of how companies operate and structure themselves can also drive companies to be more aggressive in completion.

Factors that can lead to this are high barriers, including but not limited to costs, tend to drive up the rivalry between firms ([Porter M. E., 1996](#)). Research from the 1990s discusses strong relationships between the performance of a firm and the competitive intensity of an industry ([Kohli and Jaworski, 1990](#)). Where markets offer less options and less competitive, organizations can prosper even without effective information and customer management, because the market offers no or limited choice to the customer for accessing product and services. The availability of choice increases the importance of customer information, because customers have alternatives for need satisfaction and therefore competition is intense. Therefore, it becomes hard to be different in such market where many firms targeting the same customer base. In this scenario, CRM becomes more relevant. It can be argued that in competitively intense market, firms try differentiate themselves from others through innovation. This rationalizes the importance of innovation, market orientation and performance in intensely competitive environments and markets ([Kohli and Jaworski, 1990](#)).

2.5. Conceptual Framework

The relationship between CRM Effectiveness, innovation and performance, have been moderated by three variables namely a) Technological Turbulence b) Market Turbulence and c) Competitive Intensity.

Figure-1. Conceptual Framework Showing Proposed Moderation of Environmental Factors on Business Performance and Innovation

2.6. Hypotheses

Based on the literature, it is proposed that:

H_{1a}: Technological Turbulence strengthens the positive relationship between CRMe' and innovation;

H_{1b}: Technological strengthens the positive relationship between CRMe' and Performance;

H_{2a}: Market Turbulence strengthens the positive relationship 'CRMe' and innovation;

H_{2b}: Market Turbulence strengthens the positive relationship 'CRMe' and Performance;

H_{3a}: Competitive Intensity strengthens the positive relationship CRMe' and innovation;

H_{3b}: Competitive Intensity strengthens the positive relationship CRMe' and Performance;

3. Methodology

3.1. Sample Frame/ Selection

The population frame for this study comprised of inter-related operational areas of tourism sector of Pakistan. The population was comprised of employees of travel agencies, hotel chains, and Tourism Ministry of Pakistan & Thailand. A list of 536 travel agencies arranging tours for Pakistan & Thailand was taken from (<http://www.agents.com.pk/travelagents.aspx>). Similarly, a list of 389 hotels was prepared though (<https://www.jovago.net/en-gb/hotels/pakistan/>).

The study was purely quantitative and primary data were collected for analysis through structural modeling technique. The sample size was selected using formula presented in the paper of (Israel, 1992), $N = Z^2 pq/e$ because desired population was large and the variability was also not known; therefore, assuming $p=0.5$ that is maximum variability. Additionally, a 95% confidence level and $\pm 5\%$ precision was also desired, then resulting sample size was 385 respondents. Therefore, 390 responses were collected out of which a sample of three hundred and eighty-two (382) responses was taken, as eight responses were discarded. The data were collected from Pakistan & Thailand, and compared in order to get the comparative analysis to draw concrete conclusion. The instrument was adopted from different studies such as Kohli and Jaworski (1990), Calantone *et al.* (2002), (Somers, 2009) and Ahmad *et al.* (2010). The adopted questionnaire was based on Liker Scale (Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5)

3.2. Confirmatory Fit Index & Factor analysis

Comparative Fit Index (CFI) measures the model fitness compared to other models. Comparative Fit Index (CFI) value of more than 0.91 for dimensions demonstrate that a satisfactory Uni-dimensionality of data (Hatcher, 1994). Similarly, Cronbach Alpha measures the internal consistency to examine the proximity of related set of items to the group (Hu and Bentler, 1998). Cronbach's alpha values of variables are more than the recommended value of 0.70 (Hair *et al.*, 2010). This shows a significant internal-consistency and reliability of the dimensions. On the other hand composite reliability measures the degree to which a set of latent constructs indicators contribute in their measurement of a construct. The average variance extracted denotes the extent of common variance amongst the latent construct indicators (Hair *et al.*, 1998). The values for Composite Reliability ranging from .73 to .90 and statistical values for AVE for all cases exceeded the threshold value of .5, indicating a reliable, consistent and valid data for further analysis.

Table-1. Reliability Analysis Statistics (Pakistan & Thailand)

Variable Name/Factor	Description of Factors/Indicator	CFI		Factor Loading		Scale-Reliability (Cronbach Alpha)		Composite Reliabilities		Average Variance Extracted	
		Pak	Thai	Pak	Thai	Pak	Thai	Pak	Thai	Pak	Thai
CRMe'	IT Performance	0.93	0.89	0.74	0.69	0.71	0.76	0.81	0.85	0.75	0.71
	Relationship Marketing Performance			0.65	0.71						
	Organizational Climate			0.74	0.83						
Innovation	Product/Service Innovation	0.96	0.94	0.61	0.73	0.79	0.77	0.79	0.83	0.69	0.73
	System Innovation			0.56	0.63						
	Process Innovation			0.96	0.69						
Business Performance	Return on Assets	0.94	0.95	0.74	0.63	0.78	0.79	0.91	0.86	0.72	0.79
	Competitive Advantage			0.62	0.71						
	Return on Investment			0.89	0.73						
Technological Turbulence	Rate of Change of Technology	0.91	0.71	0.64	0.76	0.72	0.75	0.88	0.71	0.65	0.66
	Technological Novelty			0.71	0.65						
	Adaption Rate			0.83	0.74						
Market Turbulence	Customer Preference	0.95	0.81	0.63	0.76	0.79	0.73	0.90	0.85	0.72	0.74
	Customers Composition			0.76	0.62						
	Regulatory Agencies			0.69	0.64						
Competitive Intensity	Level of Competition	0.92	0.94	0.74	0.65	0.76	0.71	0.85	0.91	0.68	0.72
	Industry Conditions			0.67	0.73						
	Competitive Density			0.83	0.88						

Table-2. Summary statistics of model fit

Fit Index	Threshold Values for Fit Indices (Hu and Bentler, 1999)	Observed values
Chi-square/ degrees of freedom	≤3.00	< 2.324
GFI	≥0.95	>0.976
AGFI	≥0.80	>0.901
NNFI	≥0.90	> 0.969
CFI	≥0.90 or ≥0.95	>0.968
RMSEA	≤0.05 or ≤0.08	<0.0381

3.2. Assessment of Data Normality

For normal uni-variate distribution, the values between -2 and +2 for asymmetry and kurtosis are considered acceptable to attest normality of data (George and Mallery, 2005).

Table-3(a). Assessment of Normality (Pakistan)

Variable	MIN	MAX	SKEW	C.R.	KURTOSIS	C.R.
CRME	1.571	5	-0.58	-1.631	0.993	1.961
BP	1	5	-0.704	-1.618	2.075	1.277
INN	1.6	5	-0.51	-1.067	1.919	1.656
Multivariate					2.144	1.12

Table-3(b). Assessment of Normality (Thailand)

Variable	MIN	MAX	SKEW	C.R.	KURTOSIS	C.R.
CRME	1.654	5	-0.67	-1.541	1.739	1.827
BP	1.434	5	-0.61	-1.681	1.875	1.357
INN	1.537	5	-0.63	-1.518	1.833	1.687
Multivariate					1.244	1.325

3.3. Multicollinearity Statistics

High correlation among the latent variables (multicollinearity) can badly affect estimated coefficients in a multiple regression analysis (Paetzold, 1992). To test the existence of this problem Multicollinearity test was carried out.

Coefficients^a

Table-4(a). Multicollinearity Statistics (Dependent variable Innovation)

Model	Collinearity Statistics			
	Tolerance (Pak & Thai)		VIF (Pak & Thai)	
CRME'	.619	.537	1.61	1.51

Coefficients^b

Table-4(b). Multicollinearity Statistics (Dependent variable Performance)

Model	Collinearity Statistics			
	Tolerance (Pak & Thai)		VIF (Pak & Thai)	
CRME'	.632	.549	1.43	1.58

3.4. Correlation Statistics

To check the nature of linear relationship among the variables, correlation statistics is used. It determines the direction and measure of the strength of a linear association between two variables (Bolboaca and Jäntschi, 2006).

Table-5(a). Correlations Statistics (Pakistan)

		CRME	INN	BP	MT	CI	TT
CRME	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	191					
INN	Pearson Correlation	0.530**	1				
	Sig. (2-tailed)	0					
	N	191	191				
BP	Pearson Correlation	0.546**	0.731**	1			
	Sig. (2-tailed)	0	0				
	N	191	191	191			
MT	Pearson Correlation	0.437**	0.513**	0.738**	1		
	Sig. (2-tailed)	0	0	0			
	N	191	191	191	191		
CI	Pearson Correlation	0.447	0.668	0.487	0.508	1	
	Sig. (2-tailed)	0.372	0.193	0.699	0.322		
	N	191	191	191	191	191	
TT	Pearson Correlation	0.551**	0.484*	0.539**	0.566**	0.508*	1
	Sig. (2-tailed)	0.619	0.345	0.868	0.74	0.494	
	N	191	191	191	191	191	191

Note: **Correlation is significant at the .01 level (2-tailed).

Table-5 (b). Correlations Statistics (Thailand)

		CRME	INN	BP	MT	CI	TT
CRME	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	191					
INN	Pearson Correlation	0.610**	1				
	Sig. (2-tailed)	0					
	N	191	191				
BP	Pearson Correlation	0.646**	0.610**	1			
	Sig. (2-tailed)	0	0				
	N	191	191	191			
MT	Pearson Correlation	0.517**	0.613**	0.491**	1		
	Sig. (2-tailed)	0	0	0			
	N	191	191	191	191		
CI	Pearson Correlation	0.547**	0.658**	0.667**	0.598**	1	
	Sig. (2-tailed)	0.372	0.193	0.699	0.322		
	N	191	191	191	191	191	
TT	Pearson Correlation	0.641**	0.544*	0.569**	0.666**	0.628*	1
	Sig. (2-tailed)	0.651**	0.545**	0.618**	0.574**	0.624**	
	N	191	191	191	191	191	191

Note: **Correlation is significant at the .01 level (2-tailed).

Figure-2(a). Standardized Regression Coefficients (Pakistan)

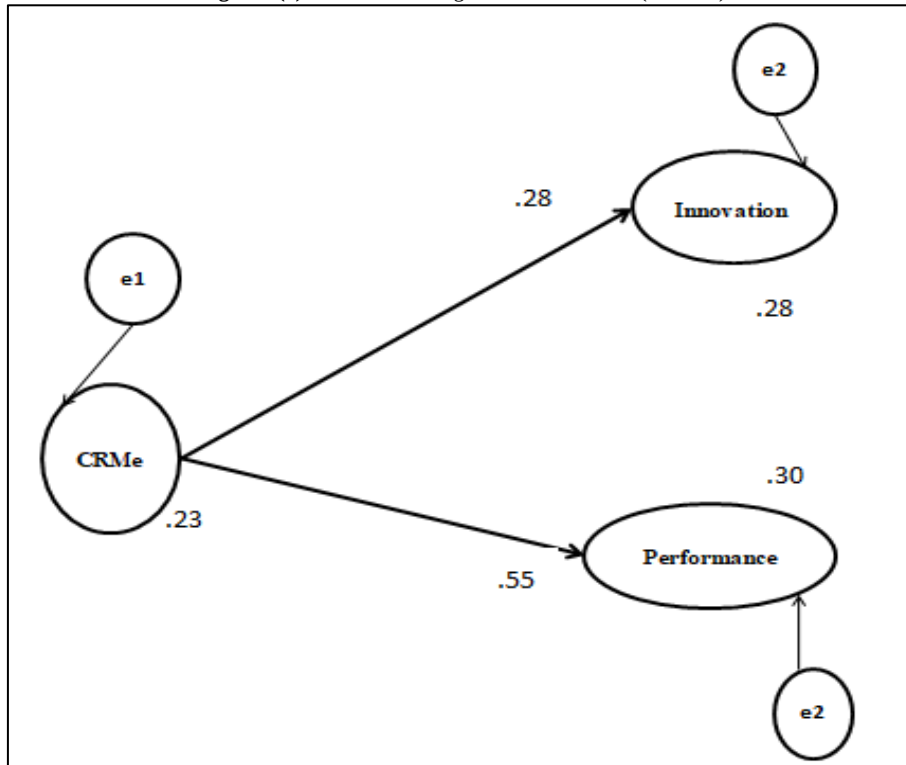


Figure-2 (b). Standardized Regression Coefficients (Thailand)

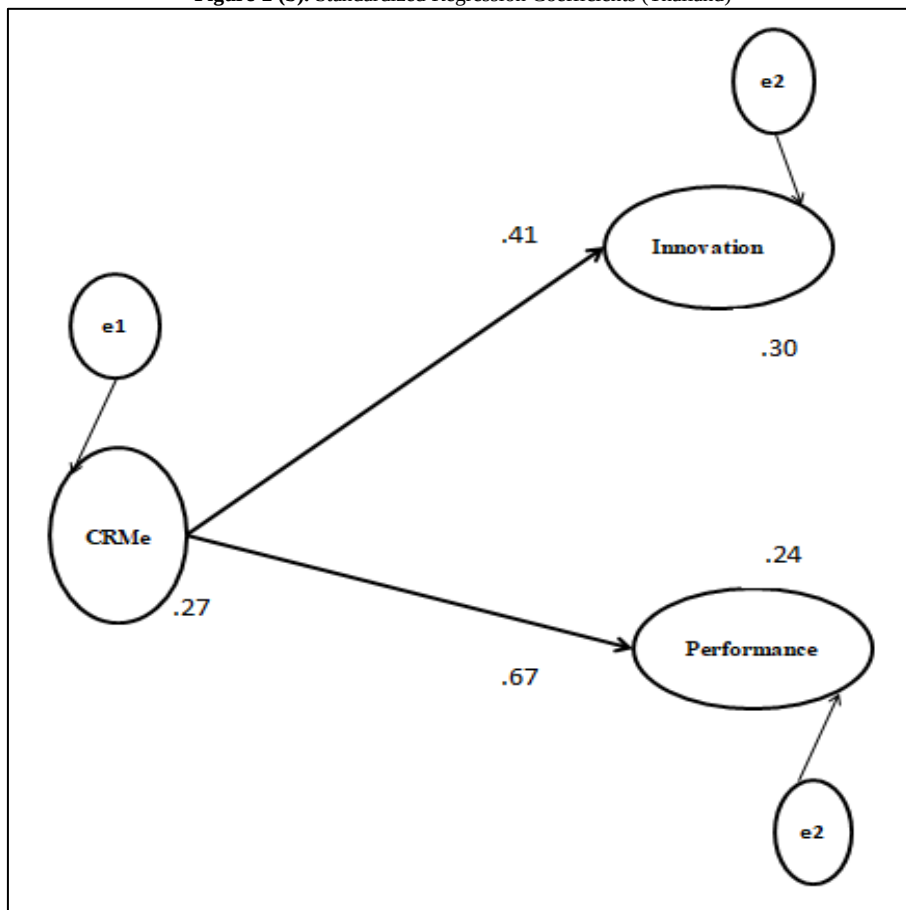


Table-6(a). Standardized Regression Coefficients (Pakistan)

Parameters			Path Coefficients	Probability
CRM _e	→	Innovation	$\beta = .28$	***
CRM _e	→	Performance	$\beta = .55$	***

Notes: *** p-value < 0.001; ** p-value < 0.05; * p-value < 0.10

Table-6(b). Standardized Regression Coefficients (Thailand)

Parameters			Path Coefficients	Probability
CRMe	→	Innovation	$\beta = .41$	***
CRMe	→	Performance	$\beta = .67$	***

Notes: *** p-value < 0.001; ** p-value < 0.05; * p-value < 0.10

3.6. Moderation Analysis

For moderation analysis of the model under discussion, multi-group structural equation modeling within AMOS was applied (Hair *et al.*, 2010). Divided sample into two subsamples along the median of each moderating variable. Chi-square difference test between the nested models (baseline/un-constrained model and constrained model) was used to investigate the influence of moderating variables; technological and market turbulence and competitive intensity. The model that allows estimates/path coefficients to vary across the two sub-samples is known as Baseline/Un-constrained in the literature (Zweig and Webster, 2003). On the other hand, model that limits the relevant estimates to be equal across the two sub-samples is known as constrained model (Ahmad *et al.*, 2010). To get measurement equivalence, the two sub-groups were subject to invariance measurement by equating factor loadings in the said sub-groups (Williams L. J. *et al.*, 2003). The results were satisfactory as it did not lead to significant decline in model fitness of the sub-groups. For these nested models, Chi-square value is always higher for the constrained model as compared to un-constrained model. Significant increase in Chi-square value indicates moderating effect (Kemper *et al.*, 2013).

Table-7(a) (Pakistan).Results of Moderation Analysis

Hypothesis	Relationship	Moderator Variables	Low Value of Moderator (Standardized efficient)	High Value of Moderator (Standardized efficient)	X ² Difference (Δd.f = 1)
H1a	CRMe→Innovation	Technological Turbulence	$\beta_1 = 0.255$	$\beta_2 = 0.488$	X ² _{diff} = 84.8 ***
H1b	CRMe→Performance		$\beta_1 = 0.383$	$\beta_2 = 0.493$	X ² _{diff} = 71.8 ***
H2a	CRMe→Innovation	Market Turbulence	$\beta_1 = 0.344$	$\beta_2 = 0.287$	X ² _{diff} = 64.1 ***
H2b	CRMe→Performance		$\beta_1 = 0.317$	$\beta_2 = 0.299$	X ² _{diff} = 51.6 ***
H3a	CRMe→Innovation	Competitive Intensity	$\beta_1 = 0.187$	$\beta_2 = 0.233$	X ² _{diff} = 83.7 ***
H3b	CRMe→Performance		$\beta_1 = 0.331$	$\beta_2 = 0.415$	X ² _{diff} = 89.6 ***

Table-7 (b). (Thailand). Results of Moderation Analysis

Hypothesis	Relationship	Moderator Variables	Low Value of Moderator (Standardized efficient)	High Value of Moderator (Standardized efficient)	X ² Difference (Δd.f = 1)
H1a	CRMe→Innovation	Technological Turbulence	$\beta_1 = 0.315$	$\beta_2 = 0.437$	X ² _{diff} = 79.5 ***
H1b	CRMe→Performance		$\beta_1 = 0.471$	$\beta_2 = 0.503$	X ² _{diff} = 78.4 ***
H2a	CRMe→Innovation	Market Turbulence	$\beta_1 = 0.493$	$\beta_2 = 0.391$	X ² _{diff} = 69.8 ***
H2b	CRMe→Performance		$\beta_1 = 0.381$	$\beta_2 = 0.299$	X ² _{diff} = 61.3 ***
H3a	CRMe→Innovation	Competitive Intensity	$\beta_1 = 0.356$	$\beta_2 = 0.473$	X ² _{diff} = 71.6 ***
H3b	CRMe→Performance		$\beta_1 = 0.381$	$\beta_2 = 0.431$	X ² _{diff} = 79.1 ***

Note: *** p-value < 0.001; ** p-value < 0.05; * p-value < 0.10

3.7. Moderation Analysis Results Discussion

Moderating variables of this study were technological turbulence, market turbulence (environmental turbulence) and competitive intensity, have also been discussed in the literature as moderating variables but in different context. For example, technological turbulence and competitive intensity have been used as moderating variables in the framework of social capital and business performance (Kemper *et al.*, 2013). Similarly, environmental turbulence and competitive intensity have been discussed as moderating variables in the context of innovation and performance

(Hung and Chou, 2013); (Garcia-Zamora and Gonzalez-Benito, 2013); (Su *et al.*, 2013); (Bodlaj *et al.*, 2012). In this study these moderating variables have been investigated in the context slightly different to the literature. Here these variables are discussed as moderators between the relationship of CRMe, innovation and business performance.

Moderation analysis results revealed that, relationship between CRM, innovation and business performance tend to be stronger in market characterized by highly technological turbulence. From the above table, technological turbulence positively and significantly moderates the relationship between CRMe and Innovation as $\beta_1 = 0.255$ is lower than $\beta_2 = 0.488$. Similarly, technological turbulence moderates the relationship positively and significantly between CRMe and business performance as $\beta_1 = 0.383$ is lower than $\beta_2 = 0.493$. Therefore, hypotheses H_{1a} and H_{1b} were accepted. In other words, rapid change in technology influences innovation and business performance in the context of CRMe.

In the same way, the relationship between CRMe, innovation and business performance will be weaker in the turbulent markets. Hypotheses H_{2a} and H_{2b} were rejected based on results shown in table no.5 as standardized coefficient values of market with low turbulence ($H_{2a}-\beta_1 = 0.344$ and $H_{2b}-\beta_2 = 0.317$) are higher than values of market with high turbulence ($H_{2a}-\beta_2 = 0.287$ and $H_{2b}-\beta_2 = 0.299$). Therefore, it can be argued that firms will innovate and perform better because of CRMe in the market where customer's preferences, their composition and rules of regulatory agencies do not change so frequently.

Hypotheses H_{3a} and H_{3b} were also accepted on the grounds of results in table no.5. The relationship between CRMe, innovation and business performance will tend to be stronger in markets where there is immense competition ($H_{3a}-\beta_2 = 0.233$ and $H_{3b}-\beta_2 = 0.415$) as compared to that market where competitive intensity is low ($H_{3a}-\beta_1 = 0.187$ and $H_{3b}-\beta_1 = 0.331$). Hence it can be said that firms will innovate and perform well because of CRMe, in those market condition where competitive intensity is higher.

In case of moderating results for Thailand, technological turbulence and competitive intensity have positive and significant moderating impact on the relation between CRM effectiveness and business innovation and business performance except for market turbulence.

4. Conclusion

Moderation analysis was conducted to determine variation in the intensity of the relationship between two variables. This study is an effort to extend these theories i.e. contingency theory, systems theory and stakeholder theory, in tourism sector of Pakistan, through extending their linkages with each other and their integrated impact on organizational performance and innovation. In this scenario, turbulent variables of technology, market and competition were presumed to moderate the intensity of the relationships between CRM effectiveness, innovation and business performance. Results showed that the relationship between these variables tend to be stronger in market characterized by high technological turbulence. Similar results also showed that organizations tend to be more innovative and show better performance where the competition is intense. However, the relationship was insignificant where markets tended to turbulent therefore, it can be argued that firms will innovate and perform better because of CRMe in the market where customer's preferences, their composition and rules of regulatory agencies do not change so frequently. Tourism sector needs to promote resilience strategy and measures within organizations for sustainability and growth considering the political and security related issues that plague the state. On part of government and other policy formation corridors shall provide a stable environment in context of prevailing security situation to let businesses establish and flourish themselves. Similarly, the tourism sector must also build measures of self-sustainability and protection within itself. To cope and survive the challenges of CPEC and vision 2020, this important sector needs to continuous learn from external environment and align itself with the outside changes. Especially the SME's working in tourism sector need to give more attention to their competitive advantage hence ensuring better performance (Shah *et al.*, 2015). Moreover, strategy and policy makers in Pakistan can take help from the outcomes of this research and try to strategically manure the policies regarding country's important sector i.e. Tourism, to cope the challenges of future.

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