# The Link between Market Orientation and Performance in the Australian Public Sector

#### ABSTRACT

Marketing academics and practitioners assume a direct link between market orientation and performance and argue that this applies to both business and non-business organisations. While this aspect has been studied in the business sector, this paper discusses the concepts of market orientation and performance and investigates this relationship in the Australian public sector. The conceptualisation of market orientation used is that by Jaworski and Kohli (1993) on which basis MARKOR was developed. This instrument together with an instrument to measure the perceptions of performance of senior managers in the Australian public sector are used to investigate the hypothesised link. The findings confirm a positive relationship between market orientation and performance. The size and type of public sector organisation involved are also found to affect the levels of market orientation together with its components and performance. From the findings, implications are drawn and directions for future research are discussed.

#### INTRODUCTION

The managerial approach in marketing took root in the 1950's and 60's focusing primarily on the sellers' needs to facilitate transactions. With time, marketing has expanded its focus to include industrial goods and more recently the marketing of services (Fisk, Brown and Bitner, 1994). Concurrently, there has been a parallel development resulting in the recognition of the importance of repeated transactions and relationships (Webster, 1992). Ideas of relationship marketing are only starting to be implemented in some of the leading private sector firms. The public sector still seems to be struggling with adopting managerialism and a market orientation. Traditionally marketing has been marginal to the provision of core public services, and at most only consisted of the use of particular techniques (Roberto, 1992). Customer consciousness and customer care programs are being increasingly implemented and the language of

marketing in terms of segmentation, market position, marketing mix, and internal markets, are being adopted (Mintzberg, 1996). A greater customer orientation of the Australian public sector is indicated from research which shows an increase in the number of marketing positions that have been advertised (Graham, 1995). The payment of taxes gives citizens their rights and government departments as custodians of citizen funds should, in a democracy, be transparent, 'accountable and responsible to the people for the policies they adopt and the manner in which they implement them' (Bourn, 1992). The importance of market orientation to public organisations stems from the fact that there is an underlying assumption among academic and marketing practitioners that there is a direct link with performance (cf. Houston, 1986; Kotler, 1991; McGee and Spiro, 1988; Webster, 1988). This study sets out to determine the level of market orientation in the public sector and what effect, if any, this has on performance. The concepts of market orientation and performance are considered and measures are identified. Empirical research is undertaken among senior managers in the Australian public sector to determine whether government departments that are more market oriented deliver higher levels of performance. Implications are drawn and suggestions for ongoing research are made.

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#### MARKET ORIENTATION

Market orientation has been expressed in such terms as 'close to the customer' (Webster, 1988; Shapiro, 1988). The term 'close to the customer' was popularised by Peters and Waterman (1982) who used it to describe one of their eight attributes of 'excellence'. The term 'market' oriented is to be preferred to 'marketing' oriented as this highlights its organisation-wide application (Kohli and Jaworski, 1990; Narver and Slater, 1990; Shapiro, 1988) while a marketing orientation is seen to be specific to the activities of the marketing department or division.

The marketing concept has received significant criticism (cf. Hayes and Abernathy, 1980; Kaldor, 1971). Much of this appears to have been a problem with how the concept has been implemented (Houston, 1986; McGee and Spiro, 1988; Webster, 1988). Perhaps this is because it appears that there has been no complete agreement as to what constitutes a market orientation. What is often implemented in the name of a market orientation may therefore differ considerably. It appears that 'only a handful of companies really stand out as master practitioners of the marketing concept' (Kotler, 1991). There exists a significant gap between the marketing philosophy that many academics have put forward and what has been implemented in the name of the marketing concept by many firms.

McGee and Spiro (1988) hold that the marketing concept can be defined in three ways; as a philosophy, as a concept and as currently implemented. Much of the confusion over the years in defining marketing and in the understanding of the marketing concept results from a failure to make these three distinctions between marketing as a culture, as a strategy, and as a tactic. Each dimension is the responsibility in the organisation of the corporate, SBU and the operational level, respectively (Webster, 1992). There is broad agreement that market orientation as a philosophy consists of three core aspects (Kohli and Jaworski, 1990; Kotler, 1991; McGee and Spiro, 1988; Runyon, 1980), namely: (1) Customer orientation; (2) The

integration of effort; and (3) Organisational objectives (or, in the case of business firms, profitability). Kohli and Jaworski (1990) have contributed by providing an operational definition for market orientation as a construct. In their study, they do this by comparing the three core elements of market orientation as a philosophy, to the perceptions of practising managers. They define market orientation as: 'the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments and organizationwide responsiveness to it' (Kohli and Jaworski, 1990).

Market intelligence is seen to be not just based on 'verbalised customers' opinions' but 'a broader concept' in that it includes consideration of: '(1) exogenous market factors (e.g. competitors, regulation) that affect customer needs and performance and (2) current as well as future needs of customers'. Grönroos (1991) recognises the need for a firm to have a strong information system especially in the case of those 'in a relationship marketing situation'. Work by Jaworski and Kohli (1993), following the approach suggested by Churchill (1979), utilised the market intelligence related activities of their definition to develop just such a measuring instrument for market orientation. The resultant 32-item scale was subsequently refined into the 20-item MARKOR instrument when evidence of its psychometric properties was also provided (Kohli, Jaworski and Kumar, 1993). At least three other scales for measuring market orientation based on different emphasis in their definition of market orientation as a construct have also been developed (Deshpandé, Farley and Webster, 1993; Narver and Slater, 1990; Ruekert, 1992). In arriving at a final decision as to which market orientation instrument to use this was narrowed down to those developed by Narver and Slater, (1990) and Jaworski and Kohli, (1993) as it was these two that departed from strong operational definitions of the market orientation construct, MARKOR by Jaworski and Kohli was preferred because (1) the exact wording of each question was provided while Narver and Slater only provide key phrases for each item, (2) MARKOR has good reliabilities for all dimensions, and (3)

overall, MARKOR appears more rigorously developed and tested (cf. Kohli, Jaworski and Kumar, 1993). However it has some problems in terms of validity with the confirmatory factor analysis provided by the latter authors indicating marginally acceptable fit indices.

#### PERFORMANCE

Organisational theory and strategic management offer much of the basis on which the performance construct is measured. Organisational theory provides three fundamental theoretical approaches to measuring organisation effectiveness. In the goal based approach the organisation is evaluated on the basis of the objectives it sets itself (Etzioni, 1964). The system approach improves on this by considering multiple, generic performance aspects (Georgopolous and Tannenbaum, 1957; Yuchtman and Seashore, 1967, Steers, 1975), while the multiple consistency approach considers the degree to which the different stakeholder performance goals are met (Connolly, Conlon and Deutsch, 1980; Pennings and Goodman 1977; Pfeffer and Salancik, 1978; Thompson 1967). Strategic management integrates these three views and considers multiple dimensions in terms of financial performance measures such as ROCE (Venkatraman and Ramanujam, 1986) together with operational performance measures such as market share (Hofer and Sandberg, 1987; Kaplan, 1983) and other measures that consider and capture multiple shareholder interests. Venkatraman and Ramanujam (1986) provide a comprehensive two-dimensional framework for classifying corporate performance measures integrating performance measures with collection methods. On the performance dimension, financial vs non-financial or operational variables, are considered while on the method of collection dimension, primary (questionnaire-interview) vs secondary (archival) data sources are taken into account.

Hensher and Waters (1993) describe three types of measures of productive efficiency in organisations in the public sector. These are: (1) econometric model estimation (2) Non parametric Data Envelopment Analysis (DEA) and (3) Non parametric Total Factor Productivity (TFP). Because non-parametric TFP measures, such as number of parking tickets given by a warden each day, are relatively easy to calculate or obtain they are extensively employed to assess many government departmental activities. However even what initially appears to be a straightforward measure of output may be quite complicated. Thus if the area the warden patrols is a busy parking area the results may be simply a reflection of this rather than efficiency. The alternative is of course to have multiple measures. However, it has been argued that the proliferation of performance targets can conceal rather than enhance the ability to assess quality through making it hard to focus, and making clear judgement of overall performance difficult (Walsh, 1994). Mintzberg (1996) attacks the myths of measurement in government; an ideology, which he holds, is embraced with religious fervour by the Management movement. He notes that many of the benefits of measurement do not lend themselves to government entities and that many activities are in the public sector precisely because of measurement problems. 'The assessment of many of the most common activities in government requires soft judgement - something that hard measurement cannot provide'. A main reason for this is that for many sectors, the appropriate output measure is not clear.

# MARKET ORIENTATION AND PERFORMANCE

Until recently the link between a market orientation and performance appeared to have been taken for granted by both academics (Houston, 1986; Kotler, 1991; McGee and Spiro, 1988; Webster, 1988) and practitioners (Kohli and Jaworski, 1990). Of late empirical support for a direct link between the level of market orientation in certain U.S. firms, at the SBU level, and performance has been confirmed in a number of studies (Jaworski and Kohli, 1993; Narver, Park and Slater, 1990; Narver and Slater, 1990; Ruekert, 1992). Deshpandé, Farley and Webster (1993)

also confirm this relationship in Japan while Pitt, Caruana and Berthon (1996) provide evidence for this relationship from the UK and Malta.

A number of authors have argued that the effectiveness of a particular strategic orientation is contingent on the environmental situation (cf. Davis, Morris and Allen, 1991; Slater and Narver, 1994). Jaworski and Kohli (1993) consider market turbulence, competitive intensity and technological intensity as moderating variables in the market orientation-performance link but their empirical work provided no evidence of a moderating effect. Slater and Narver (1994) considered the possibility that this result was the effect of a poor measure of performance. Using different measures they consider market turbulence, competitor hostility, technological turbulence and market growth as moderating variables on the market orientation performance link. Slater and Narver, (1994:53) conclude that:

'there is little support for the proposition that competitive environment has an effect on the strength and nature of the market orientationperformance relationship'.

Given these findings from the private sector it seems that these same environmental factors are likely to have less of an effect in the generally more stable environment that the public sector operates in.

Research on the link between market orientation and performance has to date focused on firms in the private sector. To our knowledge this relationship has not been considered in the public sector. It is an underlying principle of marketing that the discipline is applicable to any organisations that has customers (Kotler, 1972). If this is true then one would expect that the benefit of a market orientation in enabling organisations to meet their objectives should apply also to organisations that adopt a market orientation in the public sector. Failure to confirm this link would put into question the relevance of marketing to non-business organisations. We proceeded to investigate this relationship from a sample of managers in the

Australian public sector.

# CONSTRUCT MEASURES AND DATA COLLECTION

To be able to investigate the relationship between market orientation and performance in government departments, a research design was employed that involved postal questionnaires to a cross-section of head of departments in the Australian public sector. The final questionnaire was made up of twenty-four questions that consisted of a measure for market orientation and performance.

#### THE RESEARCH INSTRUMENT

Market orientation (MO) was measured using the 20 item MARKOR as reported in Kohli, Jaworski and Kumar (1993). Their original instrument was amended to reflect the situation in Government departments as against business units. The key used involved substituting department for business unit; macro environment for industry; sections for departments; and, services for products. Because of definitional problems an additional initial question asked the degree to which everyone in the department has a clear understanding as to who their customers are. Each item was described by 7 point Likert type scales described by 1 = Strongly disagree to 7 = Strongly agree. In the original MARKOR instrument 5 point scales were used. We have increased the number of scale points to 7, as this generally helps scale reliability (Churchill and Peter, 1984) and does not affect its psychometric properties (Nunnally, 1978). Higher scores on this scale (when reverse scored items are suitably amended) indicate higher levels of market orientation. In their studies the authors (Jaworski and Kohli, 1993; Kohli, Jaworski and Kumar, 1993) report results of two single informant samples and reliability alpha (Cronbach, 1951) of between 0.89 to 0.96 for market orientation and of between 0.71 to 0.82 for intelligence generation, intelligence dissemination and responsiveness respectively. Evidence for the scale's

convergent, discriminant and nomological validity is also provided (Kohli, Jaworski and Kumar, 1993).

To measure performance (PERF) it was thought impractical to expect busy departmental heads to collect actual performance data, even if they were agreeable to divulging such information. Obtaining such data from archival sources, such as trade and other publications, was not seen to be a viable alternative. Dess and Robinson (1984) who looked at the accuracy of such data hold that it is also of minimal use in explaining variation in performance between firms and recommend that researchers consider using questionnaire or interview based perceptual measures of organisation performance, Pearce, Robbins and Robinson (1987) show that such questionnaire based evaluations are reliable means for measuring performance. To measure performance use is made of a scale developed by Dess and Robinson (1994) consisting of three items originally measured with a five point Likert scale. To maintain overall consistency 7 point scales are used, described by 1 = 'Very Poor' to 7 = 'Very Good'. The items were suitably amended to reflect the situation in government departments. Thus items asked about improvements achieved; the level of service provided to customers; the level of cost effectiveness achieved; as well as the overall performance of the department. Respondent perceptions and evaluations about the four items in the scale were collected on the basis of senior management experience about their organisation during the last three years.

#### SURVEY OF HEAD OF DEPARTMENTS

300 postal questionnaires were sent to heads of government departments in Australia. By the cut off date, three weeks later, a total of 140 valid replies were obtained, of which 134 could be used, representing an effective response rate of 45.6%. Analysis of respondents indicates that these were either the director of the organisation concerned or in the larger organisations the completion of the questionnaire was often delegated to a deputy. Respondents reported that

they had worked with the public sector for an average of 18.4 years with a standard deviation of 3.4. In terms of the number of full time employees, one third had between 2 and 119, one third between 120 and 1499 and one third had between 1500 and 40,000. This indicates sufficient depth of the sample and we proceeded to check for non-response bias. An 'extrapolation procedure' technique was used to assess non-response bias. This assumes that 'late' respondents are similar to the 'theoretical' non-respondents (Armstrong and Overton, 1977). Independent t-tests were used to determine whether significant differences between the mean for the sum of the constructs for market orientation and performance, differed between the two sub-samples consisting of respondents in the first and last quartile. No significant differences were found between the two sub samples for any of these variables. The results suggest that there appears to be no difference between respondents and nonrespondents for the variables under study and the sample can be considered sufficient to draw conclusions about Australian government departments for the issue under study.

#### ANALYSIS

The mean and standard deviations of the items in the MARKOR and performance scale are shown in Table 1. The coefficient alpha for each of the dimensions of the MARKOR scale was first computed. Results of 0.727, 0.710 and 0.861 were obtained for each of the information gathering, information dissemination and responsiveness respectively and of 0.889 for the entire market orientation scale. The coefficient alpha for the four items of the performance scale was 0.883. All alpha coefficients are greater than 0.70 and therefore acceptable (Nunnally, 1978). A confirmatory factor analysis of the market orientation construct along the lines of Kohli, Jaworski and Kumar, (1993: 470: footnote 3) provided rather low but marginally acceptable fit indices with  $\chi^2_{(148)} = 290.72$  (p = 0.000; GFI = 0.812; RMS = 0.17; TLI = 0.79; RNI = 0.728) as against the null model with  $\chi_{(190)}^2 = 1066.74$  (p = 0.000; GFI = 0.340; RMS = 0.687).

TABLE 1 MEAN AND STANDARD DEVIATIONS FOR THE MARKOR AND PERFORMANCE ITEMS

MARKOR scale	Mean	Std Dev	N
<ol> <li>In this department we meet with customers at least once a year to find out what products or services they will need in the future.</li> </ol>	5.07	1.54	134
<ol><li>In this department, we do a lot of in-house market research.</li></ol>	3.83	1.60	133
3. We are slow to detect changes in our customers' product preferences. (R)	3.42	1.32	130
<ol> <li>We survey customers at least once a year to assess the quality of our products and services.</li> </ol>	4.93	1.84	132
<ol> <li>We are slow to detect fundamental shifts in the macro environment (e.g. technology, economic, social). (R)</li> </ol>	3.04	1.51	134
<ol> <li>We periodically review the likely effect of changes in our macro environment (e.g., technology) on customers.</li> </ol>	4.84	1.45	134
Intelligence Generation	28.21	5.98	128
<ol><li>We have interdepartmental meetings at least once a quarter to discuss market trends and developments.</li></ol>	4.57	1,84	133
<ol> <li>Customer care personnel in our department spend time discussing customers' future needs with other departments.</li> </ol>	4.19	1.57	130
<ol><li>When something important relating to the department happens, everyone in the department knows about it within a short period.</li></ol>	5.00	1.68	134
<ol> <li>Data on customer satisfaction are disseminated at all levels in this department on a regular basis.</li> </ol>	3.97	1.87	133
<ol> <li>When one section within our department finds out something important, it is slow to alert other sections in the department. (R)</li> </ol>	3.56	1.61	134
Intelligence Dissemination	22.02	5.84	130
12. It takes us forever to decide how to respond to new customer needs. (R)	3.05	1.55	132
<ol> <li>For one reason or another we tend to ignore changes in our customers' service needs. (R)</li> </ol>	2.92	1.47	133
<ol> <li>We periodically review our service development efforts to ensure that they are in line with what customers want.</li> </ol>	5,12	1.20	133
<ol> <li>Several sections within our department get together periodically to plan a response to changes taking place in the macro environment.</li> </ol>	5.17	1.39	133
<ol> <li>If a major problem is identified among our customers we would implement a response immediately.</li> </ol>	5.35	1.38	133
17. The activities of the different sections in this department are well coordinated.	4.53	1.48	133
18. Customer complaints fall on deaf ears in this department. (R)	2.59	1.65	133
<ol> <li>Even if we came up with a great idea, we probably would not be able to implement it in a timely fashion. (R)</li> </ol>	3.34	1.60	133
<ol> <li>When we find that customers would like us to modify a service, the section involved make concerted efforts to do so.</li> </ol>	5.20	1.21	132
Intelligence Dissemination	45.57	8.85	131
Market Orientation	95.80	17.07	123
Performance scale	Mean	Std Dev	N
The overall performance of this department in the last three years has been:	5.18	1.20	131
In relation to the resources committed the improvements achieved by this department in the last three years has been:	5.46	1.15	131
<ol><li>The level of customer service provided by this department in the last three years has been:</li></ol>	5.27	1.12	130
4. The level of cost effectiveness achieved by this department in the last three years has been:	5.40	1.33	131

(R.) Indicates a negatively worded item.

TABLE 2
REGRESSION OF PERFORMANCE AGAINST MARKET ORIENTATION

	-	
Multiple R	0.583	
R <sup>2</sup>	0.340	
Adjusted R <sup>2</sup>	0.335	
Standard Error	3.337	

## Analysis of Variance

	DF	Sum of Squares	Mean Square	F	Sig. F
Regression	1	672,076	672.076	60.371	0.000
Residual	117	1302.496	11.132		

### Variables in the Equation

Variable	В	SE B	Beta	T	Sig. T
MO	0.139	0.018	0.583	7.770	0.000
Constant	7.910	1.730	4.571	0.000	

The sum of the scales for performance and market orientation together with its dimensions were computed. Table 2 reports the results of a regression that considers the link between market orientation and performance. It indicates that market orientation does have a significant effect on performance providing an adjusted R of 34.0%. When the overall market orientation variable is replaced by the three dimensions of market orientation, an adjusted R of 32.6% (F = 29.49; p < 0.000) is obtained with intelligence gathering and responsiveness being found to be significant.

## DIFFERENCES IN TERMS OF SIZE

The public sector organisations from which respondents came were distinguished in terms of size by using the number of employees they had. To do this, the sample of 134 was split into three equal groups consisting of organisations that employed between 2 to 119; 120 to 1499; and 1500 and more employees. The respective scores for intelligence gathering (IG), dissemination (ID), responsiveness (RE), overall market orientation (MO) and performance (Perf) were gathered. These are shown in Table 3 and indicate that the larger the public sector organisation the lower is

the overall scores obtained for each of these aspects. An ANOVA confirmed that the differences for each variable among the three size groupings are statistically significant.

#### DIFFERENCES BY CATEGORY

Mintzberg (1996) prefers not to use the term customers in the case of public sector firms and distinguishes between clients, citizens and subjects. Clients are recipients of direct professional service like education; but citizens also have rights and benefit indirectly from various parts of the public infrastructure such as: social (e.g. museums), physical (e.g. roads and ports), economic (monetary policy), meditative (e.g. civil courts), offshore (e.g. embassies), and government (e.g. election machinery). However, as subjects individuals also have obligations towards the state being subjected to policing and regulatory agencies and may have to serve the country. Our sample consisted exclusively of public agencies and organisations that offered direct and indirect services. Out of 134, five of the respondents did not provide the name of their department while from the remaining 129 that could be classified, 23 or (17.8%) could be described as offering client services while the

TABLE 3
RESULTS OF ANOVA ON RESPONDENT DIFFERENCES BY SIZE IN TERMS OF NUMBER OF EMPLOYEES

	Items		employees =44		employees 45		employees =45	F
		Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	
IG	6	30.70	5.97	28.23	5.30	26.30	5.34	6.64**
ID	5	24.66	5.78	22.10	5.96	19.45	4.69	9.57***
RE	9	49.74	8.38	45.55	8.95	41.61	7.81	10.25***
МО	20	104.45	16.53	95.77	17.95	88.00	13.23	10.60***
Perf	4	22.63	4.24	21.56	3.30	20.00	4.25	4.80**

<sup>\* =</sup> p < 0.05

TABLE 4
MANN-WHITNEY U TESTS OF SIGNIFICANT DIFFERENCE BETWEEN 'CLIENT' AND 'CITIZEN' TYPE OF PUBLIC ORGANISATIONS

	Items	Client type N=23		Citizen type N=106		U
		Mean	Std Dev	Mean	Std Dev	
IG	6	30.96	5.55	27.52	5.88	729.5*
ID	5	24.22	6.56	21.37	5.55	854.5*
RE	9	48.96	7.96	44.63	8.97	848.5*
МО	20	105.18	15.69	93.00	16.60	615.5**
Perf	4	22.83	3.54	20.73	4.15	802.0°

p = p < 0.05

## DISCUSSION

The research represents an application of the

MARKOR scale to the public sector and provides empirical support for the basic tenet of the marketing discipline that argues for the better performance of organisations that adopt a market orientation. The research confirms a significant link between market orientation and performance (Adjusted R<sup>2</sup> = 0.335; p < 0.001) among Australian public service organisations. The results are based on instruments that have shown strong levels of reliability. It appears that public sector organisations that adopt a market orientation are able to successfully drive their organisations forward with positive performance results. The research underlines the importance for

<sup>\*\* =</sup> p < 0.01

<sup>\*\*\* =</sup> p < 0.001

<sup>\*\* =</sup> p < 0.01\*\*\* = p < 0.001

remaining 106 offered citizen services. Given the relatively small number of respondents in the client services category Mann-Whitney U tests were run on the main variables in this study. These indicated a significant difference between the two categories with organisations serving clients having higher levels of market orientation and performance as shown in Table 4.

public sector managers to devote resources to ensuring the gathering, dissemination and responsiveness to market intelligence that is collected.

It is common knowledge that public sector organisations spend considerable resources on intelligence generation activities such as customer surveys and information processing technology. The results of the analysis seem also to bear this out with lower scores for dissemination. Moreover, the scores for the other dimensions deteriorate, as public sector organisations become larger. It may be that the bureaucratic organisational structure that is typical of the public sector is an important impediment to intelligence dissemination. Despite strong reported scores for responsiveness this may not be too significant as not much intelligence may be getting through to respond to. In any case it is likely that an element of bias is involved in the case of the responsiveness scores obtained given the nature of MARKOR where this dimension is completed by managers. In this respect it may be an interesting idea to administer the responsiveness part of MARKOR (or some suitably amended battery) directly to customers who would provide a more accurate picture of the situation. Such an approach is feasible if one is looking at the market orientation of a single public sector organisation but it becomes more difficult when an entire sector is examined. There is definitely scope for other dimensions in understanding the level of market orientation of an organisation. Organisational structure, which has already been touched upon, is undoubtedly an important consideration. A key aspect is the attitude of top management to marketing and a market orientation. Understanding this and using a suitable measure to determine the market orientation of top management would go a long way. At the end of the day unless these people believe in marketing and are committed to it the organisation can never be market oriented. The many problems relating to resistance to change and the sort of initiatives introduced are often a consequence of particular outlooks and orientations.

The research has a number of limitations. First,

consideration needs to be given to further variables that have an effect on performance as well as variables that have a direct effect on market orientation. Secondly, use has been made of a particular conceptualisation of market orientation that may not be sufficiently elaborate, particularly for organisations in the public sector. Thirdly, the instrument asks executives rather than customers. Fourthly, the results of confirmatory factor analysis indicate only marginally acceptable fit indices that raise issues about certain aspects of validity of the MARKOR instrument. Fifth, the use of an indirect measure of performance may not precisely and adequately reflect actual performance. Furthermore, in understanding performance it is necessary not only to look at the level of market orientation of an organisation as numerous other variables are at play and have an effect on performance.

In order to arrive at some agreement as to how best to measure public sector organisations it may first be useful to have a commonly agreed typology. The public sector includes many diverse organisations. On one side there are the quasi commercial/ autonomous entities such as some of the utilities. On the other side, there are those that have little autonomy, like government departments, who have no independent sources of income and spend only allocated budgets. Mintzberg (1996) has sought to characterise organisations on the single basis of groups served and distinguishes between clients, citizens and subjects. While such a categorisation is useful as it adopts a 'customer' approach, any categorisation adopted is likely to be most effective if it is multidimensional. Each resulting cluster from such a multidimensional approach is likely to represent a relatively homogenous grouping of public sector organisations that are inclined to pursue similar objectives. These objectives can in turn act as a basis on which more acceptable performance criteria can be determined. Given the nature of public sector organisations the data collected should be the 'soft' type. In any case it is perceptions that count for beneficiaries. Asking managers to assess their own organisation has its uses but is inevitably prone to result in over-scoring and the introduction of

a bias. Collecting soft data from beneficiaries of organisations in the public sector is probably the key since it is they who are the recipients of the offerings of public sector organisations. They should therefore have the final say in assessing these organisations.

There are a number of directions for further research that can be pursued. A priority should be to develop a clearer conceptualisation of the performance construct for the public sector together with the further elaboration of a measure which has the desired psychometric properties. A further direction for research could be to investigate the antecedent constructs to market orientation and whether these also hold for organisations in the public sector. For example, Jaworski and Kohli (1993) report a number of antecedents among SBU's in the US, that include top management emphasis, interdepartmental dynamics relating to conflict and connectedness as well as organisational system variables of centralisation and reward systems.

#### REFERENCES

- Armstrong J. S., Overton T. S., (1977), Estimating nonresponse bias in mail surveys, *Journal of Marketing Research*, XIV, August, 396-42.
- Bourn J., (1992), Evaluating the performance of central government, in Plooitt C., Harrison S., Handbook of Public Service Management, Blackwell: Massachusetts, 25
- Churchill G. A. Jr., (1979), A paradigm for developing better measures of marketing constructs, Journal of Marketing Research, XVI, February, 64-73.
- Churchill G. A. Jr., Peter J. P., (1984), "Research design effects on the reliability of rating scales: A meta analysis", Journal of Marketing Research, XXI, November, 360-375.

- Connolly T., Conlon E. J., Deutsch S. J., (198), Organizational effectiveness: A multiple consistency Approach, Academy of Management Review, 5, May, 223-236.
- Cronbach, L. J., (1951), Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16, 3, September, 297 - 333.
- Davis D., Morris M., Allen J., (1991) Perceived environmental turbulence and its effect on selected entrepreneurship, marketing and organizational characteristics in Industrial firms, Journal of the Academy of Marketing Science, 19, 1, 43-51
- Deshpandé R., Farley J. U., Webster F. E. Jr., (1993), Corporate culture, customer orientation and innovativeness in Japanese firms: A quadrad analysis. *Journal of Marketing*, 57, January, 23-37.
- Dess G. G., Robinson R. B., (1984), Measuring organizational performance in the absence of objective measures: The case of the privatelyheld firm and conglomerate business unit, *Strategic Management Journal*, 5, Jul-Sep, 265-273.
- Etzioni A., (1964), Modern organizations, Prentice -Hall, Englewood Cliffs, NJ.
- Fisk, R. P., Brown, S. W. and Bitner, M. J., (1994), "Tracking the evolution of the services marketing literature", *Journal of Retailing*, Vol. 69, No. 1, Spring, 61-103.
- Georgopolous B. S. Tannenbaum A. S. (1957), The study of organizational effectiveness, American Sociological Review, 22, October, 534-54.
- Graham P., (1995), Are public sector organizations becoming customer oriented? Marketing Intelligence and Planning, 13,1, 35-47.

- Grönroos C., (1991), The marketing Strategy Continuum: Towards a marketing concept for the 1990's, Management Decisions, 29, 1, 7-13.
- Hayes R. A, Abernathy N. J, (1980), Managing our way to economic decline, *Harvard Business* Review, Jul-Aug, 67-77.
- Hensher D. A., Waters W. G., (1993), Using Total Factor productivity and Data envelopment Analysis for performance comparisons among government enterprises: Concepts and Issues, *Institute of Transport Studies*, Working paper 1, Graduate School of Business, University of Sydney.
- Hofer C. W., Sandberg W. R., (1987), Improving new venture performance: some guidelines for success, American Journal of Small Business, 12, (Summer), pp 11-25.
- Houston F. S, (1986), The marketing concept: What it is and what it is not, *Journal of Marketing*, 5, April, 81-87.
- Jaworski B. J., Kohli A. K., (1993), Marketing orientation: Antecedents and consequences, Journal of Marketing, 57, July, 53-7.
- Kaldor A. G., (1971), Imbricative marketing, Journal of Marketing, 35, April, 19-25.
- Kaplan R. S., (1983), Measuring manufacturing performance: A new challenge for managerial accounting research, *The Accounting Review*, 58, October 686-75.
- Kohli A. K., Jaworski B. J., (1990), Market orientation: The construct, research propositions, and managerial implications, *Journal of Marketing*, Vol. 54, April, 1-18.

- Kohli A. K., Jaworski B. J., Kumar A., (1993), MARKOR: A measure of market orientation, Journal of Market Research, XXX, November, 467-477.
- Kotler P., (1972), A generic concept of Marketing, Journal of Marketing, 35, April, 46-54.
- Kotler P., (1991), Marketing Management Analysis, Planning, Implementation and Control, New Jersey: Prentice-Hall, 7ed.
- McGee L. W., Spiro R. L., (1988), The marketing concept in perspective, *Business Horizons*, 31, May-Jun, 3, 4-45.
- Mintzberg H., (1996), Managing Government Governing Management, Harvard Business Review, May/June, 75-83.
- Narver J. C., Park S. Y., Slater S. F., (1992), Relative Emphasis in a market orientation and its effect on business profitability, AMA Summer Educators Conference proceedings, Chicago: American Marketing Association.
- Narver J. C., Slater S. F., (1990), The effect of a market orientation on business philosophy, *Journal of Marketing*, 54, October, 2-35.
- Nunnally J. C., (1978), Psychometric Theory, New York: McGraw Hill, 2 ed.
- Pearce J. A., Robbins D. K., Robinson R. B., (1987), The impact of grand strategy and planning formality on financial performance, Strategic Management Journal, 8, Mar-Apr, 125-134.
- Pennings J. M., Goodman P. S., (1977), Toward a workable framework, in Goodman P. S. and Pennings J. M. (eds), New perspectives on organizational effectiveness, Jossey-Bass, San Francisco, CA, 146-184.

- Peters T. J., Waterman R. H., (1982), In search of Excellence, New York: Harper & Row.
- Pfeffer J., Salancik G., (1978), The external control of organizations, Harper & Row, New York.
- Pitt L., Caruana A, Berthon P. R, (1996), Market orientation and business performance: some European evidence, International Marketing Review, 13, 1, 5-18.
- Roberto E., (1992), Applying a Marketing Model in the Public Sector in O'Faircheallaigh C., Graham P, and Warburton J, Service Delivery and Public Sector Marketing, Australia: Macmillan.
- Ruekert R. W., (1992), Developing a market orientation: An organisational strategy perspective, International Journal of Research in Marketing, 9, No. 3, 225-245.
- Runyon K. E., (1980), Consumer Behaviour, 2ed., Ohio: Bell & Howell.
- Shapiro B. P, (1988), What the hell is 'Market oriented', Harvard Business Review, 6, Nov-Dec, 119-125.
- Slater S. F. Narver J. C., (1994), Does competitive environment moderate the market orientation - performance relationship, Journal of Marketing, 48, (January) 40-55.

- Steers R. M., (1975), Problems in the measurement of organizational effectiveness, Administrative Science Quarterly, 2, (December), 546-558.
- Thompson J. D., (1967), Organizations in Action, McGraw Hill, New York.
- Venkatraman N., Ramanujam V., (1986), Measurement of business performance in strategy research: A comparison of approaches, Academy of Management Review, 11, October, 81-814.
- Walsh K., (1994), Marketing and Public Sector Management, European Journal of Marketing, 28, 3, 63-71.
- Webster F. E. Jr., (1988), The rediscovery of the marketing concept. Business Horizons, 31, May-Jun, 3, 29-39.
- Webster F. E. Jr., (1992), The changing role of marketing in the corporation, Journal of Marketing, 56, October, 1-17.
- Yuchtman E., Seashore S. E., (1967), A system resource approach to organizational effectiveness, American Sociological Review, 32, December, 891-93.