THE INTERPLAY OF INNOVATION, TQM PRACTICES AND SMES PERFORMANCE IN PAKISTAN: MODERATING EFFECTS OF KNOWLEDGE INERTIA AND EXTERNAL ENVIRONMENT

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ABSTRACT

This paper acknowledges the increasing importance of entrepreneurial activities for the promising and developing economies like Pakistan, where the lack of understanding of the dynamics and significance of the interplay between Knowledge Inertia, External Environment, Innovation and Total Quality Management (TQM) practices is hampering the entrepreneurial businesses’ success at large. The objective of the paper is to examine the moderating effects of entrepreneurs’ knowledge inertia, external environment and the relationship between innovation, TQM practices and Small and Medium Enterprises’ (SMEs) performance. This paper is conceptual in nature. It is based on thorough literature review relevant to the variables discussed in the paper. The paper is based on the theoretical foundations such as Resource Based View, Dynamic Capabilities Theory and Theory of the Growth of the Firm. The findings provide insights about how the new as well as existing ventures should achieve higher performance and sustainable competitiveness through the interplay of the variables discussed in the paper.

Key words: Knowledge Inertia, External Environment, Innovation, Total Quality Management, SMEs Performance in Pakistan

1. Introduction

In this era of intense competition, uncertain business and economic environment, rapid introduction of new product and process technologies and ever challenging quality benchmarks, only those firms would succeed who can successfully cope with the aforementioned business challenges. Such challenges prevail in developed as well as developing economies. Similarly the large as well as the small firms encounter these issues. However, it is quite critical for SMEs to identify and cope with these challenges as they represent the majority of business firms in developed as well as developing countries. Thus, the objective of the present paper is to have an insight about the nature of relationship that exists between Innovation, TQM and SMEs Performance, whereas; knowledge inertia and external environment have been studied as potential moderators. The present paper reviews the relationship among above discussed variables from the view point of SMEs in developing countries in general and Pakistan in particular. The significance of SMEs for developing economies is briefly discussed as follows.

SMEs are strategically important in many developing countries, particularly those located in the Asian region. In Malaysia, SMEs represent 99.2% businesses, account for 56.4% of employment and contribute 32% of GDP; In Japan, SMEs represent 99.7% of businesses, provide 71% of employment and contribute 55.3% of GDP; In China, SMEs represent 99% of total business establishments, account for 75% of employment and contribute 56% of GDP; In Indonesia, the corresponding figures are 99.7%, 99.6% and 57% respectively (Rosman & Rosli, 2012). Similarly in South Asia, SMEs contribute immensely towards economic growth and development. In Bangladesh, SMEs contribute 50% to industrial GDP and employ 82% of industrial sector employees. In Nepal, SMEs represents almost 98% of businesses and contribute 63% of the value-added segment. In India, SMEs’ contribute 30% of GDP. In the same manner, SMEs are making significant contributions in Pakistan’s economic development. In Pakistan, SMEs represent about 99% of total business establishments. These SMEs are accounting for 30% of annual gross domestic product (GDP) of the country, employment of 80% of non-agricultural labor force, 25% of total exports and 35% of value added manufacturing (Hussain, Si, Xie & Wang, 2010).

The rest of the paper is organized as follows: Section 2 discusses problem statement. Section 3 sheds light on previous literature. Section 4 presents the proposed framework which is followed by research propositions in section 5. Section 6 discusses research methodology. Section 7 discusses conclusion, implications and future research recommendations.

2. Problem Statement

SMEs Performance has remained an area of immense concern and has generated significant scholastic debate among entrepreneurs and academia. It is because SMEs play a pivotal role in economic development of any country. They improve the lives of individuals along with contribution to GDP and creation of employment opportunities. However, it has been identified that despite of magnanimous economic support and contribution towards development, the performance of SMEs remains below expectations in the developing countries (Hafeez, Mohd Shariff & Mad Liazim, 2013, Arinaitwe, 2006). The factors causing low performance comprise of unfavorable economic conditions, inconsistent public policies, lack of infrastructural support, financial constraints, mounting operating costs and corruption (Oboh, 2002; Okpara, 2000; Wale-Awe, 2002). In Pakistan, the situation is not very different. As put forward by one of the top officials Small and Medium Enterprises Development Authority of Pakistan
(SMEDA), SMEs in Pakistan are suffering from a low growth trap (Khawaja, 2006). In terms of performance, SMEs in Pakistan are struggling for long term survival and success of their businesses. He further identified that lack of knowledge management, inability to innovate and non-adherence to quality standards are among the few causes of poor SMEs performance. It is evident from statistical facts that 19% of SMEs are less than 5 years old and only 4% of the firms are able to operate for more than 25 years (Hussain, Si, Xie & Wang, 2010).

The review of literature as discussed before has revealed a number of issues associated with SMEs performance. Some of those issues such as financing, government regulations, entrepreneurial skills and orientations and working conditions of SMEs have received considerable attention from the researchers and have been studied in various contexts. It is observed that Innovation and TQM practices are a few contemporary issues highlighted in the recent studies. Past research also sheds light on the importance of knowledge inertia and external environmental dynamics that can have an effect on SMEs performance. To the best of the knowledge of researchers there is very limited research if any with respect to moderating role of knowledge inertia and external environment on Innovation and TQM practices in general and in developing countries in particular. Therefore the paper proposes to examine the moderating effect Knowledge Inertia and External environment on the relationship between Innovation, TQM practices and SMEs Performance as there are very limited studies if any that have examined the aggregated impact of all aforementioned variables on performance of SMEs.

3. Literature Review

3.1. Innovation

Innovation enables an organization to keep pace with newly emerging environmental changes. The role of innovation is considered to be potentially significant to counter uncertain challenges of changing environment (Zafar, Hafeez & Mohd Shariff, 2015). In an organization, innovation introduces the creation and acquisition of new concepts and behaviours (Liao, Fei & Liu, 2008). The previous literature strongly affirms that innovation, being a competitive instrument carries the potential for firm’s sustainable existence and performance (Santos-Vijande & Alvarez-Gonzalez, 2007). Tidd, Pavitt and Bessant (2001) have defined the ‘parameters of innovation in order to conquer the competitive advantage both at local and global level. These parameters include equipping the market with unique and novel products and services, introducing entry barriers that compel the important resources to improve innovative techniques through learning and designing new values in order to reconsider the rules of competitive environment (Hafeez, Mohd Shariff & Mad Lazim, 2012; Llorens Montes, Moreno & Morales et al., 2005).

Previous researchers have recommended that innovation helps organizations adjust themselves to rapidly changing market and technological scenario by means of diversification, reinvention and adaption (Hafeez et al., 2013; Santos-Vijande & Alvarez-Gonzalez, 2007). Innovation literature provides multiple definitions of innovation from different contextual backgrounds. Innovation, as defined by prominent researchers of the domain includes the acquisition of a program, system, policy, device, product or service whether purchased or originally produced, which is primarily new for its acquiring organization (Prajago & Sohal, 2001, 2006). According to Wu, Chang and Chen (2006), innovation incorporates any system, product/process or an idea, that appears to be novel and unique to an individual.

Moreover, innovation has been classified into different types including product versus process, technology versus management innovation and radical versus incremental. The most significant category of innovation is established as incremental or radical. The capability to create innovations in order to enhance and emphasize existing products and services is termed as incremental innovative capability while radical innovative capability considerably transforms the existing products and services (Subramaniam & Youndt, 2005).

To sum up, innovation is a driving force which comprises of various dimensions such as marketing, managerial, product and process innovation. Through these innovative approaches, the firms especially SMEs can bring about break through changes and advancements in their overall performance in developed as well as developing countries like Pakistan. (Van de Vrande et al., 2009; Hafeez et al., 2013).

3.2. Total Quality Management

Dr. Edward Deming is considered to have revolutionized the field of quality management in the most influential way. Through a special television program “If Japan can. Why can’t we”, Deming’s contribution in the development of Japanese quality was greatly identified. The program focussed on the significance of quality in U.S. industrial sector and U.S. governmental policies and interlinked it with country’s economic wellbeing (Samson & Terziovski, 1999). Simultaneously, Ortiz, Benito and Galende (2006) noticed that TQM has advanced further from its unidimensional characteristic and it holds strategic significance for the firms which implement it in order to ensure their dynamic capabilities.

TQM has been defined in different contexts and perspectives so the literature does not offer any common definition so far. The US Defence Department has proposed that TQM is the incorporation of human resource practices and technical methods within and outside the organizational processes so that the improvement in material and services inputs can be enhanced to cater the needs of its customers (Singh & Smith, 2004). Deming (1982) and Juran (1988) are regarded as “quality gurus”, who attempted to explain the basic concepts and practices of quality management. According to Martinez-Costa and Jimenez-Jimenez, (2009), TQM can be explained in terms of company-wide strategy that involves all employees, suppliers and customers, continuously focussing on the enhancement of its product/process quality to satisfy and further extend the customer’s needs. The scope of TQM needs to be extended to international market by ensuring the enhancement of quality, productivity and competitiveness. For this purpose, TQM must be understood in terms of holistic approach. Yang (2005) has attempted to define TQM in greater detail. He introduces it as an incorporated management philosophy and sets out the parameters for organizational practices that
highlights constant upgrading, satisfying customers’ requirements, improved employee contribution and coordinated team-work, decreasing rework, team-based problem-solving, long-term planning, competitive benchmarking, process remodelling, persistent result measurement, and close interlinking with suppliers. Therefore, Ortiz et al., (2006) affirm that systematic integration of TQM dimensions ultimately result into integral management. The TQM dimensions need to be identified to carry out accurate analysis. These dimensions include leadership, customer focus, people management, process management, information analysis, strategic planning and performance (quality, business and operational performances) (Samson & Terziovsky, 1999; Singh & Smith, 2004; Prajogo & Sohal, 2001).

This paper emphasizes on some prominent dimensions of TQM; participation also known as people management, continuous improvement, leadership, process management and customer focus. Martinez-Costa and Jimenez-Jimenez (2009) emphasized on the salience of customers and stakeholders, their teamwork and participation at each and every organizational level and a focussed process maintained by continuous improvement and learning. Participation specifies a delegation of empowerment and work decisions. Through the training and incentive programs for personnel and equity building procedures, employees are qualified to actively participate in creation of quality products and constant improvement of products and processes (Ortiz et al., 2006). Leadership incorporates the vision and commitment of the management, where quality is treated as strategically potential resource for the acquisition of competitive advantage. In pursuit of quality, strategy and objectives should be closely affiliated with corporate strategy and organizational values in which management carries a significant role (Ortiz et al., 2006). Moreover, continuous improvement inspires variation and innovative thinking in organizational work setup which resultantly increases the expectations and quality Martinez-Costa and Martinez-Lorente (2008) Furthermore, Prajogo and Sohal, (2001) contend that continuous improvement necessitates the standardization of processes which ultimately yields numerous consequences: (a) the reduction in ambiguities in the work design leaves no room for innovation (b) being a kind of organizational conformism the employees are not interested in breaking their routines or taking extra responsibility of an alternative thought; and (c) because of adhesion, a by-product of repeated behaviour, it offers lesser flexibility and acceptance to change (Santos-Vijande & Alvarez-Gonzalez, 2007).

Continuous improvement emphasizes on incremental change developed by Imai (kaizen) ultimately targeting the process improvement (Prajogo and Sohal, 2001). Moreover, process management concentrates on the uniformity of programmed and planned organizational tasks. The efficient process management is characterized by design and documentation of the processes, cleanliness and protective maintenance of the work place. Lastly, customer focus which is another important dimension of TQM is illustrated by Ortiz et al. (2006). It is fabricated on relationships of trust at both internal and external levels in order to adapt the product or service to ensure its crucial quality dynamics. Therefore, TQM oriented firms need to initiate their operations to satisfy or extend the customer needs to attain competitive advantage where customer orientation has to be continuously evaluated. (Santos-Vijande & Alvarez-Gonzalez, 2007). In comparing larger firms with smaller firms, Hendricks and Singhal (2001) argue that smaller firms tend to benefit more from TQM as compared to larger firms. Implementation of TQM principles may not have direct but indirect impact on financial performance (Kaynak, 2003) by increasing innovation (Singh & Smith, 2004), changing organizational culture (Irani, Beskese & Love, 2004), market competitiveness (Chong & Rundus, 2004), overall organizational performance (Powel, 1995), market share and growth of market share (Kaynak, 2003), employee morale (Rahman & Bullock, 2005), productivity (Rahman & Bullock, 2005; Kaynak, 2003; Rahman, 2001). TQM is highly relevant to SMEs in developing economies as they tend to ignore the quality benchmarks and thus suffer resultantly. Hence, this paper sheds light of significant role of TQM in SMEs Performance.

3.3. Moderating Role of Knowledge Inertia

Inertia is defined as an opposing force. This force creates hindrance in organizational processes at individual and organizational level. This concept encompasses financial investments, personal commitments and institution mechanisms that are supporting the status quo (Huff et al., 1992). If the same concept is applied to individual level then this inertia is applied on behavioral perspective of employees. Knowledge inertia has two dimensions, Knowledge and experience inertia. Knowledge inertia is learning from same source and experience inertia is using the previous knowledge to problem solving thus avoiding experimentation (Liao et al., 2008). Knowledge inertia is opposing force so it is deemed to play a moderating role between organization’s innovation, quality practices and performance.

3.4. Moderating role of External Environment

Freel (2005) defined environmental dynamism as continuous changes in market conditions such as technology, competition and market demand. Dess and Beard (1984) explained environmental dynamism as a process, which is related to unpredictable environmental changes which as a result affect the performance of organization. In dynamic environment rational decision making is very difficult, which may lead to its moderating role. Product innovation is positively related with environment. Priem et al. (1995) found a moderating relationship between strategic decisions and firms performance. Thus hostile and dynamic environment affect innovation and performance. Environmental dynamism and hostility also have moderating effects on outsourcing and firm’s performance (Rasheed & Precott, 1992).

Dynamic environment is dealing with unpredictable changes which sometimes create opportunities in the environment and leads to high performance and innovation (Miller, 1987; Frank & Kebler, 2008). Environmental Hostility has several characteristics such as market competition, price, regulatory restrictions and unfavorable trends (Miller, 1987). If hostility increases then organization has to make decisions which are not rational. Innovation and Quality Management is only possible when organization is continuously focusing on creating and sharing knowledge which is not possible in hostile environment.
4. Proposed Framework

Based on the literature discussed earlier, a research framework has been proposed as given in Figure 1.

![Proposed Research Framework](image)

5. Research Propositions:

In the light of aforementioned literature review and proposed framework, major research propositions are as follows:

1. There is a significant relationship between Innovation and SMEs Performance.
2. There is a significant relationship between TQM and SMEs Performance.
4. Knowledge Inertia Moderates the relationship between TQM and SMEs Performance.

6. Research Methodology:

As this paper is predominantly conceptual in nature, it is based on a thorough literature review related to variables used in the study which includes two independent variables namely Innovation and Total Quality Management, two moderators namely Knowledge Inertia and External Environment and one dependent variable namely SMEs Performance. With reference to aforementioned variables, the researcher has comprehensively reviewed refereed books and research articles in order to get an in-depth insight about the related underpinning theories that provide a foundation for the relationships among the variables as proposed in the framework and discussed in research propositions.

7. Conclusion, Implications and Future Research:

This paper discusses the prominence of Innovation, TQM as predictor variables, Knowledge Inertia and External Environment as Moderating variables with reference to their relationship with SMEs Performance as Dependent variables. In line with the objectives of the papers the relationships among aforementioned variables have been thoroughly reviewed and propositions have been formulated. It can be concluded that this paper proposes a framework which would gain the interest of academia and practitioners alike. The interplay of variables highlighted in this paper can act as catalyst in boosting SMEs performance in developing economies. This paper is based on strong theoretical foundations such as Resource Based View, Dynamic Capabilities Theory and Theory of Growth of the Firm. This paper makes worthy contributions to existing body of knowledge by discussing the nature of relationship between Innovation, TQM practices and SMEs Performance along with the moderating effects of knowledge inertia and external environment.

Furthermore, it provides valuable implications for SMEs owners and managers in general and in Pakistan in specific in order to run their firms more successfully and thus achieve higher levels of competitiveness and sustainability in local as well as international markets. In order to stay above the competitors firms need to embrace innovative and quality oriented practices along with acquiring and disseminating new knowledge in an environment which is open and conducive to aforementioned practices. Future researchers can empirically test the propositions highlighted in this paper by conducting quantitative research in SMEs in cross industries and economies. The future studies based on the proposed relationships would help SMEs in developing economies in general and SMEs in Pakistan in particular especially with reference to surgical goods industry, sports industry, leather industry, furniture industry, cutlery industry and ceramics industry that have not yielded their true potential in local as
well as foreign markets because of improper attention to innovation, quality management and continuous learning that can enables them to combat with existing inertias and cope with challenges of ever changing external business environment.

References

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