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The impact of internal and external market orientation on performance in local public organisations

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Abstract

Purpose – This study aims to build on and extend the literature of market orientation by examining the impact of sub-dimensions of both internal and external market orientation on financial and non-financial performance in the local public sector context.

Design/methodology/approach – In line with previous studies on market orientation, a quantitative research design was adopted. The data collection was performed through a mail survey of a sample of local Portuguese public organisations (municipality executive board members). Structural equation modelling was used as a means to analyse the hypothesised relationships.

Findings – Six out of 12 hypotheses are supported. Concerning the sub-components of external market orientation, the study finds that the dissemination and responsiveness of external information impacts strongly on non-financial performance. In turn, external information generation and responsiveness impacts positively on financial performance. With respect to internal market orientation, results revealed a lower impact of different sub-dimensions on performance. Specifically, the only dimension that impacts positively on organisational performance (financial and non-financial) is internal information generation. This reinforces the view that there is a need to strengthen internal information dissemination and responsiveness to enhance organisational performance.

Originality/value – This paper offers original and unique findings and to the best of the authors' knowledge this research is one of the few studies addressing the role of internal and external sub-dimensions of market orientation on performance in the local public sector. The findings of this study add weight to the recent emphasis on disaggregate approaches to (internal and external) market orientation-performance link.

Keywords Market orientation, Internal marketing, Organizational performance, Local public sector

Paper type Research paper



Introduction

Worldwide, public sector organisations are facing a vast number of unpredictable challenges. A process of deep transformation has been encouraged by the introduction of market-style supply associated with the growth of contract-based services, and concepts such as efficiency, effectiveness, accountability, transparency, value for money and market orientation, which rapidly transposed the domain of the private sector and expanded it to public and non-profit sectors (Harris, 2003; Macedo and Pinho, 2006). Basically, this trend follows the New Public Management (NPM), which in its simplest form views the government from the standpoint of markets and customers. That is, public organisations should adopt practices, ranging from “scientific management” to “total quality management” that have been found relevant in the private sector (Denhardt and Denhardt, 2000).

Building on this point, we concur with several authors who argued that “key elements of the practice of the NPM included an attention to the lessons from private sector management, a focus upon entrepreneurial leadership... and the growth of the use of markets and competition as a key allocative mechanism for delivering public services” (Osborne, 2010, p. 2). Besides, it has been recognised that the growth of a firm oriented culture led public and non-profit organisations alike to become preoccupied with meeting demands of “sovereign consumers” (Keat and Abercrombie, 1991). The effects of worldwide changes and challenges arising from the application of the fundamental tenets of NPM were also addressed by Hood (1995).

Portuguese public administration is not an exception to this ongoing global trend. In fact, several initiatives have been taken to provide better public service, to increase the level of education and training of public servants and to improve the use of the available resources, raising efficiency and efficacy (Araújo, 2001). As acknowledged by several authors, Portuguese public administration is being renovated in order to bring about a new organisational model that is less bureaucratic, more efficient and more needs-based with respect to citizens and other stakeholders (Pinho *et al.*, 2007; Rodrigues and Pinho, 2010). The movement to customer/citizen-centred government provides the rationale to emphasise the importance of strategic marketing and, as a result of that, the opportunity to integrate the concept of internal and external market orientations within the context of public sector agencies. Relevant literature acknowledges that, as in the case of business firms, there are numerous advantages associated with the adoption of a market orientation in the context of public and non-profit organisations. More specifically, it simplifies not only the design of the most appropriate services to the target public but also provides superior customer value leading to major performance (Andreasen and Kotler, 2003; Pinho *et al.*, 2007).

The market orientation (MO) concept, which has gained an outstanding position in the marketing literature, is still a research priority (Cano *et al.*, 2004), particularly in local public organisations. The main research stream on market orientation-performance relationship emphasise the exchanges that occur between the organisation and its external markets. Some scholars, however, have paid increasing attention to the need to integrate an internal and external focus (Lings, 1999, 2004). It appears, therefore, that an internal focus on marketing (internal marketing) is important to promote the organisation internally to its employees and, at the same time, a better adaptation of the employees to organisational procedures and changes (Gummesson, 2000). It is relevant to note that, the successful public service providers

lies both in governing and responding to the service expectations of consumers and in training and motivating the organisation to interact positively with the consumer (Osborne, 2010).

The primary goal of this article is to examine, from an integrated perspective, the impact of each internal and external market orientation dimension on organisational performance in the public sector administration context, and as a consequence, to address some New Public Management principles (Rod and Ashill, 2010). It is assumed that a market orientation consists of a group of activities, which translate a marketing philosophy into practice through the generation, dissemination and response to market information (Kohli and Jaworski, 1990). Implementing an internal and external market orientation in public organisations requires the alignment of people, processes, and policies in a transformational manner with the ultimate objective of creating advantages for both publics: employees and customers/citizens (Rodrigues and Pinho, 2010).

Evidence from various studies also indicates that both internal and external market orientation have significant effects on different measures of organisational performance. Most existing studies focus mainly on the overall measure of market orientation (internal/external), and far less attention has been paid to the impact of each market orientation component on organisational performance (Narver and Slater, 1990; Han *et al.*, 1998; Noble *et al.*, 2002).

Concerning organisational performance in the public sector, it may be worth noting that the adoption of both financial and non-financial indicators is a better approach when considering the overall performance of an organisation (Venkatraman and Ramanujam, 1986). Moreover, it should be emphasised that some measures of performance are selected by governments and their representatives, so in some cases their choice reflects the priorities of powerful groups within the state (Andrews *et al.*, 2011). The present study builds on and extends the literature of market orientation in three ways.

First, this study departs from existing literature by taking a sub-dimension approach to internal and external market orientation. Most of the literature to date has used an aggregated approach (Furrer *et al.*, 2003); however, the study of the independent effects of market orientation dimensions (internal/external) on organisational performance has not been researched, apart from several notable exceptions (Dawes, 2000; Noble *et al.*, 2002; Sin *et al.*, 2005; Zhou *et al.*, 2007; Tsiotsou, 2010).

Second, the study extends current research by examining the effects of the implementation of market-oriented behaviours in the context of local public organisations. A balance between internal and external market orientations will provide a different view and a unique opportunity for local public sector organisations to achieve their mission and improve their performance.

Third, the analysis of the impact of market orientation dimensions both internal and external to organisational performance is examined. This objective is in line with a number of scholars in the areas of strategic management and organisational marketing who have recognised the importance of achieving a balance between an internal and external focus (Lings, 1999). Examining an internal market orientation perspective contributes to a better understanding of an organisation, promotes its services internally, to employees, and at the same time contributes to a better adaptation of employees to organisational procedures and changes (Gummesson, 2000). By doing this, employees are better prepared to deal with external environmental challenges increasing chances of success of the organisation.

In the remaining parts of this paper, the conceptual framework and research hypotheses are reviewed. The methodology is then explained and the findings are explored along with a discussion of theoretical and managerial implications. Limitations of the study and future research directions are identified.

conceptual framework and research hypotheses

The need to respond to profound changes that occur in most societies leads public managers and academics alike to pay increasing attention to the way organisations develop and maintain their focus on their customers and markets (Appiah-Adu and Ranchhod, 1998). However, focusing on the external customer no longer seems to be sufficient to achieve organisational goals and objectives. If employees lack customer-conscious attitudes and behaviours, and if internal systems and processes are not focused on customer-conscious objectives, marketing approaches directed exclusively at external customers are likely to fail.

Accordingly, a balanced perspective should be taken into account, particularly by considering the relative importance of internal and external market orientation dimensions on performance. This can be better understood through the conceptual model proposed in Figure 1.

As can be seen in Figure 1, two major relationships can be found. First, the impact of internal market orientation dimensions on both financial and non-financial organisational performance. Second, the impact of external market orientation dimensions on both financial and non-financial organisational performance.

External market orientation dimensions and organisational performance

For the past few decades, the concept of market orientation has dominated the theory and practice of marketing strategy. There is broad recognition that market orientation is the implementation of the marketing concept (Kohli and Jaworski, 1990; Narver and Slater, 1990). As a result, a market-oriented organisation is one whose activities incorporate market-related activities.

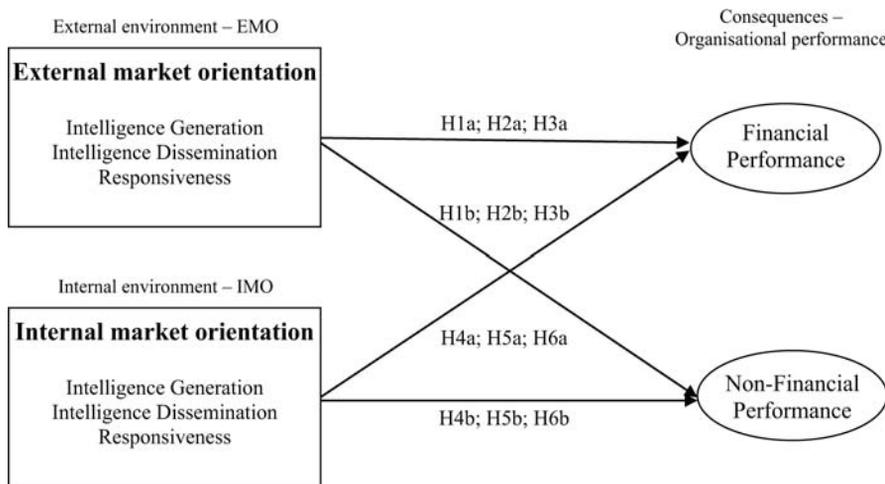


Figure 1.
Proposed conceptual model – the impact of external and internal market orientation on financial and non-financial performance

The systematic study of market orientation began at the beginning of the 1990s and has been conceptualised in the literature in different but related approaches. However, two conceptualisations of market orientation have gained wide support (Piercy *et al.*, 2002). The behavioural-based view of market orientation developed by Kohli and Jaworski (1990) and the culture-based interpretation of market orientation tested by Narver and Slater (1990). In this study, the approach of Kohli and Jaworski (1990) on market orientation has been adopted.

On the basis of their behavioural conceptualisation, Kohli and Jaworski (1990) have identified three main sub-dimensions of market orientation which are:

- (1) organisation-wide generation of market intelligence relevant to current and future customer needs;
- (2) cross departmental dissemination of the intelligence; and
- (3) organisation-wide responsiveness to it.

Different activities are associated to each market orientation dimension (Li and Calantone, 1998). For instance, the first component called market intelligence generation refers to the process of continuous monitoring and gathering of information on both the current and future needs of customers, and analysis of the exogenous factors that may influence those needs (the impact of government regulation, competition, technology and other environmental forces). The second component refers to the dissemination of market intelligence, which is the vertical and horizontal flow and sharing of information gathered at the early stages of an organisation. The last component of external market orientation is called responsiveness and includes actions involving the design and selection of products and services, the production, distribution and promotion of the product.

Over the last few years, there have been a vast number of studies examining the relationship between the degree of market orientation and organisational performance. For example, there are several studies that demonstrate the existence of a positive and significant relationship between these two concepts (see the meta-analysis conducted by Cano *et al.*, 2004 and Kirca *et al.*, 2005 for a review). In other words, most previous studies assume that the implementation of a marketing philosophy will almost inevitably lead to superior organisational performance (Piercy *et al.*, 2002). This relies on the fact that a market-oriented posture creates a favourable environment to fulfil the customer's needs, thus causing a positive impact on customer satisfaction (Kara *et al.*, 2004). Similarly, in the context of the local public sector, prior research has also demonstrated a direct causal relationship between (external) market orientation and organisational performance (Cervera, 1998; Caruana *et al.*, 1998; Cervera *et al.*, 2001; Rodrigues and Pinho, 2010).

Although previous research has theoretically claimed – and provided empirical support for – a positive relationship between market orientation and organisational performance, there are a number of issues that have hardly been explored by relevant literature such as the impact of the sub-dimensions of market orientation on non-financial and financial indicators of performance. The assessment of organisational performance is a recurring theme in the management and marketing literature and has been under extensive empirical investigation. In the vast majority of market orientation studies the organisational performance construct has mainly been operationalised through financial measures of performance (Jaworski and Kohli, 1996). However, this perspective has been criticised by several authors (Brignall and Ballantine, 1996). Due to this drawback and in order to provide an integrated

perspective of organisational performance, several authors also included non-financial indicators (Panigyrakis and Theodoridis, 2009).

Taking all of the above into account it is also important to emphasise another issue in market oriented research, which is related to a sub-dimension market-oriented approach. This concern can be linked with a position taken by Narver and Slater (1990) who have called for future studies that examine “the effect of the proportions of the components within a given magnitude of market orientation” (Narver and Slater, 1990, pp. 33-34). In order to accommodate this issue, recent research has addressed a decomposed approach of the market orientation construct emphasising the relative value of its different sub-components (Han *et al.*, 1998; Dawes, 2000; Voss and Voss, 2000; Lukas and Ferrell, 2000; Noble *et al.*, 2002; Tsotsou, 2010). In line with this, Carver (1989) pointed out that with this approach a greater predictive capability of individual components of the construct of market orientation can be achieved.

Even so, the need to examine a sub-dimension approach of market orientation can be theoretically justifiable (Dawes, 2000) and more empirical research is required, especially because the findings concerning the role of the three market orientation components has not been consistent in the literature (Tsotsou, 2010). The importance and the role of the three market orientation dimensions suggested by Narver and Slater are questioned and the empirical studies to date provide mixed results about their contributions to the construct (Zhou *et al.*, 2007). In some studies (Dawes, 2000; Noble *et al.*, 2002) the competitor orientation component is the strongest determinant of performance; other studies (Balakrishnan, 1996) reported that both customer and competitor orientation are positively associated with performance. An indirect relationship between customer orientation and performance through its effect on innovativeness was also considered by Han *et al.* (1998). In the research of Sin *et al.* (2005), the only market orientation component that shows a significant positive effect on (market and overall) business performance is customer orientation. In the same vein, Zhou *et al.* (2007) report of the three market orientation dimensions only customer orientation is significantly associated with and impacts on performance. Similarly, Tsotsou (2010) also pointed out that the customer orientation was the only sub-dimension that revealed a direct impact on organisational performance.

Additionally, by taking a sub-dimension approach, most studies on the topic have used the Narver and Slater (1990) components of market orientation, whereas the Kohli and Jaworski elements of market orientation are less studied. Moreover, it should be emphasised that most sub-dimension approaches are typically confined to for-profit organisations and produce an undesirably simplified approach to the reality since they capture only a partial or biased picture of this reality (Day and Wensley, 1988; Tsotsou, 2010).

Against this backdrop, this study investigates the market orientation-performance relationship within a specific local public sector, taking the different sub-components of the market orientation construct proposed by Kohli and Jaworski (1990). Thus, the following hypotheses are offered:

- H1.* External information generation (IG) has a direct, positive and significant impact on financial performance (*H1a*) and on non-financial performance (*H1b*).
- H2.* External information dissemination (ID) has a direct, positive and significant impact on financial performance (*H2a*) and on non-financial performance (*H2b*).

H3. External responsiveness (R) has a direct, positive and significant impact on financial performance (H3a) and on non-financial performance (H3b).

It is widely recognised that the concept of market orientation constitutes the cornerstone of both marketing and strategic management (Greenley, 1995) and, traditionally, it reflects an external orientation of the organisation toward their markets. This study goes further by simultaneously analysing this external perspective and an internal view of the organisation. This view is particularly important since in the last few years, particularly in the for-profit sector, there has been an increasing body of literature supporting the theory that internal marketing activities are vital to external marketing strategy and successful orientation (Grönroos, 1981; Ballantyne, 2000; Rafiq and Ahmed, 2000).

Internal market orientation components and organisational performance

Internal marketing is considered a key factor not only to attain service excellence but also to ensure the success of external marketing by strongly motivating public employees (Greene *et al.*, 1994). The concept of internal marketing originally emerged from the services marketing literature, and was proposed as a solution to the problem of delivering consistently high service quality (Rafiq and Ahmed, 2000). Since its introduction in the 1980s by Berry (1981) and Grönroos (1981), internal marketing has gained the attention of academic professionals in the area of marketing and other fields (Varey and Lewis, 1999). One important definition of internal marketing was that presented by Rafiq and Ahmed (2000, p. 454) who defined this construct as “the planned effort using marketing as an approach to overcome organisational resistance to change and to align, motivate and inter-functionally co-ordinate and integrate employees towards the effective implementation of corporate and functional strategies in order to deliver customer satisfaction through a process of creating motivated and customer oriented employees”.

Internal marketing is defined as a set of employee-friendly managerial behaviours (Lings and Greenley, 2005), and its implementation has been operationalised by recent studies through the internal market orientation construct (Panigyrakis and Theodoridis, 2009). Internal market orientation is a mechanism for instilling a “people” orientation into an organisation, and a prerequisite for improving and strengthening the quality of public services among employees (Papasolomou, 2006) within public and non-public organisations.

Conceptually, this construct is similar to external market orientation (Lings, 2005). With the aim of adapting this construct to internal environment, Lings and Greenley (2001), Lings (2005) acknowledged that the same three behavioural components proposed by Kohli *et al.* (1993) are at the core of the internal market orientation construct (Kaur *et al.*, 2009). Therefore, information generation is relevant to the internal market as it relates to employees’ perceptions of the inputs to their jobs, the outputs (what they receive) and the equity of this exchange; information dissemination between management and employees and among managers relates to information generated internally about the needs of employees, and their requirements, which is shared and communicated across departments; 3) responsiveness relates to the implementation of appropriate strategies and action plans, the form of required job designs, salaries, perks, share in profits, and non-monetary benefits (Lings and Greenley, 2001).

Research on internal market orientation is relatively recent (Gounaris, 2008) and research in this field still remains very conceptual, especially those studies undertaken

between the 1980s and 1990s (Panigyrakis and Theodoridis, 2009). It is important to emphasise that the implementation of internal marketing involves the application of marketing inside the organisation and has been associated with specific organisational objectives. That is, its effectiveness should correspond to successful marketing initiatives (Gounaris, 2006) with internal and external consequences for the organisation (Lings and Greenley, 2005). However, from an internal perspective, it is noteworthy that managers' behaviour towards their subordinates influences their attitudes and behaviours (Ahmed and Rafiq, 2003) impacting, for instance, on job satisfaction (Lings and Greenley, 2005) and organisational commitment (Piercy and Morgan, 1990). From an external perspective, it may influence customer satisfaction and loyalty (Lings and Greenley, 2005; Kaur *et al.*, 2009), service quality (George, 1990; Lings, 2000) and financial performance (Tanshuaj *et al.*, 1988).

Recently there have been some studies that attach importance to the under-examined relationship between the internal marketing implementation and financial and non-financial performance in the commercial sectors (Panigyrakis and Theodoridis, 2009). The importance of this association is widely recognised. However, two aspects can be pointed out as under-explored areas: the consideration of the individual dimensions of the internal market orientation construct, and the analysis of this relationship in the public sector.

So taking the above into account, this study adopts a sub-component approach by considering the three aforementioned dimensions of internal market orientation and examines their impact on organisational performance. Although the use of aggregated approaches of market orientation is not completely original, in previous literature (Cheng and Krumwiede, 2010) the link between different internal market orientation dimensions and organisational performance is far from being fully explained. This is particularly relevant if we consider the public sector context.

One of the few studies that have addressed this issue was undertaken by Tortosa *et al.* (2009) who analysed the banking setting. These authors examined the influence of internal marketing on satisfaction of the front-line personnel, on one hand, and on the other, they analyse the related external aspects of the organisation, associated with perceived quality of service and organisational performance.

Based on the preceding discussion, it is assumed that internal market orientation dimensions could have an important impact on financial and non-financial indicators of public sector organisational performance. Therefore, the following hypotheses are proposed:

- H4.* Internal information generation (IG) has a direct, positive and significant impact on financial performance (*H4a*) and on non-financial performance (*H4b*).
- H5.* Internal information dissemination (ID) has a direct, positive and significant impact on financial performance (*H5a*) and on non-financial performance (*H5b*).
- H6.* Internal responsiveness (R) has a direct, positive and significant impact on financial performance (*H6a*) and on non-financial performance (*H6b*).

Methodology

Data collection procedure

The local public sector, specifically municipal authorities were selected due to their proximity to citizens and due to the vast changes that have been occurred in this specific

sector of public administration. The Portuguese local public sector, which is the focus of the present study, is comprised of 308 Municipalities. Relying on a convenience sample procedure, it was decided to select only those Municipalities of the North Region of Portugal due to its overall country representativeness and due to constraints associated with time and resources. Executive board members were chosen as the unit of analysis for this study (a total of 354 members). The reason for this choice is that they are in a better position to evaluate organisational dynamics as they participate actively in the achievement of organisational objectives. Focusing on the executive board members made it possible to access relevant information due to their prominent role in defining tactical and strategic activities. Of the 354 self-administered questionnaires mailed to executive board members, a total of 118 completed questionnaires were returned, yielding a usable response rate of 33 per cent. This response rate compares favourably with other studies on market orientation (Jaworski and Kohli, 1993).

Non-response bias was assessed by comparing early to late respondents (Armstrong and Overton, 1977). We define early respondents as the first 80 per cent to return questionnaires and late respondents as the last 20 per cent. Univariate tests of significance (*t*-tests) were conducted and no significant difference was found between the two sets of respondents along the most important constructs. Thus, non-response bias did not appear to be a serious problem in the current study.

Measurement scales

In order to develop appropriate measures for this study, standard psychometric scale construction procedures were followed. Most scales used in this study have been sourced from literature in the field of public organisations and, in some cases, modified for the current context. Several procedures were developed to improve content validity, and in particular the questionnaire was pre-tested to ensure the appropriate meanings. The pre-test was used with academics and practitioners and helped to clarify ambiguous questions. Their comments and suggestions were taken into account in the final version of the questionnaire. All construct measures used in this study were rated on a five-point Likert scale.

External market orientation. The development of this measurement scale was based on Cervera *et al.* (2001) who adapted the original scale of Kohli *et al.* (1993) to the local public sector. Three dimensions have been considered, namely:

- (1) external information generation;
- (2) external information dissemination; and
- (3) external information response.

Some changes were made to the items to suit the characteristics of the sampled organisations.

Internal market orientation. Following the approach developed by Lings and Greenley (2005) this scale included 16 items. In operationalizing this construct, Lings and Greenley (2005) modified the internal market orientation scale developed by Kohli and Jaworski (1990) for the transaction context between employees and employers.

Organisational performance. The existence of multiple, and sometimes conflicting objectives, makes performance assessment difficult for public sector managers. However, two sets were considered to measure this construct. The first set was financial based, including the Common Assessment Framework, particularly: degree of

budgetary accomplishment, degree of attainment of financial objectives, growth in income, size of profit/surplus, efficient use of assets and funds and degree of activities performed to generate funding/income; The second set was non-financial based and included the following items: organisational labour climate, degree of employees' skills and competencies, and citizen satisfaction with services provided by the municipality.

Relying on subjective (rather than objective) measures appears to be justified since previous studies have found a strong correlation between subjective assessments and organisational performance (Dess and Robinson, 1984; Slater and Narver, 1994).

Findings

Sample profile and the measurement model results

From a total of 118 executive board members, the characteristics of the sample indicated that the majority of the respondents were male, age between 36 to 45 years old, with a high academic level. Of the 70 Municipalities represented in the sample the number of full-time employees ranged from 56 to 3,266. In terms of resident population of the Municipalities the number of inhabitants varied from 3,378 to 300,868.

A series of tests were undertaken to ensure that the internal and external market orientation scales and organisational performance scale retained their psychometric properties when employed in a Portuguese setting. To purify the initial measures and to ensure the homogeneity of original scales, several item-to-item correlations were performed and items that showed a low item-to-total correlation or high cross-loadings were dropped from the analysis.

The structural equation modelling (SEM) was considered to be the most appropriate analytical methodology for testing the proposed model. Following Anderson and Gerbing's (1988) suggestions, the analysis was conducted in two steps. First, a measurement model was analysed through confirmatory factor analysis (CFA); second, the structural model was evaluated to assess the hypothesised relationships between constructs.

Initial data screening and preparation was accomplished using EQS 6.1 (Bentler, 2006). Mardia's coefficient was used to measure multivariate kurtosis and provided an indication that the data are relatively free from multivariate kurtosis. Additionally, all responses exhibited good univariate normality with all distributions indicating a skewness less than 1 and a kurtosis less than 2 in absolute value. These values are well within the robust thresholds for maximum-likelihood estimation. To address the common method variance bias, we applied Harman 1-factor test (Podsakoff and Organ, 1986) on all measurement variables of our research model. All variables were entered into a principal component analysis with varimax rotation. In case a single factor emerges from the analysis or one general factor accounts for the most covariance in the measure scores, common method variance may be present. The results of this analysis found no significant biases in the dataset so we assumed the nonexistence of this type of bias.

The psychometric properties of the scales were assessed through confirmatory factor analysis (CFA), using the maximum likelihood method (MML) (Fornell and Larcker, 1981). After performing the CFA for each proposed measurement scale to evaluate its unidimensionality, the item pools were purified by dropping those which revealed weak convergence, low standardised loadings and low R^2 . During this process a number of items were discarded from the analysis. Information pertaining to the summary statistics of the measurement model (factor loadings and t -values; Cronbach's alphas, average

variance extracted and composite reliability of all the scales) are given in Appendix 1. The reliability of most of the constructs met the recommended standard of 0.70 suggested by Nunnally (1978). The scales of external information dissemination produced Cronbach's alpha values of 0.65 which were slightly lower than 0.70. Composite reliability represents the shared variance among a set of observed variables measuring an underlying construct (Fornell and Larcker, 1981). In general, a composite reliability of at least 0.6 is considered desirable (Bagozzi and Yi, 1988, p. 82). As shown in Table I, each construct met that criterion. Similarly, the AVE for all constructs can be considered satisfactory (above 0.50) (Bagozzi and Yi, 1988). Overall, most scale psychometric properties examination shows unidimensionality and conceptual consistency.

The standardised loadings and their associated *t*-values were also examined. Convergent validity is revealed by the large and significant standardised loadings ($t > 1.96$; $p < 0.05$). With regard to discriminant validity we tested whether all the construct inter-correlations were significantly different from 1, and that the square root of AVE was greater than the variance shared between the latent construct and other latent constructs in the model (i.e. the square correlation between two constructs) (Barclay *et al.*, 1995). All latent constructs satisfy this condition (Table I).

Only the information dissemination dimension of (external) market orientation showed some inconsistency. However, it was decided to maintain this dimension because of its theoretical relevance. Based on the above analysis, it was concluded that most constructs had adequate measurement properties. After examining the construct validity and the reliability of the measurement model, the next step was to assess whether the structural model supported the proposed theoretical model.

Structural model results and discussion

The parameter estimates and model fit statistics of the proposed structural model for external market orientation are presented in Table II. H_1 to H_3 examine the impact of external market orientation dimensions, such as information generation, dissemination and responsiveness on financial (a) and non-financial performance (b).

The results indicate that external information generation is positively and significantly related to financial performance (supporting H_{1a}) and not related to non-financial performance (not supporting H_{1b}). External information dissemination fails to be significantly related to financial performance but positively affects non-financial performance. Thus, H_{2b} is supported and H_{2a} is not supported. This finding is in line with the results of Dawes' (2000) study. In this research, Dawes (2000) uses "market information sharing" (defined as the dissemination of market-related information between departments) as a proxy of Kohli and Jaworski's "dissemination" market orientation component. The author also did not find any relationship between this dimension and financial performance (profitability).

Finally, external responsiveness is positively and significantly related to financial and non-financial performance (supporting H_{3a} and H_{3b}). This is in line with Chao and Spillan (2010), who found that responsiveness was the only significant predictor of three market orientation components that impacts positively on both financial and non-financial performance.

The parameter estimates and model fit statistics of the proposed structural model for internal market orientation are presented in Table III.

Constructs	Items	Mean	SD	R ²	EIG	EID	EIR	IIG	IID	IIR	FOP	NFOP
External inf. generation	3	4.11	0.932	0.425	(0.81)							
External inf. dissemination	3	3.74	0.831	0.468	0.21*	(0.60)						
External responsiveness	5	4.75	0.558	0.329	0.43**	0.27**	(0.78)					
Internal inf. generation	6	3.81	0.816	0.872	0.23**	0.45**	0.21*	(0.68)				
Internal inf. dissemination	3	3.66	1.04	0.376	0.25**	0.25**	0.17	0.44**	(0.73)			
Internal responsiveness	3	3.77	0.831	0.458	0.22**	0.27**	0.18*	0.45**	0.34**	(0.72)		
Financial performance	4	3.95	0.520	0.462	0.24**	0.02	0.19*	0.17	0.031	0.11	(0.70)	
Non financial performance	3	4.00	0.471	0.497	0.19*	0.21*	0.19*	0.33**	0.17	0.19*	0.45**	(0.68)

Notes: *p < 0.05 **p < 0.01 (two-tailed)

Table I. Descriptive statistics and the correlation matrix

As results from Table III shows the relationships arisen from internal information generation have a positive impact on either financial or non-financial performance ($H4$ to $H6$). Thus, H_{4a} and H_{4b} are accepted. However, the data from the present study did not support H_{5a} , H_{5b} , H_{6a} and H_{6b} . These results are partly in line with those obtained by Tortosa *et al.* (2009) who reached similar results for the informal generation of internal information (internal information generation), which was a key finding of their study.

Results from this study revealed that: First, a review of existing literature finds that much of the empirical work in the market orientation-performance area has used an aggregated approach (Furrer *et al.*, 2003). However, some recent studies (Dawes, 2000; Noble *et al.*, 2002; Sin *et al.*, 2005; Zhou *et al.*, 2007; Tsiotsou, 2010) have claimed that the behaviour of the different market orientation sub-components may produce different results. Findings from this study add significance to this argument by offering different results when dealing with the impact of different sub-dimensions of market oriented (internally and externally) behaviours with performance.

Second, with regard to external market orientation it seems that the two dimensions of information gathering and responsiveness appear to be important dimensions to predict financial performance, in particular the degree of budgetary accomplishment, degree of accomplishment of financial objectives, the degree of activities performed to generate funding/income and efficient use of assets funds.

Furthermore, the external information dissemination dimension associated with responsiveness also seems to have a positive impact on non-financial performance, particularly regarding to the degree of organisational labour climate, degree of

Table II.
Estimation of path coefficients for external market orientation and performance

Paths in the theoretical model	Standardised coefficient	t-value	SE	Hypothesis support
External IG → Financial performance	0.271 *	2.47	0.11	$H1_a$ – Yes
External ID → Financial performance	0.195	1.67	0.07	$H2_a$ – No
External RI → Financial performance	0.311**	3.00	0.12	$H3_a$ – Yes
External IG → Non-financial performance	0.076	0.77	0.09	$H1_b$ – No
External ID → Non-financial performance	0.480**	3.77	0.07	$H2_b$ – Yes
External RI → Non-financial performance	0.281**	2.80	0.11	$H3_b$ – Yes

Notes: * $p < 0.05$; ** $p < 0.01$; Fit indices: Absolute fit: $\chi^2 = 193$; $df = 122$, Prob. 0.0004; CFI = 0.94; RMSEA = 0.071; NFI = 0.86; IFI = 0.94

Table III.
Estimation of path coefficients for internal market orientation and performance

Paths in the theoretical model	Standardised coefficient	t-value	SE	Hypothesis support
Internal IG → Financial performance	0.367*	2.34	0.11	$H4_a$ – Yes
Internal ID → Financial performance	0.029	-0.20	0.08	$H5_a$ – No
Internal RI → Financial performance	0.110	0.72	0.11	$H6_a$ – No
Internal IG → Non-financial performance	0.301*	2.02	0.11	$H4_b$ – Yes
Internal ID → Non-financial performance	0.036	-0.25	0.07	$H5_b$ – No
Internal RI → Non-financial performance	0.253	1.69	0.11	$H6_b$ – No

Notes: * $p < 0.05$; Fit indices: Absolute fit: $\chi^2 = 224$; $df = 140$, Prob. 0.0001; CFI = 0.93; RMSEA = 0.072; NFI = 0.82; IFI = 0.93

employee's skills and competencies and degree of citizens satisfaction. Broadly speaking, we may conclude that most external market orientation sub-dimensions have a significant impact on both financial and non-financial performance (four out of six) when compared to internal market orientation sub-dimensions (two out of six).

Third, with regard to internal market orientation it is interesting to note that the only dimension that impacts positively on both financial and non-financial performance is the internal information generation sub-dimension. This justifies the need for managers to regularly generate and disseminate information about what employees want from the municipality and their real feelings about their jobs. In order to achieve this, managers should carry out regular staff appraisals and should undertake a good deal of internal market research. This finding provides an important insight into the debate on internal marketing regarding the need to collect and analyse information relative to the internal market (Panigyrakis and Theodoridis, 2009).

By contrast, internal information dissemination and responsiveness did not impact on both financial and non-financial performance. A possible explanation for this relates to the fact that although public managers are mainly concerned with gathering information about current and future customer needs, they are reluctant to disseminate this information to their employees. Additionally, they are not sufficiently responsive to the needs of their employees, which may suggest that public managers still exercise bureaucratic, formalised control based on a limited set of explicit rules that define the course of action to be undertaken in different contexts. Specifically, they do not usually take corrective action to minimise dissatisfaction, they do not modify their conditions of employment and do not make changes when employees indicate that they are dissatisfied. Although not examined in this article, it can be assumed that job satisfaction and organisational commitment may have a positive impact on organisational performance (Petty *et al.*, 1984). One possible recommendation is to analyse the strength of employees' feelings towards the organisation. In other words, the more satisfied and committed the employees are, the greater their willingness to engage in behaviours that are vital for the organisation's success. For instance, Petty *et al.* (1984) found that job satisfaction is positively correlated to organisational performance.

In summary, in line with previous studies (Jaworski and Kohli, 1993; Narver and Slater, 1990), all three external market orientation dimensions are important and "provide a holistic view of firms' ability to collect and use market information effectively" (Grinstein, 2008, p. 167). With regard to the internal market orientation – organisational performance link it seems that activities that generate internal information can be successfully used to identify superior value for the internal clients. However, information sharing and communication across functional units and responsiveness to that internal information does not positively affect the performance indicators. It could be said that these findings emphasise the difficulties local public organisations face in effectively implementing such internal orientation.

Conclusions and implications

This study contributes to a better understanding of implementing an internal and external market orientation in public organisations with the ultimate objective of creating enhanced value to both publics: employees and customers/citizens. This paper began by looking at whether the success of public sector initiatives can only be accomplished through a clear view of the needs of internal and external publics:

employees and citizens (Jones *et al.*, 2007). Throughout this study, attention has been concentrated on the influence of different internal and external market orientation components on financial and non-financial performance indicators. A conceptual model was presented and the case of the Portuguese local public sector organisations was analysed.

Results of this study have particular relevance for both marketing theory and practice. From the standpoint of theory, as previously mentioned, this study addressed an important topic that was neglected in relevant literature, particularly the analysis of the relationship between different sub-dimensions of internal and external market orientations to both financial and non-financial performance. This is in line with the call for research by several authors in this particular field (Han *et al.*, 1998; Noble *et al.*, 2002; Grinstein, 2008; Tsiotsou, 2010).

The relative roles of the sub-dimensions of internal and external market orientation and their impact on organisational performance provide a fertile arena for research. It can be argued that an understanding of the aforementioned relationships is an important contribution to improve knowledge in one of the most crucial concepts of marketing – the concept of market orientation. Similarly, concerning the internal market orientation research stream, this is one of the very few studies that have been specifically focused on a sub-dimension approach and its impact on organisational performance. Thus, this study contributes to the body of internal marketing research by providing empirical findings relative to an under-researched relationship between internal market orientation and performance (Panigyrakis and Theodoridis, 2009) and by investigating the influence of each internal market orientation dimension on organisational performance (Tortosa *et al.*, 2009).

Additionally, to the best of our knowledge this is one of the few studies that reports results from the analysis of internal and external market orientation sub-dimensions with financial and non-financial performance in local public sector organisations. It is important to understand how previous relationships are perceived within different organisational and cultural contexts. It should be noted that most of previous studies devoted to market orientation have primarily been focused on for-profit sector.

This study includes an important sector that has been undergoing profound transformation because of the worldwide phenomenon of “redesigning public sector administration on the basis of NPM principles (Rod and Ashill, 2010, p. 601). The relevance of this study was justified by the fact that the public sector has been undergoing profound changes in order to bring about a new organisational model, which is closer to management-oriented practices. In line with other areas of the public sector, local government increasingly faces a changing external and internal environment that challenges its traditional bureaucratic “modus operandi”. Recent transformations and modernisation efforts, especially those concerned with the introduction of business-like management practices and the developments in information communication technologies, have highlighted the importance of offering citizen-centric services that deliver real measurable public value (McDonald *et al.*, 2006). To accomplish this aim, public managers can learn a great deal from market-oriented approaches which have an important role in defining those priorities, that fulfil customer and citizen needs.

Apart from these theoretical contributions, this study has some important implications for local public sector managers and policy makers. Nowadays, due to

turbulent, complex and constantly changing environments, organisations at all levels (and especially those in the local public sector) are increasingly pressured to re-evaluate their activities, based on more stringent criteria in terms of transparency and accountability. As mentioned in the introduction, this has driven local public organisations to be more efficient by incorporating internal and external marketing approaches, in which the needs of both its publics: internal (employees) and external (customers/citizens) are at the centre of activity (Drummond *et al.*, 2000) of the transformational government process.

The findings reported in this study can provide public sector managers with specific knowledge that would enable them to respond to market turbulence and to meet marketplace demands. Local public executives need to recognise the importance of allocating organisational resources to ensure the efficient collection and dissemination of and responsiveness to intelligence, which can be addressed internally and externally. By incorporating these activities into their organisational structures, local public organisations create the necessary conditions to be more successful and, as a result, to enhance their performance. This is consistent with Osborne (2010) who observed that successful public service provision implies both governing and responding to the service expectations of consumers and training and motivating the organisation to interact positively with the consumer.

Those responsible for local public sector organisations should take the necessary actions to define which priorities should be devoted to different public types (internal and external). Otherwise, they will not succeed. Also, knowing the influence of which external and internal market orientation sub-dimensions better impact on organisational performance provides knowledge about how local public managers should provide better value to employees and customers. This study also found that, from an internal perspective, local public organisation still rely on bureaucratic mechanisms of control based on an extensive set of rules, regulations and procedures that clearly limit local managers' authority. This conclusion can be drawn from the fact that internal information dissemination and market responsiveness are critical factors that did not enhance organisational performance.

Limitations and future research directions

This study is inevitably subject to a number of limitations, which should be borne in mind while interpreting its results. The study also opens several fruitful avenues for future research.

Since this work is entirely based on evidence from local public organisations of a specific Portuguese region, results should be interpreted with some caution. Although this approach allows for a deeper understanding of the actors under investigation (due to the homogeneity of the respondents), no generalisations to other regions (or countries) can be made. Future studies should examine the same relationships with a wider sample or even including organisations from different sectors.

Moreover, the single-informant design represents a limitation. This study has considered the Municipality executives as the main unit of analysis. Further studies should also take into account other stakeholders (such as customers and employees). In addition, this study used cross-sectional data to test the research model and hypotheses, but internal marketing, market orientation, and organisational performance are dynamic constructs, involving elements of time, which may be

better examined over an extended period. Thus, future research through longitudinal design is desirable to accomplish this objective.

A further limitation relates to the measurement of internal market orientation and market orientation. Alternative conceptualisations of both constructs could also be examined in future research. The measure used for organisational performance focused on certain aspects of performance, which overlook other possible indicators. Consequently, future research could broaden the measures of this study.

Finally, the constraints on the sample size have to be taken into account. Although a number of authors (Hair *et al.*, 2006) have argued that the minimum sample size to ensure appropriate use of ML estimation, such as in the case of this study, ranges between 100 and 150, the interpretation of these findings and their generalisation should be undertaken with caution.

Other research directions could be pointed out. For example, future research could adopt a more comprehensive approach by examining the possible causal order of the dimensions of internal and external market orientation, and their potential interaction effects. Studying the relationships between the dimensions of internal and external market orientation and the success of public sector organisations could provide an interesting topic for future research. Moreover, in this research internal and external market orientations are viewed independently but future research could usefully investigate the inter-relationships between the two orientations, as their joint effect could shed new light on the dynamics of two traditionally separated areas of study. What is more, there are future research opportunities for the application of these models to other non-profit sectors or even for making a comparative analysis of public and private sectors.

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Items for each construct	Factor loadings	t-value	Coef. Alpha	ρ_c^a	ρ_{ve}^b
<i>Internal information generation/formal face-to-face/formal written</i>			0.83	0.83	0.47
We try to find out what employees want from this municipality	0.80	–			
We try to find out our employees' real feelings about their jobs	0.70	10.0			
We regularly talk to our staff to find out about their work	0.68	7.58			
We do a lot of internal market research	0.61	6.70			
We have regular staff appraisals in which we discuss what employees want	0.56	6.09			
We often talk with our survey people to identify influences on our employees' behaviour	0.54	5.10			
<i>Internal information dissemination</i>			0.77	0.77	0.54
We regularly report back to our staff about issues that affect their working environment	0.85	7.40			
We regularly meet with all our staff to report about issues relating to the whole municipality	0.75	–			
We have regular staff meetings with employees of all levels attending	0.59	5.90			
<i>Internal responsiveness</i>			0.77	0.77	0.53
When we find that employees would like us to modify their conditions of employment, the department make concerted efforts to do so	0.74	6.74			
When we find out that employees are unhappy with our supervision or management, we take corrective action	0.73	–			
We make changes to what we do when employee feedback indicates that they are dissatisfied with the status quo	0.73	6.72			
<i>External information generation</i>			0.83	0.85	0.67
This municipality is slow to detect changes about citizens' needs (R)	0.97	5.95			
This municipality is slow to detect fundamental shifts in the public sector environment (R)	0.92	6.02			
This municipality does not know the needs of those groups whose voice is not heard (ex: the illiterate, poor citizens) (R)	0.50	–			
<i>External information dissemination</i>			0.65	0.63	0.37
In this municipality citizen information is communicated to all departments	0.67	–			
The activities of the different departments in this municipality are well coordinated	0.62	4.12			
Employees in front-line activities have efficient communication systems at their disposal to report any problem that may arise	0.52	3.809			
<i>External responsiveness</i>			0.87	0.88	0.61
In this municipality we do not use clear and simple language to communicate to citizens (R)	0.93	10.42			

(continued)

Table AI.
Summary of statistics of the measurement model (CFA)

Items for each construct	Factor loadings	t-value	Coef. Alpha	ρ_c^a	ρ_{ve}^b
In this municipality we do not give information to citizens about how to access and utilize services (R)	0.89	9.88			
In this municipality we do not give information to citizens about their rights (R)	0.79	–			
In this municipality contact with citizens/users is not easily provided when it is effectively required (R)	0.71	8.51			
In this municipality citizen complaints fall on deaf ears (R)	0.54	6.27			
<i>Financial organisational performance</i>			0.82	0.80	0.50
Degree of financial objectives accomplishment	0.80	7.42			
Degree of budgetary accomplishment	0.76	–			
Measures related with the efficient use of assets funds	0.67	6.89			
Degree of activities performed to generate funding/income	0.60	5.93			
<i>Non-financial organisational performance</i>			0.74	0.73	0.47
Degree of employee's skills and competencies	0.72	4.26			
Degree of organisational labour climate	0.68	4.20			
Degree of citizens satisfaction	0.68	6.89			

Table AI.

Notes: ^a ρ_c (Composite reliability: $0.70 \leq \rho_c \leq 1$); ^b ρ_{ve} (AVE): $0.50 \leq \rho_{ve} \leq 1$; (R) = Recoded

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