Market Orientation and Performance of PSO

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ABSTRACT
Market orientation and its effectiveness in improving the organizational performance has anecdotal evidence in the context of private and profit oriented sector of the world. By replicating the MARKOR scale the present study attempted to analyze market orientation and its sub constructs in the context of Public Sector organizations (PSO) of Pakistan. This study by using a random sample of profit oriented PSO of Pakistan analyzed the relationship of market orientation with performance by using SEM and Cluster analysis. Results are indicative to the fact that market orientation is there in the context of PSO but the relationship between market orientation and its underlying three activities i.e. intelligence generation, dissemination and responsiveness with performance of the PSO are equivocal.

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Keywords: Market Orientation, Public Sector Organization, Performance, Cluster Analysis, SEM

I. Introduction

The organizations which are managed and financed by state and provide services to the citizens of country are known as public sector organizations and are also called government/state owned enterprises (Murray, 1975; Schiflett & Zey, 1990). Therefore Govt. /state owned enterprises and public sector organizations are used synonymously (Rainey, 2003). In this paper the word PSO is used to reflect both. There is vast body of research literature in management that is focused on private sector organizations; however little attention has been paid to public sector organization (PSO) and its management (Rainey, 2003). To improve the performance of PSO it is highly desirable that PSO become more strategic and customer oriented (Boyne & Walker, 2004), as strategic orientation and resulting strategy of the firm in its given context can be a source of competitive advantage (Baker, 2000; Slater & Olson, 2001). In the same

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way marketing concept as a defining philosophy of the organization and its strategy can be a source of competitive advantage in PSO (Barksdale & Darden, 1971; McNamara, 1972). Thus the PSO may need to become more strategic oriented in the long term with a specific focus on the value that they are supposed to add to the stakeholders. However strategic orientation and customer focus which are the two major contributors to the firm performance seems to be a novel idea in the working of the PSO (Boyne & Walker, 2004). Given that the implementation of strategy in the firm and its performance outcomes is dependent on firm’s market orientation capabilities (Kohli & Jaworski, 1990), with emphasis on being customer oriented and fulfilling their needs with quality (Bitner, 1990; Day & Wensley, 1988; Parasuraman et al., 1985). According to Teece, & Pisano (1994) & Teece (2007) resource based view of the firm helps an organization to capitalize on its internal capabilities to leverage its strategies. This view is gaining currency as specific capabilities of the organizations when become dynamic capabilities they can be a source of sustainable competitive advantage (Makadok, 2001; Rindova & Kotha, 2001; Winter, 2003). In this backdrop the present study is aiming to conceptualize market orientation and its underlying three capabilities as the dynamic capabilities of the PSO and these capabilities will help PSO to leverage information from the outside into the PSO and will result into more effective strategy formulation and ultimately will result in better performance (Jantunen et al., 2005; Menguc & Auh, 2006). It is intuitively appealing to suggest that if a PSO have the dynamic capability in terms of more customer and market orientation they will be more successful given the changes that are taking place in environment (Boyne & Walker, 2004). Given the significance of the situation inherent in the environment including the rapidly changing circumstances, however there is very little evidence regarding the existence or otherwise of relationship between strategic planning, strategic orientation including customer focus and organizational performance within the context of PSO. In the context of PSO nevertheless, Walsh (1994) claims that the PSO can adopt market orientation as a strategy to come closer to the community and can improve their performance (Balabanis et al., 1997; Walsh, 1994). Therefore this paper aims to assess the application of market orientation in the affairs of PSO as a prelude to strategy formulation and to examine the impact of market orientation on the performance of PSO.

An overview of Public Sector of Pakistan:

Pakistan with an annual growth rate of 2.05% in population is the world’s sixth most populous country (Government of Pakistan, 2011). The total employed force in Pakistan is 54.92 million while, because of struggling economy, the unemployed labor force is estimated to be 2.39 million (Labor Force Survey, 2011, CIA, 2011). By the size of labor force Pakistan is the 10th largest country in the world (Government of Pakistan; 2011; CIA, 2011; Labor Force Survey, 2011). The economy of Pakistan is agricultural and almost 50 percent of employed labor is working in the agricultural sector (Khilji, 2001). In Pakistan the PSO in general enjoy the autonomy of finance while also enjoying monopoly positions in major many markets in the form of state funding and collection of taxes (Franco-Rodriguez et al., 1998). Till the early 1990s, PSO in Pakistan enjoyed the support of state and faced very little competition from private sector (Khilji, 2001). But later on the reform movement in PSO and growing fiscal deficit caused by among other things the losses suffice by the PSO which were subsidized largely by the Government during the 90s,
started the process of denationalization and as a result major industries and monopolies were privatized (Easterly et al., 1994). Because of their monopoly position and state protection PSO in general had provided poor services to public and created mistrust among people regarding these entities.

The start of new millennium witnessed the improvement in PSO operations as the threat of privatization and extensive competition from private sector forced the PSO to come up with reform measures to build trust and generate reputation for state as well as reduce their own deficit (Nishtar, 2009). It is a very common perception among people of Pakistan that PSO are managed by people who are incapable, corrupt, and work for their own self interest (Schiavo-Campo, 1996). The people in Pakistan think that 2.4 million civil servants (one for 67 people of Pakistan) have no respect for the needs and desires of common people (Shah, 2002). It is this underlying cause of mistrust among people of Pakistan that further favored denationalization of PSO (Watson & Khan, 2005). The PSO are meant for survival and stability of government by helping the government to maintain good governance (Haltiwanger & Singh, 1999). It is therefore in the best interest of state and PSO that they should come up with effective and efficient mode of services and products for the people (Corbo & Schmidt-Hebbel, 1991; Looney, 1995). Hence in other words it has been strongly recommended for these organizations in Pakistan that they should come up with a market oriented approach and serve the public according to their needs (Mcgillivray, 2009). The same view is provided by International Crisis Group (2010) to Government of Pakistan that to revive the performance of PSO in Pakistan government should take measures to serve the people according to their needs. By doing so PSO would build trust for themselves among people of country and also help to stabilize the economy.

In order to make PSO to be more responsive and efficient or in other words to be more market oriented the Government of Pakistan introduced various PSDP (Public Sector Development Programmes in the years 1955; 1960; 1965; 1988;1997;2001 and 2005 to further improve the performance of PSO (Commission, 2008). With the underlying assumption of all these programmes being to improve the performance of PSO in Pakistan and as result build trust amongst the people.

**Importance of study:**

The study is significant in the current times when PSO in general require focus on improving their performance and to provide better and efficient services to people (citizens). A case in point is the report presented to parliamentary committee in the year 2010 where it is reported that the losses of PIA (PSO) have crossed Rs. 92 billion. Further a recent report by former president of SBP claims the overall losses of PSO are crossing billion of rupees. On the other hand among many other strategic frameworks, market orientation and strategic planning are considered to be two very significant contributors to organizational performance.

**Research Questions:**

The study has identified following research questions,

1- Do the PSO involve themselves in Market orientation activities?

2- Is there a relationship between market orientation along with its sub constructs and performance of PSO?
II. Literature Review

Market Orientation:

The period between 1950s and 1960s witnessed the use of increase in marketing activities in all types and domains of businesses i.e. Profit, Non Profit Private and Public sector and to date marketing as a core activity and a dominant perspective for improving the performance is used by most of the organizations (Esteban et al., 2002). The time period of 1960s showed marketing as priority function of organizations, by focusing on their clients (Borch, 1957; Levit, 1960). In the application of the concept of market orientation and its philosophical precedent of marketing concept, Kotler (1972) suggested that the marketing concept and market orientation are both for profit and nonprofit organizations. Similar opinion is presented by Lafferty & Hult (2001) who had broadened the scope of market orientation to a global domain across various forms and cultures of the organizations and it included both profit and nonprofit organizations in the public and private domains of business.

To enhance the output of organizations in the long term, organizations needed to integrate all their core activities with core activities of marketing (Felton, 1959) that focused marketing concept. Marketing concept is therefore, the philosophy of an organization which is aimed at orientation towards customers, the financial outputs and rationalization of importance of marketing throughout the organization (Mcnamara, 1972). The operationalization of market concept within the organizations is termed as market orientation (Esteban et al., 2002; Kohli & Jaworski, 1990; Narver & Slater, 1990).

The operationalization of market orientation has been advanced by a few seminal works by different research teams. The seminal work of Kohli and Jaworski (1993); Narver and Slater (1990); Deshpande, Farley and Webster (1993) and Day (1994) operationalized the marketing concept of organization into measurable construct known as market orientation. The various definitions of market orientation from view point of Kohli & Jaworski (1993); Narver and Slater (1990); Deshpande, Farley & Webster (1993) & Day (1994) are more or less same with a prime focus on understanding customer satisfaction by fulfilling their existing and future needs (Day, 1994; Deshpandé et al., 1993; Narver & Slater, 1990).

Market orientation is an information generation process about the customers which is affected by internal and external factors of the organization (Jaworski & Kohli, 1996). To deal with the external and internal factors in order to satisfy customers and as a result improve performance market orientation is a set of activities and behaviors which help in dissemination of information and responsiveness to that information (Day, 1994; Deshpandé et al., 1993; Kohli & Jaworski, 1990). Thus market orientation further leads to customer satisfaction and also employee commitment to the organization (Kohli et al., 1993; Narver et al., 1991). Further in order to be market oriented organization need to enhance its top down and bottom up change efforts (Kohli & Jaworski, 1990; Narver et al., 1991). Hence market orientation as an organization’s state of mind and commitment from employees can satisfy its customers more effectively than those organizations that are not market oriented (Harris, 2001; Rodriguez Cano et al., 2004; Selnes Bernard J, 1996). Further market orientation is not only for large firms it is equally applicable to small firms, NGOs, and Public sector organizations (Andreasen, 1985; Coddington & Moore, 1987; Lafferty & Hult, 2001; Pelham & Wilson, 1995).
Market Orientation and PSO:

According to Chester (1953) the PSO are of three major types namely, Regulatory bodies (central cores of GOVT), Public Services (Service to citizens), State Owned Enterprises (SOEs)

are autonomous bodies and are meant for generating revenues for State. The SOE’s or PSO particularly are meant to regulate the whole market as well as to generate the revenues for state (Boin et al., 2010; Chester, 1953). Further Public Sector Organizations (PSO) receive extensive amount of finance from the state; this finance is considered as an investment from the state to achieve two purposes. First PSO have to stabilize the economy and second to face head on competition from private sector (Frumkin & Galaskiewicz, 2004; Stark, 2011; Wettenhall, 2003). Further according to Luoma (2008) the profit making organizations of public sector are meant to create dignity of state by fulfilling the demands of people in an efficient manner and by making them unique as compared to their private counter parts by fulfilling the desires of customers (Public).

It is agreed by the researchers and practitioners that to work effectively and perform better in competition with the private sector, PSO have to come up with more proactive stance to deal with the public interests and fulfill the desires of their political masters (Beetham, 1992; Boyne & Walker, 2004). According to Kohli & Jaworski (1993) market orientation is a set of activities that help an organization to become proactive in dealing with the desires and wants of its customers. Further market orientation helps an organization to develop its strategy with a prime focus on customers’ existing and future needs (Deshpandé et al., 1993; Kohli et al., 1993; Narver et al., 2004). In this view market orientation as a set of activities can help PSO to generate information about their customers, disseminate that information, and come up with responsiveness to the information. Further it is believed that PSO are controlled by political system and would be affected by the government policies (Boyne, 2002; Buurma, 2001), this leads to more pressure on operation and management of PSO (Kickert, 1997; Luoma, 2008). To deal with external pressure besides customers, PSO needs employee commitment so that two important stakeholders of PSO i.e. State (political system) and Public (Customers) can be satisfied (Boyne, 2002; Boyne & Walker, 2004; Buurma, 2001; Walsh, 1994). The same view is opined by Cervera et.al (2000) that PSO when become market oriented enjoys the commitment of employee and serves the customers more effectively (Shoham et al., 2006). Hence market orientation can lead to better performance of PSO (Cervera et al., 2001; Duque-Zuluaga & Schneider, 2006; Kowalik, 2011).

Need for Market Orientation in the Context of PSO:

The other important aspect besides political motives is the environmental uncertainty that is more important to PSO than private sector (Boin et al., 2010; Boyne, 2002; Frumkin & Galaskiewicz, 2004; Stark, 2011). Bureaucratic form of governance in PSO tends to turn a deaf ear to customers and the public. This is becoming more intractable for the PSO as the environmental uncertainty is forcing the PSO of the whole world to become more responsive to the environment (Boin et al., 2010; Boyne, 2002). So the bureaucratic authority and deaf ear to customers or public from PSO is no more applicable, it is the environmental pressure and uncertainty that forced PSO of whole world to become more responsive to the environment.

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1 Most recently State Owned Enterprises (SOE) are also called Public Sector Organizations (PSO) (Boin et al., 2010).
(Korunka et al., 2007). According to Manning (2001) the New Public Management (NPM) which is aimed at improving management of PSO helps to make them more responsive. It is the environmental pressure which triggered the NPM movement and under NPM reforms a number of PSO which are not responsive to environmental shifts and ultimately to their customers, have been privatized (Manning, 2001; McCourt, 2002; Yamamoto, 2003). To save their repute and operations it is in the best interest of PSO that they should become more responsive to environment and consequently to their customers (Batley, 1999). The market orientation is an organizational philosophy which is then translated in activities of an organization help organization to become more responsive to environment and as a result help the organization to serve their customers well (Zuluaga & Schneider, 2006). Thus it is argued that when PSO develop their organizational philosophy with underlying assumption of becoming responsive to environment and serving the customers (Kohli & Jaworski, 1990; Narver et al., 2004) they can improve their operations and as a result performance (Zuluaga & Schneider, 2006; Wanna et al., 1992; Wood & Bhuian, 1993). Given the facts mentioned above it can be proposed that in general, in the present times PSO are facing two forces that threaten their survival i.e. competitive threats from private sector and pressure from diverse political and social stakeholders. In order to sustain themselves and gain competitive advantage PSO need to become more market orientated (Bernard, 1996; Shoham et al., 2006; Vigoda, 2000) by providing better quality of services and products and would result in satisfaction of customers and various stakeholders (Caruana et al., 1997; Cervera et al., 2001; Zuluaga & Schneider, 2006; Kowalik, 2011).

Market Orientation and Performance of PSO:

The debate of market orientation and its linkage with performance is ongoing, as various scholars are in favor of further empirical evidence of this linkage (Deshpandé & Farley, 1998; Jaworski & Kohli, 1996; Matsuno et al., 2000; Slater & Narver, 1998, 2000). Nevertheless it is of little doubt that market orientation is a substantial contributor to excellent business performance (Narver & Slater, 1990; Cano et al., 2004). It is because of this that market orientation is considered to be at the heart of business strategy and is taken as a tool to attain competitive advantage (Slater & Narver, 1998).

In a meta-analysis of relationship between market orientation and business performance (Cano et al., 2004) & (Kirca et al., 2005) reported that there exists a strong relationship between market orientation and organizational performance. Further it is argued that market orientation is more strongly related to organizational performance in the context of nonprofit sector and PSO (Kirca et al., 2005; Cano et al., 2004; Wood & Bhuian, 1993).

From the above literature review on market orientation it is evident that in PSO market orientation as a behavior of the organization is a determinant of their performance especially market orientation creates sustainability in the sustainability in the satisfaction of stakeholders (Andreassen, 1994). From this logical link we are also adopting behavioral approach of market orientation coined by Kohli & Jaworski (1990). From the above the literature review following hypothesis has been postulated,

**H01:** All PSO rely on the same level of information generation as part of their market orientation activities
**H02**: All PSO involve themselves with information dissemination across the various department of the organization

**H03**: All PSO respond to the market information with the same level of capability

**H04**: Market orientation has no affect or role to play in the performance of PSO

### III. Methodology

In understanding the role of market orientation in the PSO operation the research is explanatory and causal comparative. The PSO can operationalize this business philosophy through i.e. market orientation a series of three activities i.e. intelligence generation, intelligence dissemination and responsiveness of the organization. So this study ascertains the usage of three activities in PSO and further assesses their relationship with the performance.

**Sample:**

The population of interest for the study is PSO which are profit oriented. Because of diversity and issues of accessibility to PSO paper has used non probability sampling. Further in this study, the paper has used convenient sampling to select the primary sample unit. The usage of convenient sampling is also supported by researcher in the past that have used convenient sampling in PSO because of their larger size and diversity of employees (Deshpandé & Farley, 2004; Brown & Oplatka, 2006; Norris, 2006; Randall & Gibson, 1990; Wong et al., 2000). The sample size for this is 360 which are higher than recommended level to undertake further data analysis covering all the assumptions of the various statistical techniques (Hair et. al., 1998). The unit of analysis is the respondents who are the Public servants from whom the paper has collected data are of minimum BPS.17 to BPS 22. According to 1973 constitution of Pakistan the Public servant of minimum grade 17 is involved in policy making and is eligible to attest any document (Mahmood & Shaukat, 1973). The characteristics of the respondents (i.e. Educational level, Experience, Training etc.) are reported in the Table 1. For selection of sample elements paper has used the snowballing method to collect data. Snowballing is most appropriate when it is difficult to be in contact with the desired respondents. Therefore using one contact in the targeted PSO the respondent is snowballed to many (Brady et al.; Girard, 2005; Harrison & Shaw, 2004). The survey instrument has been sent to single contact in each selected PSO through self addressed paid postage envelope. In the present study each snowballed contact has been provided with 20 questionnaires. Keeping in view the sensitivity of PSO, the public servants are assured about the confidentiality and privacy of their information. A covering letter requesting the time of respondent and a letter from the university confirming the purpose of survey is also attached with the letter. The data collection process has taken approximately two months along with the necessary follow ups to encourage response rate. At the end of survey we received 166 useable questionnaires resulting in overall response rate of almost 48% which is acceptable (Baruch, 1999; Forza, 2002). The researchers in the previous studies on public sector were of the view that in the context of PSO a response rate of almost 30 percent or above is considered quite good (Fikree et al., 2005; Lechner et al., 2004; Tuncalp, 1993).
Table 1. Descriptive Statistics of Respondents

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Basic Pay Scale</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>BPS17</td>
<td>45</td>
<td>27.1</td>
</tr>
<tr>
<td>2</td>
<td>BPS18</td>
<td>51</td>
<td>30.7</td>
</tr>
<tr>
<td>3</td>
<td>BPS19</td>
<td>36</td>
<td>21.7</td>
</tr>
<tr>
<td>4</td>
<td>BPS20</td>
<td>30</td>
<td>18.1</td>
</tr>
<tr>
<td>5</td>
<td>BPS21</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>6</td>
<td>BPS22</td>
<td>2</td>
<td>1.2</td>
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</table>

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1-5 years</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>6-10 years</td>
<td>31</td>
</tr>
<tr>
<td>3</td>
<td>11-15 years</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>Above 15 years</td>
<td>81</td>
</tr>
<tr>
<td>5</td>
<td>Total</td>
<td>166</td>
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<table>
<thead>
<tr>
<th>Educational specialization before joining civil services</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Business Education</td>
<td>44</td>
</tr>
<tr>
<td>2</td>
<td>Economics</td>
<td>29</td>
</tr>
<tr>
<td>3</td>
<td>Engineering</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>Accounting</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>Arts</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>others specify</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>Total</td>
<td>166</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Joined civil services after</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>1</td>
<td>Graduation</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Post Graduation</td>
<td>146</td>
</tr>
<tr>
<td>3</td>
<td>Total</td>
<td>166</td>
</tr>
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</table>

<table>
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<tr>
<th>Service training</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Modern Managerial Practices</td>
<td>149</td>
</tr>
<tr>
<td>2</td>
<td>Managing with popular management techniques</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Total</td>
<td>166</td>
</tr>
</tbody>
</table>

Measurement:

The Data for the study is collected using survey questionnaire instrument with two primary sections; specifically, (a) Market Orientation and (b) Performance. The market orientation questionnaire is adopted from an existing instrument developed by Kohli and Jaworski (1993). The performance of PSO in this study is measured through performance measures as used in the profit oriented private sector. The logic behind using performance measures of private sector for PSO is the profit oriented nature of our targeted PSO further the same performance measures of private sector has been used in various studies of PSO (Caruana
et al., 1999; Propper & Wilson, 2003). In this view we used six performance measures i.e. Market Share, Growth in sales, Profitability, ROI, Customer Satisfaction, and Overall Business Performance. The reliability of the scale is reported in Table 2.

### Table 2. Reliability Analysis of the Scale

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
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<tbody>
<tr>
<td>1</td>
<td>Market Orientation</td>
<td>.851</td>
</tr>
<tr>
<td>2</td>
<td>Intelligence Generation(IG)</td>
<td>.821</td>
</tr>
<tr>
<td>3</td>
<td>Intelligence Dissemination(ID)</td>
<td>.819</td>
</tr>
<tr>
<td>4</td>
<td>Intelligence Responsiveness(IR)</td>
<td>.713</td>
</tr>
<tr>
<td>5</td>
<td>Performance Measures</td>
<td>.831</td>
</tr>
</tbody>
</table>

### IV. Results

**Market Orientation and Performance of PSO:**

Market orientation is considered as significant contributor to organizational performance (Deshpandé & Farley, 2004; Kohli & Jaworski, 1990; Matsuno et al., 2000; Narver & Slater, 1990). Similarly it is also agreed by researchers that relationship between the two can be perceived in both the private and public sector organizations (Caruana et al., 1997; Caruana et al., 1998; Caruana et al., 1999; Shoham et al., 2006; Wood & Bhuian, 1993). According to (Hair et al., 1998) SEM (structural equation modelling) is a multivariate technique that helps the researcher analyze the relationship between two constructs. In this study we have used market orientation (MO) and three underlying activities of market orientation (IG, ID and IR) as a set of independent variables and performance of PSO as a set of dependent variables. Performance has been operationalized using two forms one the subjective method as used by (Balabanis et al., 1997; Caruana et al., 1997; Wood & Bhuian, 1993) and the objective measures (Dawes, 1999; Fritzen, 2007). The results of SEM are given below in the figure 1 below along with the ratios of various fit indices measures.

### Table 3. Main effects of Market Orientation on Performance of PSO

**Regression Weights: (Group number 1 - Default model)**

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
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</thead>
<tbody>
<tr>
<td>C3 &lt;--- Generation1</td>
<td>1.004</td>
<td>.108</td>
<td>9.274</td>
<td>***</td>
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</tr>
<tr>
<td>C5 &lt;--- Generation1</td>
<td>1.072</td>
<td>.115</td>
<td>9.291</td>
<td>***</td>
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</tr>
<tr>
<td>Business Performance &lt;--- Generation1</td>
<td>.422</td>
<td>.291</td>
<td>1.449</td>
<td>.147</td>
<td></td>
</tr>
<tr>
<td>Business Performance &lt;--- Dissemination1</td>
<td>.679</td>
<td>.411</td>
<td>1.651</td>
<td>.099</td>
<td></td>
</tr>
<tr>
<td>Business Performance &lt;--- Responsiveness1</td>
<td>-.223</td>
<td>.437</td>
<td>-.510</td>
<td>.610</td>
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</tr>
<tr>
<td>C6 &lt;--- Generation1</td>
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</tr>
<tr>
<td>C14 &lt;--- Dissemination1</td>
<td>1.176</td>
<td>.165</td>
<td>7.105</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>C15 &lt;--- Dissemination1</td>
<td>1.000</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### Standardized Regression Weights: (Group number 1 - Default model)

<table>
<thead>
<tr>
<th>Label</th>
<th>Estimate</th>
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<th>C.R.</th>
<th>P</th>
<th>Label</th>
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<tbody>
<tr>
<td>C20 &lt;--- Responsiveness1</td>
<td>.443</td>
<td>.110</td>
<td>4.028***</td>
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<tr>
<td>C19 &lt;--- Responsiveness1</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>C13 &lt;--- Dissemination1</td>
<td>.948</td>
<td>.185</td>
<td>5.124***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C22 &lt;--- Responsiveness1</td>
<td>.807</td>
<td>.128</td>
<td>6.304***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C23 &lt;--- Responsiveness1</td>
<td>1.029</td>
<td>.131</td>
<td>7.844***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C25 &lt;--- Responsiveness1</td>
<td>.975</td>
<td>.133</td>
<td>7.354***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C26 &lt;--- Responsiveness1</td>
<td>.802</td>
<td>.124</td>
<td>6.480***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C10 &lt;--- Dissemination1</td>
<td>.936</td>
<td>.180</td>
<td>5.213***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C12 &lt;--- Dissemination1</td>
<td>1.054</td>
<td>.201</td>
<td>5.240***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C11 &lt;--- Dissemination1</td>
<td>1.040</td>
<td>.188</td>
<td>5.518***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Structural Equation Model:**

In order to test the hypothesis 1,2,3,4 the study used AMOS software by applying Structural Equation Modelling (SEM). SEM is selected for its explanatory power of structural paths and it is one of most
preferred choice for researchers in social sciences (Hooper et al., 2008). Based on its power to not only explain but also guide the relationships in true sense AMOS has been used in various studies for establishing the link between market orientation and its underlying activities and performance of the firm (Bernard et al., 2011; Castro et al., 2005; Gold et al., 2001; Ho, 2008; Jiménez-Jiménez & Sanz-Valle, 2010).

Results of model fitness ratios are presented in Table 4. Fitness ratios from both “Absolute Fit Indices” and “Incremental Fit Indices” are reported in the Table 4. These ratios include relative chi-square (CMIN/df), goodness of fit index (GFI), comparative fit index (CFI) normed fit index (NFI) and root mean square of error approximation (RMSEA). There is lack of consensus among researchers about adequate number of model fit indices and their cut off point (Hooper et al., 2008) however, most widely cited ratios include relative chi-square, GFI, CFI, NFI and RMSEA. Similar to this line of thought the study used the relative chi-square, GFI, CFI, NFI and RMSEA.

Chi-square is first fitness ratio for SEM. Value of chi-square is 126.305; significant with p-value of 0.001, hence indicating adequate model fitness. Relative Chi-square (CMIN/df) is second measure for model fitness. Cut off point for this ratio is 5, i.e. any value below 5 indicates good fit of proposed model (Hult & Ketchen, 2001; Lado, Maydeu-Olivares, & Rivera, 1998) on the same grounds it can be suggested that model is good fit as value of CMIN/df. is below 5 (1.373) in this case.

Table 4. Model Fitness Ratios

<table>
<thead>
<tr>
<th>Model</th>
<th>Incremental Fit Indices</th>
<th>Absolute Fit Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NFI</td>
<td>CFI</td>
</tr>
<tr>
<td>SEM</td>
<td>0.879</td>
<td>0.963</td>
</tr>
</tbody>
</table>

Next in line is GFI, with measure of 0.918. This ratio describes statistical measure for fitness of proposed model by summarizing observed values. Difference exists in acceptance level for GFI ratio. In general as the value gets closer to 1, it is considered as good model fitness ratio. Cut off point as suggest by is 0.90 that is a value of more than 0.90 represents good model fit. Since calculated value lies below the cut off limit, hence model fitness for SEM A is good. Last fitness measure for model is Root Mean Square Error of Approximation (RMSEA). For acceptance the value of this ratio should be less than 0.1, and in this study vale of RMESA is .048 and hence we can propose that our proposed model enjoys a good fit.

Second set of fitness ratio are NFI and CFI. Acceptable limit of these ratios is 0.90. Calculations of model suggest that both incremental fit indices meet the minimum criteria and hence model fitness for structural equation model is acceptable.

SEM Model sketches the hypothesized relationships in figure 1, showing all structural paths. This figure reports all structural paths and does not differentiate for significance or insignificance of hypothesis. Regression weights along with significance level are also reported. Findings from model fitness ratios suggest that GFI, CFI and relative chi-square meet acceptance criteria, whereas remaining fitness ratios are slightly inappropriate. Ratios of NFI and RMSEA are not deviated from acceptable values and hence model fitness is satisfactory and good.

The figure 1 below demonstrates the proposed structural equation model. Model fit summary indicated
that the proposed model is fit as its CMIN/DF value is 1.373 that shows insignificant results at 1% level of significance. Moreover, the values of RMR, GFI, CFI and RMSEA are also showing favorable scores that indicate that the model is fit. Above figure is showing standardize results. It was proposed that information generation, dissemination and responsiveness are three main contributors of business performances. To measure latent variable of information generation three observed variables of C3, C5 and C6 are selected. All the indicators are showing reasonable high factor loadings (0.75). Similarly, six items are used to measure each latent variable of information dissemination and responsiveness. Their results also revealed reasonable factor loading statistics.

It can be view that the model is demonstrating positive standard coefficients for information generation and dissemination with respect to business performances while in case of responsiveness beta coefficient is negative. Beta coefficient for information generation is 0.43 that shows that high information generation leads to high business performance. Similarly, high information dissemination is also contributing positively to the business performance as it beta coefficient is 0.46. However, in case of responsiveness beta coefficient is -0.18 that is showing negative relation between performance and responsiveness. Nonetheless, results for information generation and responsiveness are insignificant and one cannot conclude confidently on these results. However, result for information dissemination is significant at 10% level of significance and it can be concluded that high information dissemination leads to high business performances.

![Figure 1. SEM of market orientation and Business Performance](image-url)
Cluster Analysis of Market Orientation:

The aim of study was to understand the application of market orientation as well as analyze the relationship of market orientation with the performance of the PSO. In order to determine which PSO are more market oriented with an implication for performance it is considered to run cluster analysis to group organization together. The logic for using cluster analysis is that as we have a sample of diversified PSO while some are from monopolistic background some are in direct competition with the private sector. In this context it seems logical that these groups will show different levels of market orientation in their operations. Thus we used cluster analysis to group organizations with similar market orientated capabilities into homogenous groups. Further from theory of market orientation it is assumed that the cluster or group from our sample with high market orientation will logically perform better. In order to examine these implicit assumptions we performed cluster analysis (see Hair et.al 1998).

In the cluster analysis there is no prior knowledge about which elements belong to which clusters. Because we usually don’t know the number of groups or clusters that will emerge in our sample and because we want an optimum solution, a two-stage sequence of analysis is suggested (Hair et al., 1998).

First we carry out a hierarchical cluster analysis using Ward’s method applying squared Euclidean Distance as the distance or similarity measure. This helps to determine the seed point i.e. the optimum number of clusters we should work with. Second stage is to rerun the cluster analysis using K-means cluster with our selected number of clusters, which enables us to allocate every case in our sample to a particular cluster. This is the major statistical method for finding relatively homogeneous clusters of cases based on measured characteristics. It starts with each case as a separate cluster, i.e. there are as many clusters as cases, and then combines the clusters sequentially, reducing the number of clusters at each step until only one cluster is left. The clustering method uses the dissimilarities or distances between objects when forming the clusters.

For the hierarchical cluster analysis (HCA) we used summated market orientation score and three sub constructs of market orientation i.e. IG, ID and IR for clustering the sample. From the HCA we have a seed point of 4 clusters to combine the respondents from our sample into homogenous group (Table 4). According to Hair et.al (1998) in order to reduce the subjectivity of researchers involved in cluster analysis it is beneficial to get seed point for clustering from HCA. Further the agglomeration schedule from HCA is helpful in identifying which cluster solution is more logical by defining the change in coefficients among various possible cluster solutions.

Table 5. Reformed agglomeration Table

<table>
<thead>
<tr>
<th>No. of Clusters</th>
<th>Agglomeration last Step</th>
<th>Coefficient this step</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1.452</td>
<td>.993</td>
<td>0.459</td>
</tr>
<tr>
<td>3</td>
<td>.993</td>
<td>.377</td>
<td>0.616</td>
</tr>
<tr>
<td>4</td>
<td>.377</td>
<td>.219</td>
<td>0.158</td>
</tr>
<tr>
<td>5</td>
<td>.219</td>
<td>.107</td>
<td>0.112</td>
</tr>
<tr>
<td>6</td>
<td>.107</td>
<td>.094</td>
<td>0.013</td>
</tr>
</tbody>
</table>
Therefore the proposed solutions are 4,3 and 2. As discussed previously after getting the seed point from HCA we can then easily cluster our sample and the paper has clustered the sample into 4, 3 and 2 cluster solutions. After examining the three separate clusters and division of organizations in each clusters we opted for four cluster solutions as the best representation of our sample. The subjective selection of this choice is getting an objective support from the figure 1 where four firms i.e. Logistic firms, Road safety and maintenance firms, Bridge contractors and National level financial institutions are at a higher level of market orientation respectively (see figure 1). The same logic is apparent in our four solution cluster analysis and in a same cluster three firms (i.e. Road safety and maintenance firms, Bridge contractors and National Level financial institutions) are not only more market oriented but also has higher level of performance. These clusters are then cross tabbed against market orientation to analyze which cluster is more market orientated. The result is reported in figure 2.

![Figure 2. Cluster Analysis](image.png)

From figure 2 it is suggested that cluster no 2 is more market oriented than the rest. In order to test the assumption that a high market oriented cluster is also perform well, we again cross tabbed the clusters with performance, and results are reported in figure 3. From figure 3 it is quite evident that cluster no 2 is also the highest performer among the 4 clusters. So we can find support to our assertion that more market oriented firm (PSO) would perform better.

<p>| | | | |</p>
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<tbody>
<tr>
<td>7</td>
<td>.094</td>
<td>.082</td>
<td>0.012</td>
</tr>
<tr>
<td>8</td>
<td>.082</td>
<td>.059</td>
<td>0.023</td>
</tr>
</tbody>
</table>
As study has also raised the question that among the three activites of market orientation in the sample of PSO in this study which activity is more meaningful than the rest. We used cross tabs to examine which activity is more dominat among clusters of our sample. The results are reported in figure 4. From figure 5 it can be claimed that the three activiites of market orientation has a mixed results. For example cluster one in which is focusing only on intelligence dissemination (figure 4) while cluster 2 and three are almost at the same level in intelligence gnerationa activites while intelligence resposne is more popular among the firms in cluster 3 and partially in cluster 2.

Figure 3. Relationship of Clusters with Performance

Figure 4. Three Activites of MO
Finally we analyze the cases that are grouped in cluster 2 so that we can examine which kind of firms are more market orientated the results are reported in figure 5. From figure 5 it is quite evident that cluster 2 is comprised of road safety and maintenance firms, bridge contractors and national level financial institutions. It means in our sample of PSO these three firms are high performer and also highly market oriented.

![Figure 5. Firms within the Clusters](image)

V. Methodology

This study addresses the problem that growing awareness among customers and increase in strength of private sector is posing a serious challenge to PSO for their survival. This study further investigates market orientation as a potential contributor to firm performance in the context of PSO and more specifically in the developing economies and contributes to the academic literature on market orientation.

It is agreed by both the scholars and practitioner that market orientation is a significant contributor to a business performance (Balabanis et al., 1997; Deshpandé & Farley, 1998, 2004; Deshpandé et al., 1993; Kohli & Jaworski, 1990; Kohli et al., 1993; Matsuno et al., 2000, 2005; Narver & Slater, 1990; Narver et al., 1991; Narver et al., 2004). Till to date the debate is continuing as the results are equivocal. In some studies market orientation results in better performance while in other studies this assumed relationship is weak (Menguc & Auh, 2006; Narver et al., 1991). Similarly it is also debatable whether market orientation as opined by various scholars is required in its true sense in both private and public sector domains of business or not (Varadarajan & Jayachandran, 1999; Wood & Bhuian, 1993).

The market orientation is reflected in the market driven activities of the firms, including intelligence generation, dissemination, and responsiveness. It is the significant operational activity that can leverage itself as the dynamic capability of the PSO and its application in formulating strategic plans is the core theoretical foundation for this study because scholars have theorized that market orientation is firm resource and it can be used to formulate strategic plans that are more fruitful (Perreault, Cannon & Mc Carthy, 2007; Kohli & Jaworski, 1990). The findings of this study indicate a positive and statistically significant
relationship between market orientation and PSO performance. This positive relationship suggests market orientation is a potential success factor for PSO performance paradigm. The implication of this finding is that a firm’s performance increases with increasing levels of market orientation (Deshpandé & Farley, 1998; Jaworski & Kohli, 1996; Matsuno et al., 2000). The performance construct used in this study, included market share; growth in sales; profitability; ROI; customer satisfaction and overall business performance. Market share driven by expanding work with current customers and performing work for new customers provides the firm with additional experience, skills, and resources (Rodriguez Cano et al., 2004) that can be leveraged to further grow the revenue base of the firm in the form of growth in sales (Kirca et al., 2005). Profitability can provide PSO with more internal working capital to invest in process improvement, tools, management systems, infrastructure, employee training, and research and development (Kirca et al., 2005; Cano et al., 2004; Wood & Bhuian, 1993). This will further ensure more return on investment by satisfying the customers more proactively and ultimately will result in improvement of overall business performance. These investments can help the PSO develop competitive advantages in an open market where private sector is posing serious challenges to the sustainability of PSO (Andreassen, 1994).

The results of present study also indicate that one of the three constructs of market orientation, intelligence generation is significant predictors of a PSO performance. The intelligence dissemination and responsiveness constructs are not as significant predictor. The results of the market orientation study of PSO conducted by Kara, Spillan, and DeShields (2005) indicated that the relationship between each of the three constructs on market orientation (information generation, information dissemination, and responsiveness to market intelligence) have mixed results where information generation is more leveraged to PSO performance. The possible interpretation of these findings can be PSO are highly bureaucratic and hierarchical organizations, it is likely that the person, or small group of people authorized from top bureaucrats, who support and monitor the intelligence generation is also the person, or people, involved in planning and implementing a response to the intelligence. Processes and activities related to intelligence dissemination may not be as critical in PSO because of the tighter linkage between the people who generate and respond to market intelligence. There is support in the literature for the insignificance of the intelligence dissemination component of market orientation in PSO. Based on their research on market orientation in small PSO, Verhees and Meulenberg (2004) asserted that the dissemination of market intelligence is not a relevant issue in PSO where bureaucrats or public servants at their own decide what to disseminate or not.

One potential explanation of the existence and non-existence of a predictive relationship of the intelligence dissemination construct to PSO performance between the two studies (the Kara, Spillan, and DeShields study and the current study) may be related to the organizational culture of PSO in term of their bureaucratic and hierarchal stance of the PSO. Where conditions like these prevail, it will be difficult if not impossible to implement any tool of improvement in performance. For a PSO of bureaucratic culture it seems an impediment to implement the activities of market orientation as people there will feel it like a threat to destroy their own reputation. All the PSO literature is ambitious on improving the performance of PSO but in the developing countries it seems difficult to alter the laden flow of bureaucratic culture that is creating problems to reap a market orientated approach. The attention can be given to change this culture and managers can be acquainted to deal PSO as a competitive body within the market.
In the Kara, Spillan, and DeShields (2005) study, the experience and mindset of public servants towards market orientation is a more predictive measure of market orientation constructs. The amount of managerial experience and incumbency in the position may have facilitated the development and maturity of internal activities and processes related to intelligence dissemination. The other potential explanation may be related to the organizational size. Collection of this type of data is included in recommendations for future research. Since this study provides empirical evidence of a positive relationship between market orientation and PSO performance, and given good performance is an inherent and fundamental goal of the firm, all firms in PSO should strive to market orientation in order to gain and sustain competitive advantage. Narver and Slater (1990) proposed in their seminal research on the effect of a market orientation on firm performance that a market-oriented business continuously seeks sources of sustainable competitive advantage. Narver and Slater built on Porter’s (1985) earlier work which suggests that a company achieves higher than average market performance by creating superior value for its customers. The findings of this research suggest that this relationship is not unequivocal as the various studies cited here are done in the context of private sector organizations (Narver et al., 2004; Shoham et al., 2005; Sinet et al., 2005) and the PSO of western context (Caruana et al., 1997; Caruana et al., 1998; Cervera et al., 2001) while ignoring the developing economic context and in particular PSO. Hence a gap is there in the literature in terms of the role of market orientation has to play in PSO in the developing economies and particularly in the South Asian context. The empirical support of present study is no doubt significant in filling this gap in the context of PSO of developing economies.

A potentially relevant implication for the PSO scholars is to consider the mechanism of changing the bureaucratic approach in the operations of PSO. The other implication of present study to the market orientation scholars is that activities of market orientation that are applicable in the context of private sector domain are not equally applicable in the public arena.

From the literature it is proposed that in the context of PSO the level of market orientation will vary as PSO have different organizational context some are monopolistic while some are in head on competition with the private sector. In this backdrop it seems logical that various PSO will have different level of market orientation. In order to test this assertion the paper used the cluster analysis (figure 1, 2, 3, 4, 5). The results of cluster analysis suggest that in Pakistan PSO tend to show different level of three activities of market orientation. They don’t follow the ideal activities of market orientation as suggested by Kohli & Jaworski (1990). Here this classification of PSO on the basis of market orientation is strengthening the claim of (Cervera et al., 2001; Walsh, 1994) that in PSO market orientation doesn’t comprises the same activities as it is in private sector organizations. The resultant clusters suggest that respondents of the PSO are not exhibiting homogenous activities of the market orientation. Among the three activities IG is the most popular among the four clusters of our sample. Further in our sample the second cluster which is comprised of national level financial institutions, bridge contractors and road safety and maintenance firms are highly market orientated similarly these are also high performer among the rest of firms ( see Fig. 2,3). The interesting finding in this analysis is that cluster 2 (Highest MO) is also comparatively highest in IG activity of the Market orientation. The same cluster is also the highest performer. A contribution from paper to the market orientation literature is this finding in the context of PSO. We can claim that in PSO the firms which
are scoring high on IG are highly market oriented and similarly high performer than the rest of similar PSO.

VI. Conclusion:
1- Market orientation is there in PSO in the same conceptualization as proposed by Kohli & Jaworski (1990)
2- The three activities of market orientation as opined by Kohli & Jaworski (1993) are somewhat different in the context of PSO
3- In the PSO market orientation is more inclined towards the customer orientation
4- The relationship of market orientation with performance of PSO is not much significant
5- Market orientation in the PSO doesn’t require top management support as top management is not concerned with the performance
6- The findings are reinforcing the idea that market orientation is not robust it needs to be replicated in all types of the organizations

VII. Limitations of Study:
1- The major limitation of this study is, because of time constraint it is not possible to include non profit and regulatory organizations of PSO
2- Till to date performance measures of PSO have not been defined therefore the paper has to rely on secondary data available and performance measures used in private sector
3- The generalization of findings is somewhat doubtful as study has used the method of convenient sampling
4- The credibility of the response cannot be assured as it is possible that the survey instrument used in the study is not understandable in the context of PSO
5- The study is limited to the extent that we have to use snowballing for survey response we are not sure about the biasness of response which our snowballed person has used

References
The Journal of Marketing, 54(2), 69-82.


21(1), 3-22.


Slater, & Olson. (2001). Marketing's contribution to the implementation of business strategy: an empirical


