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Market orientation in a GLC: evidence from Malaysia

Abstract

The aim of this paper is to report on market orientation as a management and business tool for a government-linked company (GLC) within the Malaysian context. Market orientation is potentially a way to enhance business performance and to achieve competitive advantage. The study analyzes 225 responses of managers within this particular GLC out of the 450 that have been solicited. This study is based on MARKOR (market orientation) model as an instrument for market orientation measurement.

Results of the study indicate that in this Malaysian GLC, top management emphasis, management risk posture, market-based reward system, market turbulence and business performance are all significantly and positively related to market orientation. Results also reveal that the external market environment including competitive intensity does not significantly affect the market orientation for the said organization. These results find their origin in the structure of the organization which had been government oriented for several years and for which intensive competitive pursuits in domestic and international markets is relatively new. The perception of market orientation might differ from other private or public organizations.

This study provides a base for further research as well as for a comparison with the private and public sectors.

Keywords: GLC, market orientation, management, Malaysia, MARKOR.

JEL Classification: D00, D21.

Introduction

Market orientation has been found to have a positive impact on business performance. In this field of study, two most important contributions are of Kohli and Jaworski's (1990) and Narver and Slater (1990). The former defined market orientation as the ability of an organization to: (1) gather market intelligence; (2) disseminate information within the organizations; (3) design appropriate strategies; and (4) respond to meet current and future needs of customers. The latter looked at market orientation as being underpinned by customer and competitor orientation and inter-functional coordination.

Market orientation is noted for its market sensing capability for a growing number of companies that want to be market focused and achieve competitive advantage. Market orientation studies have been entrenched in two most important contributions by Kohli and Jaworski (1990) and Narver and Slater (1990). Their scholarly research work has been often sought by other researchers when making attempts to research further on this area. Of the two, Kohli and Jaworski's (1990) contribution, which is classified as the behavioral perspective, (Carmen et al., 2008) seemed to be the more comprehensive (Siquaw et al., 1998), appropriate for many sectors and has been used in research studies in various different political, economic and cultural environments.

The emphasis of this paper is to derive evidence on market orientation as a management philosophy in a

government-linked company (GLC) in Malaysia. A GLC is a privatized government organization that has the government as major shareholder. Market orientation research in this type of organization is scarce in the extant literature. The organization in this study was previously under government control for more than thirty years. It was among the first government organizations to be privatized in Malaysia. Driven by financial performance objectives, shareholder's wealth maximization is utmost priority and this requires an appreciation of increasing effectiveness, improved efficiency and a market orientated culture.

1. Market orientation study in Malaysia

Market orientation constitutes an important part of marketing academe that has been practiced for several years and has been prevalent in countries that regard the marketing concept as a philosophy of doing business. Accordingly, many research studies on market orientation were conducted in the USA, in single cultures such as Eastern European countries, i.e., Bulgaria, Hungary, Poland and Slovenia (Lafferty et al., 2001), and in the UK (Esteban et al., 2002). Little evidence on market orientation has been reported from developing nations. Hence, it is important to examine the market orientation and its impact on organization business performance in economic environments substantially different from the original U.S.-based research and in business contexts substantially different from the original commercial setting (Pulendren et al., 2003).

According to Yalcinkaya (2008), national culture plays an important role in business dealings. Hofstede (2001) categorized Malaysia as the highest

in the power distance culture dimension which is a barrier to market orientation. It is important to understand the extent to which market orientation serves as a management tool in such organizations now, especially in the case of the GLC in this study. Power distance is one of the five dimensions of culture studied by Hofstede, where the four others are uncertainty avoidance, individualism, masculinity and long-term orientation, introduced in Hofstede's later works. Organizations which have high power distance culture accepts that power is distributed unequally (Hofstede and Hofstede, 2005).

2. The organization in the study

The GLC studied is an organization that was previously under government control and has monopolized the one of the utilities sector for more than 30 years. It has built over the years an organizational structure and with it, an organizational culture that is control based. Since privatization, the GLC has been struggling to cope with a rapidly changing business landscape and a competitive business environment. It has struggled to break the shackles of a top down, bureaucratic, control based organization to one that is agile, entrepreneurial and commitment based. More importantly, it is an organization that has to re-orientate its managerial staff mindset from being company focus to being more customer focus. The GLC has been continuously implementing activities and initiatives focused on understanding and serving market needs of its customers. To do this better, the organization requires a better customer-based market orientation focus. However, the extent to which the organization is adopting these market orientation practices is still unclear. In addition, it is unknown what specific market orientation based antecedents are in place and what practices are in place and are required for a more market orientated based organization to emerge. Furthermore, the impact of such a market orientation approach to its business performance remains murky.

3. Replication, market orientation measures and hypotheses

This study replicates the Kohli and Jaworski (1990, 1993) model. This replication was pursued as it would assess the validity and generalizability of prior research and inconsistency of findings among the non-U.S. replication studies, particularly non-Western business environments. Two most popular market orientation measurement scales are MKTOR by Narver and Slater (1990) and MARKOR by Kohli and Jaworski (1993). MKTOR scales measures of three components market orientation: customer orientation, competitor orientation and inter-functional coordination. MARKOR scale measure

four components of market orientation encompassing intelligence gathering, intelligence dissemination, strategy respond design and respond strategy to market. According to Bigne et al. (2003) both measurement scales show reliability between and within companies, predictive and discriminating validity and also yield similar results. Harris (2000) further noted that MARKOR has been widely applied and captures the construct of market orientation better than MKTOR in differing contexts. Based on the above discussions, the MARKOR is used in this study as the measure for market orientation. Specifically, the MARKOR scale is adopted for this study.

A total of 11 hypotheses were tested. Seven organizational antecedents (top management emphasis, top management risk aversions, formalization, centralization, inter departmental conflict, departmental connectedness and market-based reward) have been tested for their impact on market orientation. Three external environments (technological turbulence, competitive intensity and market turbulence) were tested to determine their impact on market orientation. Finally, an overall market orientation and the organization's business performance relationship were examined.

Studies have shown positive relationship between market orientation and business performance, However, some studies have provided evidence that this relationship does not hold true. Arguments have been proposed that the development of market orientation may be more important for some types of firms, or for firms operating under certain environmental conditions, and may be less important for other types of firm (Cadogan et al., 2002). The service sector (where the GLC is in) in transition economies such as Malaysia is relatively young and has grown rapidly in the changing markets. The question remains about the extent to which the GLC, which is a service based firm, have adopted a market orientation approach in driving their growth. More importantly, what needs to be established is whether having adopted a marketing orientation approach, this leads to improved business performance. To measure business performance, the subjective evaluation is used as it is a reliable means of measuring performance (Pearce et al., 1987). The subjective measures will surround questions on overall business performance, overall business performance compared to major competitor, return on investment (ROI) and sales. In exploring the relationship between the market orientation and business performance in the context of the study, it is proposed that the following hypothesis be tested in this study:

H1: The greater is the market orientation, the better is the business performance.

Top management plays a critical role in influencing managers to adopt market orientation practices. The molding of organizational values and development of market orientation should start from the top management. Levitt (1969) suggests the importance of continuous reinforcement by senior management is critical for individuals to adopt the market orientation practices (generate, disseminate and respond to market intelligence). Slater and Narver (1994) pointed out that top management role in facilitating through communication certain guidelines and encourage contribution from employees are of paramount importance. The more that top management is genuinely committed and communicates throughout the organization, the more it enhances the implementation of market orientation as a philosophy (Lancaster and Van der Velden, 2004). The GLC being a large government linked company places high importance on leadership commitment to drive its business. As it was purely a government organization before and now has become a private entity, the role of top management in facilitating market orientation practices is important. Although some researchers have studied top management commitment as an antecedent to market orientation mainly in the USA and in the UK, the findings may not be similar in Malaysia which Deng (1998) noted that organizational and environmental conditions outside USA and other industrialized countries might be such that top managers may prefer a production orientation to a market orientation. The hypothesis that follows is:

H2: The greater is the top management emphasis, the greater is the market orientation.

The second antecedent related to top management is the risk-taking tendency of top management members. Literature discussion states that risk-taking tendency by top management members can affect the implementation of market orientation. Risk-taking tendency can be either risk seeking or risk averse. Kohli and Jaworski (1990), Jaworski and Kohli (1993) and Lancaster van der Velden (2004) assert that top management members' willingness to take risk will encourage and facilitate organization wide commitment to innovation and responsiveness. On the other hand, a risk averse tendency practiced by top management will inhibit the market implementation of market orientation. As mentioned earlier, the role of top management in the Malaysian GLC is equally important as in organizations outside Malaysia, especially firms in the USA and EU. As such this antecedent related to top management should be dealt with in this study, although it has

been studied by Jaworski and Kohli (1993), and Deshpande and Webster (1989) involving US firms. The study of this antecedent will strengthen the validity and generalization of its contribution to market orientation. It will extend the knowledge of how risk aversion of top management affects market orientation in a GLC in Malaysia. Thus, the hypothesis for the antecedent is as follows:

H3: The greater is the risk aversion of top management, the lower is the overall market orientation of the organization.

Formalization and centralization are two important organizational dimensions that can impact the implementation of market orientation (Pulendran, Speed and Wilding, 2000). Jaworski and Kohli (1993) in supporting the point above noted that formalization, centralization and departmentalization tend to hinder market orientation practices such as generation and dissemination of information and the design of organizational response. Mintzberg, Raisingham and Theoret (1976) noted that formalization is the process of providing employees empowerment in undertaking duties. In other words, it is an organization's way of prescribing discretion. The extent of discretion provided depends on formalization of work processes. In a highly formalized work environment, little or no empowerment is given to use one's discretion to make decisions. In the GLC, although many work processes and organizational structures have lead to lower formalization, it is still not known if this has positive impact on the overall market orientation process. As such the antecedent that needs to be tested in this study is the relationship between degree of formalization and market orientation. The hypothesis that follows is:

H4: The greater is the formalization, the lower is the overall market orientation of the organization.

Centralization is another relevant factor studied. Pulendran, Speed and Wilding (2000) noted that centralization refers to centralization of power for decision-making. In a highly centralized work environment, all the power for decision-making rests at a single point. It is noted that in highly centralized work environment, bureaucracy is prevalent. According to Pulendran, Speed and Wilding (2000), bureaucracy often leads to heightened levels of uncertainty, interdepartmental conflicts and competition, a breakdown in communication flows and delays in decision-making. Jaworski and Kohli (1993) suggest that centralized decision-making can adversely affect market orientation. This dimension of organization dynamics plays an important role in implementation of business plans. Despite process and structural changes the GLC has implemented in

recent years to reduce centralization of decision-making, its impact on market orientation practices is unknown. Thus, it needs to be tested. The hypothesis that follows is:

H5: The greater is the centralization, the lower is the overall market orientation of the organization.

Two dimensions of organization dynamics, conflict and connectedness have been studied in relation to their impact on market orientation by writers like Jaworski and Kohli (1993) and Pulendran, Speed and Wilding (2000) involving USA and Australian firms, respectively. The findings in both researches were consistent. Whether the consistent findings extend to different business environments outside USA and Australia is unknown. In this sense, such study involving a large GLC in a developing country is worth pursuing. Researchers, old and new like Levitt (1969), Lusch and Laczniak (1987) and Lancaster and van der Velden (2004). Flavian and Lozano (2006) also noted that interdepartmental conflict or the existence of the lack in cohesion between departments makes the generation of information, dissemination of information and taking actions in response to information within the organization will be more difficult. Pulendran, Speed and Wilding (2000) found that interdepartmental conflict could have three negative impacts to an organization, which are breakdowns in communication, secrecy and inbred competition. These factors ultimately impede market orientation. To establish the extent to which interdepartmental conflict impedes market orientation, the hypothesis that shall be tested for this study is:

H6: The greater is the interdepartmental conflict, the lower is the overall market orientation of the organization.

Interdepartmental connectedness enables interaction and sharing of information among the departments (Ruekert and Walker, 1987). Jaworski and Kohli (1993) postulate that interdepartmental connectedness makes the departments within an organization to work together and employees have the same thinking towards knowledge generation and knowledge utilization. As noted above, the lack of cohesion between departments can impede the implementation of market orientation (Flavian and Lozano, 2006). However, a question can arise as to whether these antecedents holds true in all organizations regardless of the type, economy background, location and ownership. It is thus imperative to study the antecedents and their impact on market orientation in a different set of environment, as is the case in this study involving a large GLC in Malaysia. The findings can strengthen the robustness of

the antecedents. Thus, the hypothesis to be tested with respect to how interdepartmental connectedness affects market orientation is:

H7: The greater is the interdepartmental connectedness, the greater is the overall market orientation of the organization.

The other antecedent to be studied in this dissertation is the market-based reward systems. Literatures have discussed the importance of reward systems in molding desired behaviors of employees. Researchers (Anderson and Chambers, 1985; Sigauw, Brown and Wilding, 1994) have pointed out that reward systems are instrumental in shaping behavior of employees. This argument is supported by Pulendran, Speed and Wilding (2000), who noted that the type of measurement and reward systems adopted by the organization would determine the extent to which market orientation is practiced. It has been argued that rewards systems direct individual behavior towards the objectives of the organization with regard to market orientation (Kohli and Jaworski, 1990; Ruekert, 1992; Jaworski and Kohli, 1993; Bhuian, 1997). To garner support of employees to be market oriented, it has been proposed that organizations must implement appropriate system of incentives (Chelariu, Quattarra and Dadzie, 2002). In further discussing on reward system and market orientation, Webster (1988) postulated that for an organization to be market oriented, the basic requirement is to put in place market-based measures of performance. Webster's argument is proven by Sigauw, Brown and Wilding (1994) in their research, which concluded that market-based reward systems were essential in achieving market orientation. The researchers argument in favor of market-based rewards measures (such as customer satisfaction and service levels) over employee performance measure (such as sales volume, short-term profitability and rate of return) is based on the reasoning that market-based rewards systems are more likely to encourage the market orientation practices (Pulendran, Speed and Wilding, 2000). In the context of the organization studied in Malaysia, does market-based reward system motivates managers to adopt market orientation practices is researched. The hypothesis that follows is:

H8: The greater is the reliance on market-based factors for evaluating and rewarding managers, the greater is the overall market orientation of the organization.

More obvious are studies in the extant literature that discussed about the impact of external market environment on market orientation and its moderating role of the market orientation and business perform-

ance relationship (Kohli and Jaworski, 1993). The significant role market orientation plays for an organization suggests that the study on market environmental factors are common. It is important to note that the moderation role played by external market environment is indeed the impact of these environments on the manager's emphasis on market orientation. This is supported by Winston and Dadzie (2002), who noted the role of top managers' emphasis and the impact of external market environments. It impacts on market orientation first then related to business performance. The business performance is the outcome of the effect of market orientation. Studies found that market environmental factors have been tested for its moderation effect on market orientation and business performance relationship. Although, Jaworski and Kohli (1993) implied that the moderating effects of the external environments have less effect on market orientation and business performance relationship, it cannot be over generalized as market conditions and environment could differ from country to country. The three external market environments are market turbulence, competitive intensity and technological turbulence.

Market turbulence means the changing degree of customers' need and preference (Kim, 2003). This suggests that the degree of market orientation varies with speed of change in customer need and requirements. When the market is turbulent, there is a strong need for managers to understand the changes in customer need and requirements and accordingly respond to them, as required by a greater degree of market orientation. The hypothesis studied is:

H9: The greater is the market turbulence, the greater is the market orientation of the organization.

The second external market environment is competitive intensity, where Hooley et al. (2003) argues that in more competitive markets it is anticipated that there is greater need to focus on customer requirements, while becoming keenly aware of competitors' strategies and offerings, which could result in adopting a differentiated approach in the firm's product offerings. Kim (2003) supported the argument by Hooley et al., (2003) that the more competitive is the market, the more market oriented a firm could become than in a lesser competitive market. The hypothesis studied is:

H10: The greater is the competitive intensity, the greater is the market orientation of the organization.

The technology turbulence relates to the changing degree of technology in products and services. According to Hooley et al., (2003), it is anticipated that firms with a greater degree of market orientation

will be more aware of the technological change in a rapidly changing technology market. However, Lancaster and Van der Velden (2004) argues that in technological turbulent environments, the importance of a high orientation to market diminishes. This is based on the assumption by Jaworski and Kohli (1993) that organizations obtain their competitive advantage through innovations rather than from a high orientation level. The hypothesis studied is:

H11: The greater is the technological turbulence, the lesser is the market orientation of the organization.

4. Collection of data

Data were acquired from staff in managerial position. Managerial staffs usually have longer years of service and those more than six years of service in the current position are responsible and suitable to be respondents (Dwairi et al., 2007). Data was solicited from the entire population (450 managers). With reminders, only 225 managers responded resulting in a 50 percent response rate. This response rate was deemed as being suitable (Flowerdew and Martin, 1997). Fortunately, all 225 responses were returned complete and usable for analysis. Majority of the respondents involved in this study were males with 65.3% and the remaining respondents were females with 34.7%. They were mostly at the age between 31-50 years old. The middle level managers (74.7% senior managers responded) responded mostly as compared to junior managers. It was noted that the respondents who served the organization between 11-15 years constitute about 47.6% of the total respondents. According to Dwairi et al. (2007), respondents with six or more years of experience in the current position are likely to be responsible persons and able to respond to the questions of this study. Although the unit of analysis is the organization, the managers' responses were taken as appropriate because they are critical to achieve organization objective (King and Grace, 2006). This is supported by Harris and Ogbonno (2000) emphasizing employees as an important internal resource to achieve organization performance.

In examining the relationship between the antecedents to market orientation, market orientation is the major dependent variable. The market orientation construct was measured using the seven point MARKOR scales of Kohli, Jaworski and Kumar (1993). An increase from five to seven or nine point scales results in less variation on re-tests and improves the reliability of the ratings (Crask and Fox, 1987). The independent variables in this relationship are as follows: top management emphasis; interdepartmental conflict; interdepartmental connected-

ness; formalization; centralization; risk aversion; and reward system orientation, which are those used by Jaworski and Kohli (1993). In examining the relationship between market orientation and business performance, performance is the dependent variable. Based on Jaworski and Kohli, performance was measured through self-assessment using a seven point Likert scale. The moderator of environmental context was based on those developed in the Jaworski and Kohli (1993) study. The survey instrument is shown in Appendix.

Structural equation modeling (SEM) used to evaluate how well the proposed conceptual model with its observed multiple variables and hypothetical constructs explains the collected data. AMOS version 6.0 was used to test the hypotheses. The SEM has provided a useful way to deal the proposed theoretical framework, i.e., market orientation antecedents, market orientation and business performance. According to Aaker and Bagozi (1979), and Garver and Mentzer (1999), SEM is a power statistical technique that simultaneously combines the measurement model (confirmatory factor analysis) and the structural model (regression or path analysis). Yong and Uysal (2005) noted that SEM evaluates how well a proposed conceptual model with its multiple indicators and hypothetical constructs fits the collected data. Various views on sample size were suggested for SEM. To have confidence in goodness of fit test, some recommended that sample size should be between 100 and 200 (Hoyle, 1995), or a minimum of 150 (Anderson and Gerbing, 1988).

5. Validation of the measures

Confirmatory factor analysis and coefficient alpha (refer Table 1) were estimated to assess the psychometric properties of the scales (Hair et al., 1987). The recommended factor loadings threshold value is 0.50 (Hair et al., 1987). According to Carmines and Zeller (1979), the acceptable threshold value for factor loading is 0.7 or above. Dwairi et al. (2007) removed items with factors loadings less than 0.40 in their research paper. In this study, factor loadings less than 0.50 were removed except in the case of one factor, where two items out of three had factor loadings of less than 0.50 and were retained due to the rule of thumb for analysis, which requires a factor to have more than 2 items. Consequently, 2, 1, 2, 1, 1 and 2 items were respectively removed from top management risk posture, organizational formalization, interdepartmental conflict, interdepartmental connectedness, market turbulence and technology turbulence. Thus, Cronbach alphas ranged from 0.40 to 0.92.

Table 1. Reliability analysis

Constructs	# of items	Cronbach alpha	# of items removed	# of items retained
Top management emphasis	4	0.907	0	4
Top management risk posture	5	0.778	2	3
Organizational system: formalization	4	0.702	1	3
Organizational system: centralization	5	0.878	0	5
Interdepartmental dynamics: conflict	6	0.794	2	4
Interdepartmental dynamics: connectedness	6	0.818	1	5
Reward system orientation	5	0.854	0	5
Market orientation: intelligence generation	5	0.706	1	4
Market orientation: intelligence dissemination	4	0.793	0	4
Market orientation: response design	4	0.724	1	3
Market orientation: response implementation	3	0.604	1	2
Market turbulence	3	0.409	1	2
Competitive intensity	5	0.823	0	5
Technology turbulence	5	0.731	2	3
Business performance	5	0.928	0	5

The CMIN/DF (1.980), GFI (0.944), CFI (0.937) values show the model fit is achieved (Bentler, 1990; Hartcher, 1994; Chau, 1997; Segars and Grover, 1993). However, the RMSEA value of 0.066 is still above the model fit value, i.e., 0.05 as noted by Schumacker and Richard (1996). However, researchers agree that the RMSEA value for model fit should be equal to or below 0.08. If the RMSEA value for threshold for model fit is accepted, then the 0.066 value that is below the threshold value for model fit indicates that the model fit is very good. Therefore, it can be further analyzed. The results show the standardized estimate ranges from 0.30 to 0.112, the critical ratio ranges from -1.209 to 5.636 for all the 11 variables. According to the results, top management emphasis, top management risk posture, market-based reward system, market turbulence and business performance are all significantly and positively related to market orientation. That means that hypotheses related to these variables are supported. Organizational formalization, organizational centralization, interdepartmental connectedness, interdepartmental conflict, technology turbulence and competitive intensity are not significantly related to market orientation which means that the related hypotheses are not supported.

Table 2. Regression results

#	Construct association	Estimate	S.E.	C.R.	P-value
1	MO <--- BP	.598	.106	5.636	.000*
2	MO <--- TME	.235	.048	4.915	.000*
3	MO <--- TMRP	.131	.057	2.278	.023*
4	MO <--- ORSF	-.015	.046	-.327	.744
5	MO <--- ORSC	.041	.030	1.366	.172
6	MO <--- IDC	-.054	.045	-1.209	.227
7	MO <--- IDCT	.054	.050	1.076	.282
8	MO <--- RWD	.153	.032	4.812	.000*
9	MO <--- TT	-.051	.073	-.707	.480
10	MO <--- CI	-.011	.049	-.218	.828
11	MO <--- MT	.602	.112	5.383	.000*

Notes: N = 225, *significant at $p = 0.05$; BP – business performance; TME – top management emphasis; TMRP – top management risk posture; ORSF – organizational system: formalization; ORSC – organizational system: centralization; IDC – interdepartmental dynamics: conflicts; IDCT – interdepartmental dynamics: connectedness; RWD – reward system orientation; TT – technology turbulence; CI – competitive intensity; MT – market turbulence.

Discussion, conclusion and limitations

The findings as in table show only five significant relationships in the GLC studied. Market orientation and business performance relationship in the GLC is significant. It means market orientation of managers representing the organization do contribute significantly to business performance. Managers in the GLC appear to place importance in market-oriented practices from generation of information to designing and responding with strategies to market developments. This finding is consistent with the findings of Narver and Slater (1990), Jaworski and Kohli (1993) and Pelham (2000). Although the majority of the studies conducted in the USA and the UK that found there was a positive association between market orientation and business performance, the same is true in Malaysia. Replication of the body of research in Malaysia strengthens further the robust empirical generalization of market orientation and business performance relationship.

Another significant relationship is top management emphasis and market orientation. Top management in this organization seemed to significantly inculcate and facilitate the market-oriented practices among managers. In view of stiff competition now faced by the GLC, top management considers the importance of market orientation of their managers to compete. Besides, top management now is answerable to shareholders in financial terms as one of their key performance indicators. This finding is consistent with findings of Jaworski and Kohli (1993), Lancaster and van der Velde (2004) and Pulendran et al. (2000).

Top management risk aversion is also significantly related to market orientation in the organization. It seems top managers' stance to avert risks, in particular that are associated with the market, will affect their responsiveness to market changes. The more they avert risks, the less are their market oriented actions. On the other hand, the higher is the tendency to take risks, the more is the market orientation practices. Jaworski and Kohli (1993) found that top management risk aversion does not appear to affect overall market orientation. Pulendran et al. found the same outcome in their study. It could be that organizations in the USA, studied by Jaworski and Kohli (1993), and organizations in Australia, studied by Pulendran et al. (2000), are more apt to market-oriented practices regardless of top managements risk averse position.

This study shows that the interdepartmental conflict is not a predictor of market orientation in the organization of this study. This could relate to departmentalization which is not significantly and positively related to market orientation (Jaworski and Kohli, 1993). Government related organizations like the one in this study is known to have many departments and bureaucratic in nature. As noted by Matsuno and Mentzer (2002), the greater level of departmentalization can lead to increased alienation and lower inter-functional connectedness, which can contribute to inefficiency in responding to market changes. The greater alienation between departments can mean lower interdepartmental connectedness and conflict which can adversely affect the implementation of market orientation. On the other hand, despite of greater alienation which is not good, in some organizations like this GLC, there is a tendency for departments to uphold strongly the need to meet organization goals as top most priority, thus conflict between departments is not allowed to exert greater impact on meeting the goals. Hence, interdepartmental conflict does not appear to influence market orientation of the managers. This is contrary to past empirical research that indicates interdepartmental conflict impedes the implementation of market orientation (Kirca et al., 2005; Jaworski and Kohli, 1993; and Pulendran et al., 2000). High level of conservatism could be another reason to explain this situation. In a study conducted by Kirca and Hult (2009) on national culture and antecedents of market orientation, it was found that interdepartmental conflict-market orientation relationship was not significantly related for firms in countries that rank high on conservatism dimensions (Schwartz, 1994) such as Malaysia, Singapore, Taiwan and Poland.

Reward appears to be significantly related to market orientation. This is consistent with the findings of Jaworksi and Kohli (1993) and Pulendran et al. (2000). It appears that managers or employees that are rewarded on the basis of customer satisfaction and customer relationship building have greater tendency to be more market oriented.

The external market environment factors do not appear to significantly affect the market orientation of the organization in this study. Market environment is a commonly cited antecedent for an organization engaged in market orientation (Selnes et al., 1996) specifically the perceived environmental turbulence. The findings from this study show that competitive intensity does not appear to significantly affect the market orientation of the organization under study. Two reasons could account for this. The first is that for the organization that was studied, the perception of market orientation may differ from what it is normally assumed to be. While the managers were mindful of the emergence of this

new paradigm, they could downplay the significance of increasing competitive intensity on the development of a market orientated approach. The second could be that the organization in question may be at a preliminary stage of development in terms of market orientation. Given that the organization in this study was a government organization for many years, their foray into competitive pursuits in domestic and international markets is relatively new.

Limitations are acknowledged. Yet, the findings of the study provide a base on which future research can be pursued. First, the larger the sample size, the better it is while interpreting the results. Second, for better generalizability of the findings and robustness of the research framework, it is important to conduct similar study involving a number of privatized government organizations. Third, the research framework can be replicated in a comparison study between privatized government organizations and public organizations.

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Appendix

Table 1. Survey instrument

<p><i>Market orientation (intelligence generation):</i></p> <ol style="list-style-type: none"> 1. In this business unit, we meet with customers at least once a year to find out what products or services they will need in future. 2. In this organization, we do a lot of in-house market research. 3. We are slow to detect changes in our customers' product preferences. 4. We poll end users at least once a year to assess the quality of our products and services. 5. We periodically review the likely effect of changes in our business environment (e.g., regulation) on our customers. 	<table border="0"> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> </table>	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7
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<p><i>Market orientation (intelligence dissemination):</i></p> <ol style="list-style-type: none"> 1. We have interdepartmental meetings at least once a quarter to discuss market trends and developments. 2. Marketing personnel in our business unit spend time discussing customers' future needs with other functional departments. 3. When something important happens to a major customer or market, the business unit knows about it within a short period. 4. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis. 	<table border="0"> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> </table>	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7
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<p><i>Market orientation (response design):</i></p> <ol style="list-style-type: none"> 1. For one reason or another, we tend to ignore changes in our customers product or service needs. 2. We periodically review our product development efforts to ensure that they are in line with what customers want. 3. Several departments get together periodically to plan a response to changes taking place in our business environment 4. If a major competitor launched an intensive campaign targeted at our customers, we would implement a response immediately. 	<table border="0"> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> </table>	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7
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<p><i>Market orientation (response implementation):</i></p> <ol style="list-style-type: none"> 1. The activities of the different departments in this business unit are well coordinated. 2. Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion. 3. When we find that customers would like us to modify a product or service, the departments involved make a concerted effort to do so. 	<table border="0"> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> </table>	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7														
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<p><i>Reward system orientation:</i></p> <ol style="list-style-type: none"> 1. No matter which department they are in, people in this business unit get recognized for being sensitive to competitive moves. 2. Customer satisfaction assessments influence senior managers' pay in this business unit. 3. Formal rewards (i.e., pay raise, promotion) are forthcoming to anyone who consistently provides good market intelligence. 4. Salespeoples' performance in this business unit is measured by the strength of the relationship they build with customers. 5. We use customer polls for evaluating our salespeople. 	<table border="0"> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> <tr> <td>Strg.disagree</td><td>Disagree</td><td>Swt.disagree</td><td>Neutral</td><td>Agree</td><td>Swt.agree</td><td>Strg.agree</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td> </tr> </table>	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7	Strg.disagree	Disagree	Swt.disagree	Neutral	Agree	Swt.agree	Strg.agree	1	2	3	4	5	6	7
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Table 1 (cont.). Survey instrument

<p><i>Top management emphasis:</i></p> <ol style="list-style-type: none"> 1. Top managers repeatedly tell employees that this business unit's survival depends on its adapting to market friends. 2. Top managers often tells employees to be sensitive to the activities of our competitors. 3. Top managers keep telling people around here that they must gear up now to meet customers' future needs. 4. According to top managers here, serving customers is the most important thing our business unit does. 	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p>
<p><i>Top management risk posture:</i></p> <ol style="list-style-type: none"> 1. Top managers in this business unit believe that higher financial risks are worth taking for higher rewards. 2. Top managers in this business unit like to take big financial risks. 3. Top managers here encourage the development of innovative marketing strategies, knowing well that some will fail. 4. Top managers in this business unit like to play it safe. 5. Top managers around here like to implement plans only if they are very certain that they will work. 	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p>
<p><i>Organizational system (formalization):</i></p> <ol style="list-style-type: none"> 1. I feel that I am my own boss in most matters. 2. A person can make his own decisions without checking with anybody else. 3. How things are done here is left up to the person doing the work. 4. People here feel as though they are constantly being watched to see that they obey all the rules. 	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p>
<p><i>Organizational system (centralization):</i></p> <ol style="list-style-type: none"> 1. There can be little action taken until a supervisor approves. 2. A person who wants to make his own decision would be quickly discouraged here. 3. Even small matters have to be referred to someone higher up for a final answer. 4. I have to ask my boss before I do almost anything. 5. Any decision I make has to have my boss' approval. 	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p>
<p><i>Interdepartmental dynamics: conflict:</i></p> <ol style="list-style-type: none"> 1. When members of several departments get together, tensions frequently run high. 2. People in one department generally dislike interacting with those from another department. 3. Employees from different departments feel that the goals of their respective departments are in harmony with each other. 4. Protecting one's departmental turf is considered to be a way of life in this business unit with each other. 5. The objectives pursued by the marketing department are incompatible with those of the manufacturing department. 6. There is little or no interdepartmental conflict in this business unit. 	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p>
<p><i>Interdepartmental dynamics: connectedness:</i></p> <ol style="list-style-type: none"> 1. In this business unit, it is easy to talk with virtually anyone you need to regardless of rank or position. 2. There is ample opportunity for hall talk among individuals from different departments in this business unit. 3. In this business unit, employees from different departments I comfortable calling each other when the need arises. 4. Managers here discourage employees from discussing work related matters with those who are not their immediate superiors or subordinates. 5. People around here are quite accessible to those in other departments. 6. Junior managers in my department can easily schedule meetings with junior managers in other departments. 	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i> 1 2 3 4 5 6 7</p>

Table 1 (cont.). Survey instrument

<p><i>Market turbulence:</i></p> <p>1. In our kind of business, customers' product preferences change quite a bit overtime.</p> <p>2. Our customers tend to look for new products all the time.</p> <p>3. Sometimes our customers are very price sensitive, but on other occasions, price is relatively unimportant.</p>	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p>
<p><i>Technological turbulence:</i></p> <p>1. The technology in our industry is changing rapidly.</p> <p>2. Technological changes provide big opportunities in our industry.</p> <p>3. It is very difficult to forecast where the technology in our industry will be in the next 2 to 3 years.</p> <p>4. A large number of new product ideas have been made possible through technological breakthroughs in our industry.</p> <p>5. Technological developments in our industry are rather minor.</p>	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p>
<p><i>Competitive intensity:</i></p> <p>1. Competition in our industry is cutthroat.</p> <p>2. There are many promotion wars in our industry.</p> <p>3. Anything that one competitor can offer, others can match readily.</p> <p>4. Price is a hallmark of our industry.</p> <p>5. One hears of a new competitive move almost every day.</p>	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p>
<p><i>Business performance:</i></p> <p>1. Overall performance of business unit last year.</p> <p>2. Overall performance of the business unit relative to major competitors last year.</p> <p>3. The return on investment of the business unit relative to all competitors last year.</p> <p>4. The sales of business unit relative to all competitors last year.</p> <p>5. The overall performance of the business unit last year, in comparison with what was expected.</p>	<p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p> <p><i>Strg.disagree Disagree Swt.disagree Neutral Agree Swt.agree Strg.agree</i></p> <p>1 2 3 4 5 6 7</p>