TITLE: IMPACT OF KNOWLEDGE MANAGEMENT ON FIRM PERFORMANCE WITH MODERATING EFFECT OF INNOVATION ON FOOTBALL SECTOR OF PAKISTAN

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Abstract: Football industry is one of the major contributors to total export and has significant importance for the growth of Pakistan economy. This study investigates the effect of knowledge management on firm financial performance with moderating effect of innovation. The study collected the data through survey based questionnaire from firms engaged in manufacturing and export of football in Pakistan. Data analysis is done through four stages of data screening, testing validity and reliability of measures and finally analyzing the relationship using SPSS. The study found a positive and significant relationship between knowledge management and firm financial performance, and relationship is further strengthen under the moderating role of firms' innovation. The study has important implication for exporters and managers of the firm working in football industry. Keywords: Knowledge Management, Innovation, Firm Financial Performance, Football Sector

I. Introduction:  
In the era of competition, the key to improve innovation and performance of the firm is awareness of information, and developing new and innovative ideas to gain competitive advantage over competitor. Knowledge itself is regarded as a key resource, as effective management of knowledge enhances firm capabilities which lead to generate innovative ideas and increase firm performance (Darroch, 2005). Knowledge management is a process to classify, disseminate and categorized information with the
people in the organization (Taft, 2000), and it includes learning, innovation and adopting ability that leads to innovation and firm performance. Knowledge management is a framework helps the organization to view all its processes as knowledge processing, and helps organization to include creation, dissemination, renewal, and application of knowledge in the form of organizational sustenance and survival (Malhotra, 2000).

It helps employees to exchange knowledge and ideas within the organization about the process which contains knowledge acquisition, knowledge dissemination and responsiveness to knowledge. An organization enhances its value by creatively identifying, implementing and incorporating knowledge in efficient ways. Knowledge management helps organizations to how to collect information how to share it and how to manage it to improve firm performance. Knowledge management expected consequences contains: enhanced financial performance of firm (Teece, 1998; Wiig, 1997); innovation (Antonelli, 1999; Carneiro, 2000; Dove, 1999; Nonaka and Takeuchi, 1995); better organizational learning (Buckley and Carter, 2000); competitive advantage (Connor and Prahalad, 1996; Hall, 1993); excellent use of information (Carneiro, 2000); and anticipation of problems (Carneiro, 2000).

Realizing the significance of knowledge management it is imperative to understand how it affects performance of the firm with moderating effect of innovation. Most of the earlier studies are from the developed countries and little evidence has been available to developing countries. So this research explores the effect of Knowledge management on the football sector of Pakistan. Football sector of Pakistan has significant importance as Pakistan is a key producer of football, with manufacturing of 40 to 60 Million approximately football a year. The economic strength of the economy is measured by its industry. Industry helps to eradicate unemployment in the country by providing jobs to people. Industry provides growth and opportunities to future generations. In Pakistan, the industrial sector contributes total 6.8 percent of GDP and its major source of revenue for the government in the form of tax collection. The growth rate of industrial sector is 5 percent. In Pakistan, football sector exports account for $172.901 Million out of total national export of $20,786.510 Million and its total export increased to 3.58% growth as compared to previous years. The industry has much importance due to its main role in export, employment, economic growth prosperity, and balance of payment in Pakistan.

II. Objective of the study:
The objective of this study is to explore the consequence of Knowledge management on the firm financial performance with moderating effect of innovation of football sector of Pakistan. This study identifies the consequence of knowledge management on firm financial performance in the form of knowledge acquisition, knowledge dissemination and responsiveness to knowledge. The richer understanding that we need to conduct this study as no one has worked on it firms like football sector contributing hugely to the national economy from developing countries like Pakistan.

III. Literature Review
In recent times, knowledge management has become an integral part of organization and gaining reputation due to its significant importance as a cause of competitive advantage over its competitors (Nonaka, 1991; Nonaka and Takeuchi, 1995; Davis, 1998; Matusik and Hill, 1998; Miller, 1999; Moore and Birkinshaw, 1998; Stewart, 1997). The worth of
knowledge management is to improve innovation and financial performance of the firm by approaching to the process such as knowledge acquisition, knowledge dissemination and responsiveness to knowledge. It helps the organization through its process to pursue organization goal. The reason behind the success of top organizations is adaptability of knowledge management strategies. Effective use of knowledge ensures the survival of the firm in the long run because it became the source of development of other capabilities in the organization (Darroch, 2005) and leads to increase innovation activities of the firm.

In literature, innovation means transferability of knowledge into new products, and enhances competitive advantage and target changing customer needs (Nystrom, 1990). Livingstone et al. (1998) stated that innovation means effective use of knowledge and human resource management systems to design new innovative products that increase the worth of the organization. Carnerio, (2000) & Dove, (1999) stated that Knowledge management has appeared as a main element of innovation. Jansen, Van Den Bosch, & Volberda, (2006); and Roberts & Amit, (2003) finds that innovation is the key factor, the organization used to improve their performance in the difficult times such as limited resources, changes in technology, globalization issues and changing demand of the customer.

Elenkov, (2002) stated that firm performance means the degree to which companies accomplished its business goals and objectives. In organization it may be determined as firm learning, profitability, and other financial benefits in knowledge management (Simonin, 1997 and Davenport, 1999). To pursue financial sustainability, most of the organizations are using effective knowledge management capabilities (Gold, Malhotra, & Segars, 2001). The capability to discuss and disseminate inner practices is essential to whole firm financial performance (Szlanski, 1996), and utilizing outer practices and knowledge is important to design new innovative product (Von Hippel, 1994) and to firm financial performance in largely (Sher and Lee, 2004).


The conceptual Model
This model explains the relationship between independent, moderating and dependent variable. In this model Knowledge acquisition, Knowledge dissemination and responsiveness to knowledge are independent variables, Innovation is moderating variable and Firm performance is dependent variable.
IV. Methodology

A. Data and Sources

Data was collected through questionnaire, the target population included football sector of Pakistan. This study was based on adopted questionnaire (Darroch, 2005), was used as a tool of data collection. The sample size of 125 was collected from firms engaged in manufacturing and export of football in Pakistan through a questionnaire. The purposeful sampling technique was used in the process of data collection. The data was analyzed through SPSS.

B. Hypothesis Development

Knowledge management is measured in three steps: knowledge acquisition, knowledge dissemination, and responsiveness to knowledge. Better use of knowledge enhances firm financial performance. Darroch, (2005) finds a positive relationship of knowledge acquisition, knowledge dissemination, and responsiveness to knowledge with firm performance. Innovation helps firms to increase efficiency and effectiveness in the form of firm financial performance. From previous literature a positive relationship has been found between innovation and firm performance (Avlonitis and Gounaris, 1999; Atuahene-Gima, 1996; Capon et al., 1992; Deshpande’ et al., 1993; Han et al., 1998; Li and Calantone, 1998; Manu and Siriam, 1996; Magondo, 1999; Va’quez et al., 2001; Darroch., 2005). Based on previous literature the hypothesis is:

<table>
<thead>
<tr>
<th>HYPOTHESIS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Knowledge acquisition shows a positive relationship with firm performance</td>
</tr>
<tr>
<td>H2</td>
<td>Knowledge dissemination shows a positive relationship with firm performance</td>
</tr>
<tr>
<td>H3</td>
<td>Responsiveness to knowledge shows a positive relationship with firm performance</td>
</tr>
<tr>
<td>H4</td>
<td>Innovation shows a positive relationship with firm performance</td>
</tr>
</tbody>
</table>

V. Results and Discussions

The table 1 indicates the result of correlation analysis and reliability between variables through SPSS. The above table indicates that there is no high correlation among variables. Some of the variables have a positive correlation and rest of them has a negative correlation. The value of Cronbach's Alpha of items is above 0.8 and it means that the reliability of items is acceptable.

Table 1

<table>
<thead>
<tr>
<th>Correlation and Reliability</th>
<th>FP</th>
<th>KA</th>
<th>KD</th>
<th>RK</th>
<th>INN</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>1.00</td>
<td>0.23*</td>
<td>0.14***</td>
<td>0.39*</td>
<td>0.11***</td>
<td>0.83</td>
</tr>
<tr>
<td>KA</td>
<td>0.23*</td>
<td>1.00</td>
<td>-0.15***</td>
<td>0.23*</td>
<td>0.05</td>
<td>0.93</td>
</tr>
<tr>
<td>KD</td>
<td>0.14***</td>
<td>-0.12***</td>
<td>1.00</td>
<td>0.16**</td>
<td>0.24*</td>
<td>0.95</td>
</tr>
<tr>
<td>RK</td>
<td>0.39*</td>
<td>0.23*</td>
<td>0.16**</td>
<td>1.00</td>
<td>0.11***</td>
<td>0.92</td>
</tr>
<tr>
<td>INN</td>
<td>0.11***</td>
<td>0.05</td>
<td>0.24*</td>
<td>0.11***</td>
<td>1.00</td>
<td>0.86</td>
</tr>
<tr>
<td>Level of Significance</td>
<td>0.01 at *, 0.05 at **, 0.10 at ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(KA = Knowledge Acquisition, KD = Knowledge Dissemination, RK = Responsiveness to Knowledge, INN = Innovation and FP = Firm Performance)

The table 2 depicts the results of regression analysis with the help of SPSS. The above table indicates the results of regression analysis with and without moderating variable innovation. The table shows the positive relationship without moderating variable. KA beta value is 0.099 at P<0.05, KD beta value is 0.051 at P<0.22 and RK beta value is 0.231 at P<0.00. The table shows the positive relationship with moderating variable, KA beta value is 0.097 at P<0.06, KD beta value is 0.045 at P<0.29, RK beta value is 0.229 at P<0.00 and INN beta value is 0.029 at P<0.59.

Table 2 Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Moderating Variable</td>
<td>(Constant)</td>
<td>2.59</td>
</tr>
<tr>
<td></td>
<td>KA</td>
<td>0.099</td>
</tr>
<tr>
<td></td>
<td>KD</td>
<td>0.051</td>
</tr>
<tr>
<td></td>
<td>RK</td>
<td>0.231</td>
</tr>
<tr>
<td>With Moderating Variable</td>
<td>(Constant)</td>
<td>2.51</td>
</tr>
<tr>
<td></td>
<td>KA</td>
<td>0.097</td>
</tr>
<tr>
<td></td>
<td>KD</td>
<td>0.045</td>
</tr>
<tr>
<td></td>
<td>RK</td>
<td>0.250</td>
</tr>
<tr>
<td></td>
<td>INN</td>
<td>0.029</td>
</tr>
</tbody>
</table>
The table 3 shows that knowledge management has positive and significant impact on firm performance with moderating effect of innovation. The result values without moderating variables are F, 9.368 at P<0.00 and with moderating variables are F, 7.059 at P<0.00.

**Table 3 ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>R²</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Modulating Variable</td>
<td>.18</td>
<td>9.368</td>
<td>0.00*</td>
</tr>
<tr>
<td>With Modulating Variable</td>
<td>.19</td>
<td>7.059</td>
<td>0.00*</td>
</tr>
</tbody>
</table>

**VI. Conclusions**

This study concludes that knowledge is a key factor to improve effectiveness and efficiency of the organization. Knowledge itself is a resource in shape of tangible and non-tangible activities (Hall, 1993). Knowledge helps the organization to better use of firm limited resources (Penrose, 1959). This study measure the relationship of Knowledge management, innovation and firm financial performance on football sector of Pakistan. The study found a positive and significant relationship between knowledge management and firm financial performance, and the relationship is strongly moderated by the innovation of the firms.

Knowledge management is become a source to adopt new technology, enhance abilities of human capital and innovativeness in product design that leads to increasing firm financial performance. Football sector with use of knowledge management process increase its capabilities and skills and avail many opportunities with the help of innovation that becomes the path of success and increases firm financial performance. Through effective use of knowledge management this study contributes that managers, manufactures and exporters in football sector enhance productivity and produce quality products that lead to increase its firm financial performance.

**VII. References:**


