Measuring Internal Market Orientation

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Abstract

Internal marketing has been discussed in the management and academic literature for over three decades, yet it remains ill defined and poorly operationalized. This paper responds to calls for research to develop a single clear understanding of the construct, for the development of a suitable instrument to measure it, and for empirical evidence of its impact.

Existing, divergent conceptualization of internal marketing are explored, and a new, multidimensional construct, describing the managerial behaviors associated with internal marketing is developed, and termed internal market orientation (IMO). IMO represents the adaptation of market orientation to the context of employer-employee exchanges in the internal market. The paper describes the development of a valid and reliable measure of IMO in a retail services context. Five dimensions of IMO are identified and confirmed. These are 1) formal written information generation, 2) formal face-to-face information generation, 3) informal information generation, 4) communication and dissemination of information, and 5) responding to this internal market information.

The impact of IMO on important organizational factors is also explored. Results indicate positive consequences for customer satisfaction, relative competitive position, staff attitudes, staff retention and staff compliance.

Key Words: Internal Marketing, Internal Market Orientation, Human Resources, Scale Development, Statistical Analysis.
Introduction

Encounters between customers and employees are critical for customer satisfaction (Chandon, Leo and Phillippe 1997). This is especially true in the retailing context, where sensitivity to customer service has increased in all markets (Wilcox and O'Callaghan 2001), and customers often evaluate retail service providers based on the behavior of front-line staff (Thomas, Vitell, Gilbert and Rose 2002), especially in terms of their friendliness, helpfulness, and generally agreeable nature (Davies et al. 2001; Larson and Sasser 2000; Sergeant and Frenkel 2000).

Research, both within marketing and human resources management (HRM), has explored the impact of employee-friendly supervision and management on the behavior of front-line staff (Lusch and Serpkenci 1990; Piercy, Harris and Lane 2002). Within the marketing domain, internal marketing has been proposed as a set of employee friendly managerial behaviors that have several internal and external consequences for the firm (see for example Ozment and Keller 1999; Rafiq and Ahmed 2000; Harrison-Walker 2001). This is also reflected within the HRM literature, where it is generally accepted that aligning HR policies with marketing can have beneficial impacts on both employee behaviors and attitudes, and on organizational outcomes (Bansal, Mendelson and Sharma 2001).

It is commonly accepted that internal marketing and human resources management are closely related (Pitt and Foreman 1999), although the nature of employee friendly internal marketing behaviors remains unclear. Internal marketing is variously seen as involving training (Berry and Parasuraman 1991; Stauss and Schultze 1990); recruitment (Tansuhaj, Randall and McCullough 1988); internal market research (Wasmer and Brunner 1991); internal communications (Piercy 1995); developing job products (Lukas and Maignan 1996).

In order for organizations to better understand the nature of employee friendly manager behaviors, and the impact that these behaviors have on front-line staff, it is necessary for internal marketing to develop past its embryonic, and descriptive or prescriptive position (Varey 1995). Calls have been made for
research to develop a single clear understanding of the construct, for the development of a suitable instrument for measuring it, and for serious empirical fieldwork to assess its impact, (Varey 1995; Rafiq and Ahmed 2000; Bansal et al. 2001).

This research contributes to the internal marketing debate in four areas. First, the concept of internal marketing is delineated and managerial behaviors associated with managing the employee-employer exchange are conceptualized as an internal market orientation (IMO). Second, a valid and reliable instrument measuring IMO is developed. Third, the relationships between IMO and organizational consequences (specifically customer satisfaction, competitive advantage, staff compliance, staff retention, and staff attitudes) are examined. Finally, substantive, application and methodological issues are discussed, and directions for future research presented.

**Conceptualizing Internal Market Orientation**

Internal marketing uses a marketing perspective for managing an organization's human resources (George and Gronroos, 1991). It is based on the philosophy of viewing organizations’ jobs as internal products and employees as internal customers of these (Sasser and Arriet 1976). This allows organizations to manage the employee-employer exchange by modifying existing marketing tools and techniques to the internal environment of the firm (Greene et al. 1994). This has led to operationalizations of internal marketing that directly reflect those of external marketing. For example Piercy and Morgan (1990) develop an internal marketing mix which directly parallels the external marketing mix. In operationalizing internal marketing in this way, Piercy and Morgan, suggest that jobs or projects constitute internal products, the price is what the employee has to give up to complete the job, promotions are represented by internal communications and distribution by meetings in which ideas are presented to employees.
More recent research suggests that market orientation is a more appropriate operationalization of marketing than the marketing mix (Kohli and Jaworski 1990). Furthermore, market orientation has been shown to be robust in several different contexts (see for example Cadogan, Diamantopoulos and de Mortanges 1999; Vorhies et al, 1999; Wrenn, LaTour and Calder, 1994). In operationalizing internal marketing, we suggest that market orientation can be modified to the context of employer-employee exchanges in the internal market and develop an internal market orientation (IMO). The development of such an IMO would be expected to have positive consequences for the firm and its employees; in the same manner that external market orientation has positive consequences for the firm and its external customers.

One of the fundamental ideas of IMO is the concept of exchange between employees and the organization. Internal exchange is examined in the HRM literature, specifically in the application of equity theory. Equity theory was first proposed by Adams (1963) and proposes that employees evaluate their jobs by comparing what they put into their work with what they get out of it. Huseman and Hatfield (1990) suggest that inputs (what the employee puts into the job) include effort on the job, time loyalty to the organization and compliance to organizational policies; whilst outputs (what the employee gets out of the job) include pay, fringe benefits, and less tangible rewards such as status, recognition for good work and sense of accomplishment). Within both the HRM and marketing literature several authors suggest that managers face the challenge of balancing perceptions of these employee inputs and their associated outputs (e.g. Stauss and Schultze 1990; Berry 1981). Freedman and Montanari (1980) assert that that behavior of managers, especially when deciding what rewards employees should receive, has an impact on employee behavior and organizational effectiveness. This view is supported by Guest and Conway (2002), who propose that a psychological contract exists, in which managers make promises and commitments that employees will receive certain rewards for
displaying appropriate behaviors. Guest and Conway report that active management of this contract has a positive impact on employee attitudes and behaviors.

It appears, therefore, that IMO crosses marketing and HRM functional boundaries and aims to create a balance between employees’ perceptions of what they put into the job and their perceptions of what they get out of the job. The role of the manager in this process is critical as managerial activity has the potential to influence employee behavior in ways that will affect customers’ perceptions of the service that they receive (Hartline and Ferrell 1996). Managerial activities associated with this are operationalized here as an internal market orientation (IMO).

**Dimensionality of IMO**

Categorizing these managerial behaviors in a manner consistent with current marketing thinking, more specifically external market orientation (Kohli and Jaworski 1990), allows IMO to be viewed as the internal equivalent to market orientation in the external context. As such, IMO involves the generation and dissemination of intelligence pertaining to the wants and needs of employees, and the design and implementation of appropriate responses to meet these wants and needs. The behavioral dimensions of IMO are discussed in more detail below.

**Internal Information Generation**

The need to generate information about the internal market is identified by several researchers (Briscoe 1980; Berry 1981; Gomez-Mejia 1988; Stauss and Schultze 1990; Huseman and Hatfield 1990; Cobb, Samuels and Sexton 1998; Johlke and Duhan 2000). Previous research in this area has focused on; a) identifying what type of information should be generated, and b) identifying how that information can be generated. These two areas are elaborated below.
Type of information

The need for managers to generate information about the things of value that are exchanged in the internal market is well recognized (Ewing and Caruana 1999; McDonald, de Chernatony and Harris 2001). This involves identifying the benefits employees seek from their jobs, what they are prepared to give up to get these, and what competitors are offering in terms of alternative employment. This knowledge can be used to make jobs more attractive to potential and existing employees than competitors’ jobs (Berry 1981; Huseman and Hatfield 1990; Stauss and Schultze 1990).

Information generation within the internal market appears to have three main foci: 1) to identify employees’ perceptions of their inputs to their jobs, 2) to identify employees’ perceptions of outputs (i.e. what they receive), and 3) to identify employees’ perceptions of the equity of this exchange (cf. Huseman and Hatfield (1990).

Mode of information generation

Three modes of information generation, based on different types of interactions between managers and front-line staff, are apparent in the extant literature. These are 1) formal written information generation, 2) formal face-to-face information generation, and 3) informal face-to-face information generation, and are discussed below.

a. Formal information generation

Formal approaches to information generation are manifest in two modes; the use of written media, e.g. questionnaires and job satisfaction surveys, and formal face-to-face interactions, e.g. interviews, appraisals and meetings (Cobb et al. 1998). Just as is the case in external market research, these two methods of information generation are complementary, with surveys and questionnaires allowing for a
degree of respondent anonymity and face-to-face interviews allowing for a greater degree of exploration of underlying issues and employee concerns.

b. Informal information generation

The close physical proximity of managers and their front-line staff, provides scope for informal day-to-day, face-to-face interactions. This offers additional opportunities for information generation. Although Johlke and Duhan (2000) conceptualize informal and formal communications as the extremes of a bipolar continuum, it is probable that in the internal market, formal and informal communications, and consequently formal and informal generation of information about employees’ wants and needs, occur independently and concurrently. In such situations, increasing the utilization of formal surveys and focus groups does not necessarily result in reduced informal day-to-day, face-to-face interactions between managers and front-line employees.

Internal Communications

Communication is the means by which organizations transfer information from one entity to another i.e. disseminate information (Johlke et al. 2000). Consequently it impacts the performance of front-line staff. Information dissemination is an important prerequisite to aligning employees’ attitudes and behaviors with the organization’s goals (Boswell and Boudreau 2001; Guest and Conway 2002). Internal communications is key in this process (Grönroos 1990). The close physical proximity between managers and employees increases opportunities for such communication, providing the chance to collect information about the wants and needs of employees, as described above, and also to disseminate information.

The process of communication is also important in fostering organizational identification (Smidts, Pruyn and van Riel 2001), and subordinate job outcomes (Keller 1994). In particular, bi-directional
informal communications between managers and staff have positive outcomes for front-line staff (Johlke and Duhan 2001). In the context of IMO, this is particularly important as the close proximity of staff and their managers means that bi-directional communications constitute an important part of workplace behavior. Information dissemination is therefore proposed as a fourth dimension of IMO.

**Responsiveness to the Internal Market**

A fifth dimension of IMO found in the literature involves responding to the information generated about the wants and needs of employees. Within marketing, one of the most commonly suggested uses for IMO information is to create job-products, meeting the needs of employees and thus satisfying and motivating them (Sasser and Arbeit 1976; Stauss and Schultze 1990; Berry and Parasuraman 1991). Sasser and Arbeit (1976) suggest that employees exchange time, energy, and values for the firm’s money. This is analogous to exchange in the external market, where customers exchange cash for goods or services. Consequently, they conclude that by augmenting internal product offerings (jobs) with such things as flexible working hours, salaries and other benefits, managers can facilitate internal exchange. This is supported by Tansuhaj, Wong and McCullough (1987), who suggest that important job attributes include incentives, salaries and bonuses. Huseman and Hatfield (1990) suggest that less tangible, social, benefits are also important in the internal exchange. These include status, recognition for good work and sense of accomplishment. As a consequence, developing jobs to meet the needs of employees involves consideration of both financial and social wants and needs.

The HRM literature also identifies several responses to internal market research information. Gomez-Mejia (1988) suggests that this information should be used to develop appropriate reward systems for employees. Briscoe (1980) suggests that there are four main responses that organizations may adopt; change the people, change the organization, change the interface between the people and the organization, and individualize the organization. These approaches involve such activities as
developing individualized rewards systems, performance reviews, changing hours of work, providing flexible physical settings, and providing training. These activities fall under the general heading of job design. Perhaps the most useful insight into responding to internal market information is provided by equity theory. Equity theory suggests that employees evaluate their jobs by comparing what they put into their work (inputs) with what they get out of it (outputs) (Huseman and Hatfield 1990). Internal market research can identify how satisfied employees are with what they get out of their jobs. Where satisfaction is low with a particular output, managers can then redesign jobs to improve these outputs or change perceptions about them.

**Consequences of Internal Market Orientation**

Several internal and external consequences of internal market oriented behaviors are apparent in the literature. Internally, it is well recognized that the behavior of managers to their subordinate staff influences the attitudes and behaviors of these employees (Ahmed and Rafiq 2003). In particular IMO is thought to impact employee attitudes in terms of their satisfaction with their work and motivation to provide good customer service. Tansuhaj et al (1988) and Comm (1989) propose that internal market oriented behaviors on the part of managers lead to higher levels of employee satisfaction and motivation. This is a key tenet of internal marketing, and is based on the assumption that happy and motivated front line employees are essential in the delivery of good service to customers (see for example Sasser and Arbeiit, 1976; Berry and Parasuraman, 1991; and Berry 1984). From the human resources literature the concept of managerial consideration appears to be closely related to IMO. Managerial consideration, in this context, refers to the degree to which managers develop a work climate of psychological support, helpfulness, friendliness, and mutual trust and respect (Johnston et al 1990). Managers are the primary link between employees and the company (Katz and Kahn 1978), and considerate management behavior fosters identification of employees with the organization and reduces employee dysfunctional behaviors (Ramaswami 1996). Consequently, employees are more likely to
buy in to, or comply with, organizational strategies aimed at creating customer satisfaction (Piercy and Morgan 1990). Finally, it is also proposed that leaving intentions and staff retention are consequences of IMO as happy and motivated employees are less likely to seek alternative employment (Taylor and Cosenza 1998; Ozment and Keller 1999).

Externally, high levels of employee satisfaction, and retention, are thought to influence customer satisfaction and loyalty. Although the link between employee satisfaction and customer satisfaction has been discussed for more than two decades (e.g. George, 1977) and is widely accepted, it remains a contended issue (Piercy, 1995; Rafiq and Ahmed, 1993) with limited literature exploring the exact nature of the relationship between the two. Despite this lack of evidence, most researchers operate under the belief that employee satisfaction and customer satisfaction are significant and positively correlated. Intuitively, higher levels of external customer satisfaction should lead to higher levels of customer loyalty and consequently IMO influences profitability (Bansal, Mendelson and Sharma 2001).

As a means of creating employee satisfaction, IMO constitutes a core competency of the organization, creating a potential competitive advantage through more satisfied and loyal customers, which, in turn, should give rise to increased market share or profits compared to competitors (Greene et al 1994).

**SCALE DEVELOPMENT**

**Method**

The primary objectives of this research are to develop a valid and reliable instrument to measure IMO and identify relationships between IMO and important organizational factors (specifically staff attitudes, staff retention, staff compliance, relative competitive position and customer satisfaction). In
addressing these aims, the following section outlines the established scale development and validation procedures adopted. (e.g. Churchill 1979; Gerbing and Anderson 1988; Smith 1999).

The first step in the scale development procedure was to create a pool of items designed to assess the dimensions of IMO outlined above. Following the guidelines developed by Churchill (1979) and DeVellis (1991), a set of 42 items were generated to tap into the IMO construct. Items were derived from the literature, focus groups and depth interviews, and were subject to expert review before inclusion into the questionnaire. First, Jaworski’s and Kohli’s (1993), 32-item instrument designed to measure market orientation was examined. Selected items were adapted to change their focus from the external market to the internal market. Second, a series of three depth interviews and twenty focus groups were conducted with managers from different service and retail industries. Depth interviews were conducted with the branch manager of a high street bank, a hotel manager, and a supermarket store manager. The interviews were transcribed and the transcripts analyzed to identify categories of meaning arising in the interviews. Focus group interviews were conducted with 20 groups of retail store managers. Each group contained five members and all were attending a management development program. Information from depth interviews and focus groups was then used to pursue exploratory aspects of the IMO construct and to generate additional scale items to complement those adapted from Jaworski’s and Kohli’s (1993) market orientation scale. The item pool was then reviewed by a panel of marketing and human resources academics who were asked to comment on the relevance, clarity and conciseness of each of the items, and to point out any additional ways of tapping the construct (DeVellis 1991). As a result of this process a pool of 42 items was generated for inclusion into the survey instrument (Appendix 1).

In addition, a further 9 validation items were included in the questionnaire; five measuring the attitude of managers to IMO and four measuring the internal market oriented behaviors of the organization.
(Appendix 1). All items were measured using a 7 point Likert scale, anchored at strongly agree and strongly disagree.

Due to the self-report nature of the survey, method variance is a potential issue. Spector (1987) reports that the most frequently found sources of method variance in self reports are acquiescence and social desirability bias. In order to minimize acquiescence bias, 8 of the items were negatively worded and distributed throughout the survey as recommended by Nunnally 1967; 611-12). In order that post-hoc tests for social desirability bias could be performed, Reynolds, (1982) short form of the Marlowe-Crowne social desirability scale (Crowne and Marlowe, 1960) was used also included in the survey.

Two pre-tests of the questionnaire were conducted. As suggested by Churchill (1999), pre test one involved personal interviews, and the second pre-test involved a small-scale test of the questionnaire. Personal interviews took the form of protocols; interviews where respondents are asked to think aloud as they answer the questions (Reynolds et al. 1993; Diamantopoulos et al. 1994). Four protocols were conducted, two with academic respondents and two with service managers, each lasted about 50 minutes. Pre-test two involved a mail survey of 200 service managers studying part time on an MBA program.

After pre-testing the questionnaire, and making amendments to the layout and question ordering, the main survey was administered by post to a sample of 3,500 UK retail managers from a wide range of retail outlets, including supermarkets, department stores, clothing retailers, and retailers of health and beauty products. Only retail organizations that made explicit statements about high levels of customer service, and emphasized service and service personnel as a differentiating competitive factor were chosen. All organizations were involved in retailing multiple product lines. Store managers were chosen as respondents because of their unique influence on the achievement of organizational objectives. At the local level they act simultaneously as a merchandiser, salesperson, financial officer,
marketer, researcher, strategist and supervisor of other employees (Lusch and Serpkenci 1990). By choosing retail organizations that explicitly state their commitment to service personnel, and because IMO is conceptualized as a set of managerial behaviors, we expect that variation in IMO will be due to differences among store managers rather than differences among employing organizations’ policies.

All respondents received a package containing a letter explaining the purpose of the study, the questionnaire and a return envelope. Reminder notices were posted two weeks after the initial mailing. A response rate of 22 percent was achieved (828 completed questionnaires, 766 usable). Respondents were roughly equally split between male and female managers (male 57.4 percent, female 42.6 percent). Ages ranged from 20 years to 61 years, with a mean of 36.6 years ($\sigma = 8.6$), the mean length of service with the company was 13.8 years ($\sigma = 7.6$) and the mean length of service in the post of 4 years ($\sigma = 4.2$).

To ensure that sample bias and non-response bias were not present, appropriate comparisons were made between early and late respondents, and respondents and non-respondents (Lesley 1972; Armstrong and Overton 1977).

**Scale Reduction**

Prior to the next stages of the scale development procedure the sample was randomly split into two sub-samples, as suggested by DeVellis (1991). The larger sub-sample, A ($n= 516$), was used for item reduction and scale refinement employing exploratory factor analysis. This provided a sample: item ratio of 12:1, which is above the recommended ratio suggested by Hair et al. (1998). Sub-sample B ($n=250$) was retained as a hold out sample for confirmatory analysis using LISREL 8.30 (Jöreskog and Sörbom 1999). The sample of 250 was chosen to minimize type I error as suggested by Hu and Bentler (1999).
Exploratory Factor Analysis (EFA)

Adopting the guidelines outlined by Hair et al. (1998), EFA, to reduce the number of items and refine the IMO scale, was undertaken. Factor analysis using principal axis factoring and oblique rotation was conducted on sub-sample A. This was done in order to seek the least number of factors that can account for the common variance in the data. Oblique rotation was chosen because it was assumed that subscales derived from the questions that were designed to measure a general IMO constructs would be correlated (Kim and Mueller 1985). A combination of methods was used to identify items and factors for inclusion in the final factor solution, and items were deleted incrementally. Items that did not have significant factor loadings on any factor (< 0.3), those with significant loadings on two or more factors and those with low communalities (< 0.5) were considered for deletion. Final decisions about item deletion were taken based on these criteria and by examining the representativeness of each item identified as a candidate for deletion. In addition, factors with Eigenvalues < 1 were considered for deletion and the scree plot was examined for a visible elbow to provide an indication of the number of factors to be extracted from the data. In this way the most representative and parsimonious set of factors was obtained. A parsimonious and interpretable solution, displaying simple structure and comprising 17 of the original 42 items resulted. All had significant loadings onto four dimensions, each with Eigenvalues over 1. The five-factor solution was also consistent with the scree plot image. The five dimensions identified from EFA coincided those identified from the literature, and explained 58.34% of the variance in the data. These are: Informal information generation (α=0.81), Formal face-to-face information generation (α=0.83), Formal written information generation (α =0.77), Information dissemination (α=0.75) and Responsiveness (α =0.78). The pattern matrix, with full list of the scale items, is presented in Table 1.

[INSERT TABLE 1 HERE].

Confirmatory Factor Analysis (CFA)
CFA employing structural equations modeling was used to confirm the dimensionality of the IMO scale, and to provide guidance for further model re-specification (Babin 1994). At this stage, one further item was removed to improve model fit. The covariance matrix of the 16 items capturing the components of IMO, and data from sub-sample B (see appendix 3), was analyzed using LISREL 8.30 (Jöreskog and Sörbom 1999). Following the suggestions of Sharma (1996 p. 151) and Hair et al. (1998, p. 605) maximum likelihood estimation was used. As recommended by Anderson and Gerbing (1988) and Baumgartner and Homburg (1996), four nested models, each representing alternative conceptual possibilities for IMO, were estimated and compared with each other.

**Model 1**: Five distinct but correlated dimensions of IMO.

**Model 2**: Five distinct but orthogonal dimensions of IMO.

**Model 3**: Three-factor structure (internal equivalent of Jaworski’s and Kohli’s (1993) market orientation dimensions).

**Model 4**: Single-factor IMO model.

A chi square ($\chi^2$) difference test suggested that Model 1 best represents the variation between the items in this data set. Due to the influence of sample size on the significance of $\chi^2$ (Enzmann et al. 1998), other fit indices are also commonly published in the literature and are included in Table 2 below. These summary statistics support the findings of the $\chi^2$ difference test and suggest that Model 1 offers the best fit to the data. The measurement model output from LISREL 8.30 is presented in Figure 2 below.
This section discusses the approaches that were undertaken to establish the validity of the IMO scale. Several tests of discriminant validity were undertaken, these are discussed next and evidence to support discriminant validity is presented. Following this, evidence from three approaches to support the convergent validity of the scale is presented. Finally the nomological validity of the scale is established by demonstrating that IMO (as represented by the IMO scale) behaves, in relation to other constructs, according to predictions derived from theory.

**Discriminant Validity**

The comparison of the competing CFA models of IMO provides evidence of discriminant validity. Significant differences in the adequacy of the different factor models to represent the data indicates that trying to force the items measuring IMO onto fewer underlying factors leads to a significant deterioration of the model fit, relative to the five-factor model identified by EFA. Further evidence of discriminant validity is provided by a low to moderate correlation among measures that are designed to measure conceptually different but related constructs, i.e. a phi coefficient significantly less than one offers support for discriminant validity between constructs (Anderson and Gerbing 1988). The inter-factor correlations ($\phi$) are reported in Table 3 below and indicate that the scale factors discriminate between the dimensions of IMO that they represent.

Additional evidence of discriminant validity is provided if the average variance explained by a construct's items is greater than the construct's shared variance with every other construct (i.e. the square of the inter-factor correlations between any two constructs ($\phi^2$), Fornell and Larcker 1981). Analysis of the data provides strong evidence of discriminant validity, with the average variance of each IMO dimension being greater than its shared variance with any other dimension. It is therefore reasonable to assume all of the first order dimensions of the IMO scale to be unidimensional. The inter-
factor correlations ($\phi$), squares of the inter-factor correlations ($\phi^2$), and average variances extracted are reported in Table 3 below.

[INSERT TABLE 3 HERE]

**Composite Reliability**

Having established that each of the sub-scales measuring various dimensions of IMO do indeed discriminate between these factors, the next stage in the analysis was to examine composite reliabilities of each of the sub-scales (Gerbing and Anderson 1988; Hair et al. 1998, p. 611). These are reported in Table 1 and all exceed the recommended standards of both Bagozzi and Yi (1981) and Hair et al. (1998), and provide evidence of the internal consistency of the construct indicators. This suggests that the scale items do indeed measure the latent constructs that they purport to.

**Convergent Validity**

Churchill (1999, p. 458) suggests that correlation between different instruments designed to measure the same construct provides evidence of convergent validity. However, Fornell and Larcker (1981) suggest that variance extracted is a more stringent test of internal stability and convergent validity. Anderson and Gerbing (1988) offer an alternative heuristic; that significant t-values support the convergent validity of scale items. All three approaches were used to test the convergent validity of the IMO scale.

1. The two validation scales discussed earlier (Appendix 2) correlated significantly with the five dimensions of IMO, providing evidence of convergent validity, and suggesting that the IMO scale does truly measure IMO and is not merely an artifact of the data. The correlations are reported in Table 4 below.
2. Examining the variances extracted for each of the IMO dimensions (Table 3), indicates that the scale explains more than 50% of the variance in the data for each of the IMO dimensions and so meets the more stringent test of convergent validity set by Fornell and Larcker (1981).

3. Finally, all sixteen items have significant t-values >1.96 (Table 5) exceeding Anderson’s and Gerbing’s (1988) heuristic, and suggesting that the scale items adequately represent the dimension that they purport to measure.

Overall these tests indicate that the IMO scale possesses sufficient internal stability and convergent validity to provide confidence that the scale actually measures IMO.

Nomological Validity

The final empirical assessment of the validity of the IMO scale was to investigate how it performed nomologically (Childers 1986; Schwab 1980). Nomological validity is established by demonstrating that the construct, as represented by the measure, behaves according to predictions derived from theory (Zaltman, Pinson, and Angelmar 1973). Although the theory relating to IMO remains largely untested and ambiguous (Rafiq and Ahmed 2000), the literature does predict a number of consequences of IMO. Under normal circumstances assessing a scale's nomological validity based on ambiguous theory would be pointless, as disconfirming evidence could be attributed to shortcomings of the theory rather than those of the scale (see Peter 1981). However, in the case of IMO, where the majority of the work is prescriptive or descriptive (Varey 1995), it is not possible to focus on only those relationships that are firmly based on established theory. Therefore, in testing nomological validity, our aim is not to develop a comprehensive model of the outcomes of IMO, but simply to test a few theory-driven hypotheses as
part of measure validation (a much more modest aim). What is required is that “one should be able to state several theoretically derived hypotheses involving the particular construct” (Carmines and Zeller 1979, p. 24).

In assessing the nomological validity of the IMO scale, we investigate five consequences of IMO identified from the literature. These are; (1) customer satisfaction (Grönroos 1990; Reynoso and Moores 1995; Rafiq and Ahmed 2000), (2) staff attitudes, (Cowell 1984), (3) staff retention (Taylor and Cosenza 1998; Ozment and Keller 1999), (4) compliant behavior (Rafiq and Ahmed 2000), and (5) relative competitive position (Leavy and Gannon 1998; Bansal, Mendelson and Sharma 2001).

A series of regression analyses were conducted to determine the extent to which the IMO dimensions predict these organizational outcomes. Scores for each dimension of IMO were computed by averaging the scores for each item included in the dimension. Dependent variables were measured using scales presented in Appendix 4. The psychometric properties of these scales were tested and found to be acceptable (coefficient α for each scale 0.80 or greater). Table 6 shows the results of regression analysis. These indicate that IMO has a significant impact on the predicted organizational outcomes, supporting the nomological validity of the constructs.

[INSERT TABLE 6 HERE]

Potential multicollinearity between the independent variables was assessed by examining the tolerance and the variance inflation factor (VIF) (Hairet al. 1998). Hair et al. and Kleinbaum et al. (1998) suggest that the commonly accepted standards for using these indicants include tolerance values < 0.10 and VIF scores > 10 to denote high collinearity. Examination of tolerance values and VIFs (Table 7) suggests that multicollinearity is not an issue for any of the regression equations.

[INSERT TABLE 7 HERE]
Method Biases

One partial explanation for the relationships IMO and its dependent variables may be the existence of systematic measurement error. Such systematic errors commonly arise from self-report bias, and take the form of acquiescence and social desirability bias. Acquiescence arises as a result of the respondents’ tendency to agree (or disagree) with all questions regardless of content and can be reduced by including both positively and negatively worded questions, as was done in this study. Social desirability arises as a result of the respondents’ tendency to present themselves in a favorable light, irrespective of their true feelings (Spector 1987; Podsakoff, MacKenzie, Lee and Podsakoff 2003). Social desirability was measured using the Reynolds, (1982) short form of the Marlowe-Crowne social desirability scale (Crowne and Marlowe, 1960). Examining the correlations of the social desirability measure with all of the items used in the study revealed that social desirability bias was not an issue in this data.

A further post-hoc test for common method bias, a Harman’s (1967) one-factor test, was performed following the approach described Podsakoff et al. (1984) and Schriesheim (1979). All of the self-report items were entered into a principal components factor analysis with varimax rotation. According to this technique, if a single-factor emerges from the factor analysis or one-factor accounts for more than 50% of the variance in the variables, common method variance is present (Mattila and Enz 2002). Our analysis revealed a ten-factor structure with no general factor present (the first factor accounted for 11% of the variance). Although this test does not rule out the presence of common method bias, combined with the measures taken in the questionnaire design to minimize acquiescence bias and the test above for social desirability bias, it does provide support for the absence of such a general bias in the findings (Mattila and Enz 2002).
DISCUSSION

The contributions of this research are fourfold. First, the internal marketing construct has been delineated and conceptualized as an internal market orientation (IMO). Second, a valid and reliable measure of IMO has been developed. Third, the relationships between IMO and its organizational consequences have been examined. Finally, in the following section, substantive, application and methodological issues are discussed and directions for future research presented.

Substantive Issues

In keeping with existing marketing theory, IMO was operationalized in a similar manner to accepted models of external marketing (Kohli and Jaworski 1990). The data indicate that IMO, although conceptually similar to external market orientation, has a five-factor structure, representing formal written generation of information, formal face-to-face generation of information, informal face-to-face generation of information, information dissemination, and responsiveness. The three forms of information generation apparent in IMO are perhaps not surprising, considering the close physical proximity of managers and front-line staff in the context of this research. Such close physical proximity allows conversations (both formal and informal), during which managers are able to gather information about the wants and needs of staff. These face-to-face mechanisms complement more structured written mechanisms of information generation, such as internal market research and employee surveys, rather than substitute for them (cf. Johlke and Duhan 2000).

The results of regression analysis indicate that IMO has a significant impact on; (1) customer satisfaction, (2) relative competitive position, (3) compliant behavior, (4) staff retention, and (5) staff attitudes.

Our findings provide the first quantifiable empirical evidence of the relationship between IMO and staff attitudes, which has received considerable attention in the literature (e.g. Gummesson 1987; Lusch
and Serpkenci 1990; and Piercy, Harris and Lane 2002). We also identify a positive and substantial impact of IMO on customer satisfaction, providing empirical support for the assertions of Grönroos (1990) and Reynoso and Moores (1995).

Finally we identify that IMO predicts both relative competitive position and staff retention. However these relationships are much less substantive ($R^2 = 0.10$ and $R^2 = 0.06$ respectively). This reflects the antecedent nature of IMO on these two constructs, but also indicates that other factors affecting these organizational outcomes are more important.

**Methodological Issues and Directions for Future Research**

There are several methodological issues that limit the generalisability of our findings and direct attention at future research. First, although the IMO scale is both valid and reliable in the context of this study, it is advisable to further test the scale using different research contexts. Rigorous testing in different service settings is necessary to establish the IMO construct as generalisable to the wider organizational contexts. In particular this research was undertaken in a retail setting with several unique characteristics, and the results are not generalisable to all service situations. Future research could place particular emphasis on examining the role of IMO in business to business settings and testing, the generalisability of the IMO construct to suppliers of business services.

Second, the dependent and independent variables were measured simultaneously in this study and may therefore be subject to common methods bias. In particular, retail managers were the respondents for this study and reported on employee and customer satisfaction, motivation etc. Although we provide some post hoc support for the absence of such a general bias in the findings, it would be beneficial to determine the impact of IMO on employees’ and customers’ attitudes and behaviors by monitoring them directly in future research. A future research design could therefore, incorporate customers and employees in a triadic study with managers.
Third, Kohli et al. (1993) raised the issue of a potential causal ordering among the three dimensions of external market orientation, suggesting that, to be consistent with research examining the use of market information, generating information would naturally occur prior to dissemination of information, and that the business unit may or may not respond to this intelligence. Similarly, for IMO, the generation of information, and its dissemination, may be antecedent to any response to the internal market. Future research should examine any causal ordering between the dimensions of IMO and test the linear information-processing model of IMO.

Finally, The IMO construct must be tested in different cultural settings. Several issues become pertinent when considering IMO in different cultures. First, testing the IMO construct in different cultures is not merely a case of translating items into another language, but of addressing the meaning of items and dimensions in different national cultures. The IMO dimensions and items may not make sense in another culture and/or language. Hofstede (1994) identifies that the validity of theories may stop at national borders and reports that employees in different countries have different values (Hofstede et al. 1990). IMO is particularly susceptible to national culture as societal values influence the way in which employers and employees interact and their mutual expectations of such interactions. For example, as a result of having different wants, needs and expectations, employees in various cultures may value alternative communication modes and exchange items in their employment. Therefore, the dimensions of IMO may vary across national cultures. Such cross-cultural considerations need to be incorporated into the design of any international replication of this study.

**Application Issues**

Many service organizations recognize the importance of their human resource in creating customer satisfaction and competitive advantage, and seek to motivate and retain them. However, in a market where voluntary staff turnover in the UK is approximately 20% per annum, and at any one time there
are 50,000 retail vacancies advertised in UK employment centers (Department of Trade and Industry 1998), managers and recruiters of front-line staff need additional tools to facilitate retention and motivation of these staff. Knowledge of the IMO construct and the scale to measure it, provides managers and recruiters with such a tool. The proposed scale could be used to establish baseline levels of IMO within service organizations and to benchmark the targets of managers against the achievements of the most internal market oriented managers. The focus of the IMO scale, on managerial activities and behaviors, allows the use of the measure to identify areas where managers’ focus on the internal market is particularly weak. This information may then be used to formulate targeted training programs aimed at overcoming these specific issues.

Modifications of the IMO scale could also inform the recruitment process by complementing existing criteria by testing to ascertain the IMO philosophy of individuals. This would allow HRM professionals to determine if potential managers have attitudes to IMO that are consistent with the organization’s culture.

On a cautionary note, although the application of internal market orientation and focusing on the wants and needs of employees as internal customer is useful for managers to create motivation among service personnel, IMO in itself does not necessarily help the organization to fulfill the wants and needs of its paying customers. It is simply a tool to align employees with the external marketing strategy of the organization. Therefore, there is a danger that by focusing on the expectations of employees, without a similar and complementary focus on the needs of customers, organizations may simply inflate overheads without attracting market benefits (Stauss 1995). Consequently, it is imperative to maintain a close alignment between internal and external market orientations.
REFERENCES


Jöreskog, Karl G. and Dag Sörbom (1999), *LISREL 8.3 and PRELIS 2.3*: Scientific Software International Inc. Mooresville, IN.


Stauss, Bernd and Henning S. Schulze (1990), Internes Marketing, in: *Marketing ZFP*, 12 (3) 149-158.


## Internal Market Orientation

<table>
<thead>
<tr>
<th>Formal Information Generation</th>
<th>Informal Information Generation</th>
<th>Information Dissemination</th>
<th>Responsiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Exchanges of value</td>
<td>• Exchanges of value</td>
<td>• About the service offering</td>
<td>• Jobs designed to meet the needs of employees</td>
</tr>
<tr>
<td>• External employee market conditions</td>
<td>• External employee market conditions</td>
<td>• About customers’ wants and needs</td>
<td>• Incentives</td>
</tr>
<tr>
<td>• Employee attitudes and values</td>
<td>• Employee attitudes and values</td>
<td>• Product and service benefits and characteristics</td>
<td>• Salaries</td>
</tr>
<tr>
<td>Face to face</td>
<td>• Personal situations</td>
<td>• Corporate aims and strategy</td>
<td>• Bonus schemes</td>
</tr>
<tr>
<td>• Exchanges of value</td>
<td>• Individual factors</td>
<td></td>
<td>• Management consideration</td>
</tr>
<tr>
<td>• External employee market conditions</td>
<td>• Personal situations</td>
<td></td>
<td>• Training</td>
</tr>
<tr>
<td>• Employee attitudes and values</td>
<td>• Individual factors</td>
<td></td>
<td>• Social elements</td>
</tr>
</tbody>
</table>
Chi-Square = 158.77, df = 94, P-value = 0.00003, RMSEA = 0.053

Figure 2 Confirmatory Factor Model (LISREL 8.30) for Five Correlated Factors (Model 1) of IMO
### Factor 1: Formal face-to-face information generation

<table>
<thead>
<tr>
<th>CODE</th>
<th>ITEM</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Alpha/CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAMEET</td>
<td>*In this store management meet with our employees at least once a year to find out what expectations they have of their jobs for the future.</td>
<td>.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAAPPR</td>
<td>In this store we have regular staff appraisals in which we discuss what employees want</td>
<td>.703</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.82/0.80</td>
</tr>
<tr>
<td>EINTERA</td>
<td>*In this store management interact directly with our employees to find out how to make them more satisfied.</td>
<td>.649</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Factor 2: Formal written information generation

<table>
<thead>
<tr>
<th>CODE</th>
<th>ITEM</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Alpha/CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAQUAL</td>
<td>*In this store we survey our employees at least once a year to assess the quality of employment.</td>
<td>-.911</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAATTIT</td>
<td>**In this store we survey our staff at least once a year to get information about their attitudes to their work.</td>
<td>-.823</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.83/0.75</td>
</tr>
<tr>
<td>EAINFLRS</td>
<td>we often talk with or survey people to identify influences on our employees’ behavior (e.g. Unions, sales representatives, customers).</td>
<td>-.595</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAIMR</td>
<td>*In this store we do a lot of internal market research.</td>
<td>-.463</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Factor 3: Response**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERFEEDBA</td>
<td><em>In this store we make changes to what we do when employee feedback indicates that they are dissatisfied with the status quo.</em></td>
<td>.826</td>
</tr>
<tr>
<td>ERMODIFY</td>
<td>In this store when we find that employees would like us to modify their conditions of employment, the departments make concerted efforts to do so.</td>
<td>.818</td>
</tr>
<tr>
<td>ERSUPER</td>
<td><em>In this store when we find out that employees are unhappy with our supervision or management, we take corrective action.</em></td>
<td>.495</td>
</tr>
</tbody>
</table>

**Factor 4: Informal information generation**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAFEEL</td>
<td>When at work I try to find out my employees’ real feelings about their jobs.</td>
<td>.813</td>
</tr>
<tr>
<td>EATALKWO</td>
<td>When at work I regularly talk to my staff to find out about their work.</td>
<td>.697</td>
</tr>
<tr>
<td>EAPROB</td>
<td>When at work if I notice one of my employees is acting differently to normal I will try to find out if there is a problem which is causing a change in behavior.</td>
<td>.674</td>
</tr>
<tr>
<td>EAFIND</td>
<td>When at work I try to find out what employees want from the company.</td>
<td>.632</td>
</tr>
</tbody>
</table>

**Factor 5: Information dissemination**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDREPWK</td>
<td>In this store I regularly report back to my staff about issues, that affect their working environment.</td>
<td>.759</td>
</tr>
<tr>
<td>EDREPORG</td>
<td>In this store I regularly meet with all my staff to report about issues relating to the whole organization.</td>
<td>.757</td>
</tr>
<tr>
<td>EDMEET</td>
<td>In this store we have regular staff meetings with employees at all levels attending.</td>
<td>.320</td>
</tr>
</tbody>
</table>

Table 1 Pattern Matrix Illustrating Factor Structure, Factor Loadings, Cronbach’s Alpha and Composite Reliabilities for IMO

* Items adapted from Jaworski’s and Kohli’s (1993) Market Orientation Scale
** Item deleted in subsequent CFA
<table>
<thead>
<tr>
<th>Model</th>
<th>No of factors</th>
<th>$\chi^2$ *</th>
<th>df</th>
<th>CFI</th>
<th>GFI</th>
<th>AGFI</th>
<th>St RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 correlated</td>
<td>158.77</td>
<td>94</td>
<td>0.955</td>
<td>0.926</td>
<td>0.893</td>
<td>0.050</td>
<td>0.053</td>
</tr>
<tr>
<td>2</td>
<td>5 orthogonal</td>
<td>659.98</td>
<td>104</td>
<td>0.731</td>
<td>0.751</td>
<td>0.675</td>
<td>0.276</td>
<td>0.147</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>495.26</td>
<td>101</td>
<td>0.8.6</td>
<td>0.8.1</td>
<td>0.732</td>
<td>0.082</td>
<td>0.125</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>633.99</td>
<td>104</td>
<td>0.724</td>
<td>0.759</td>
<td>0.684</td>
<td>0.091</td>
<td>0.143</td>
</tr>
</tbody>
</table>

* Normal Theory Weighted Least Squares Chi-Square

Table 2 Summary Statistics for Four Nested Models of IMO
<table>
<thead>
<tr>
<th></th>
<th>Informal information generation</th>
<th>Formal face-to-face information generation</th>
<th>Formal written information generation</th>
<th>Information dissemination</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal information generation</td>
<td></td>
<td>0.545</td>
<td>0.510</td>
<td>0.535</td>
<td>0.540</td>
</tr>
<tr>
<td>Formal face-to-face information generation</td>
<td>$\phi=0.550$ ($\phi^2=0.303$)</td>
<td></td>
<td>0.535</td>
<td>0.560</td>
<td>0.565</td>
</tr>
<tr>
<td>Formal written information generation</td>
<td>$\phi=0.451$ ($\phi^2=0.203$)</td>
<td>$\phi=0.575$ ($\phi^2=0.331$)</td>
<td></td>
<td>0.525</td>
<td>0.530</td>
</tr>
<tr>
<td>Information dissemination</td>
<td>$\phi=0.716$ ($\phi^2=0.512$)</td>
<td>$\phi=0.702$ ($\phi^2=0.493$)</td>
<td>$\phi=0.507$ ($\phi^2=0.257$)</td>
<td></td>
<td>0.550</td>
</tr>
<tr>
<td>Response</td>
<td>$\phi=0.622$ ($\phi^2=0.387$)</td>
<td>$\phi=0.538$ ($\phi^2=0.289$)</td>
<td>$\phi=0.514$ ($\phi^2=0.264$)</td>
<td>$\phi=0.530$ ($\phi^2=0.281$)</td>
<td></td>
</tr>
</tbody>
</table>

Inter-factor correlations ($\phi$) [Square of inter-factor correlations ($\phi^2$)]

Table 3 Squares of the Parameter Estimate Between Factors ($\phi^2$) and Average Variance Extracted for Pairs of Factors.
<table>
<thead>
<tr>
<th>Validation scale</th>
<th>Informal information generation</th>
<th>Formal face-to-face information generation</th>
<th>Formal written information generation</th>
<th>Information dissemination</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Attitude of managers to IMO</td>
<td>0.397</td>
<td>0.283</td>
<td>0.303</td>
<td>0.274</td>
<td>0.298</td>
</tr>
<tr>
<td>2 IMO behaviors of the organization</td>
<td>0.335</td>
<td>0.492</td>
<td>0.400</td>
<td>0.415</td>
<td>0.409</td>
</tr>
</tbody>
</table>

Table 4 Correlations for Dimensions of IMO with Validation Measures of IMO
All values are significant at the 0.01 level
<table>
<thead>
<tr>
<th></th>
<th>Informal information generation</th>
<th>Formal face-to-face information generation</th>
<th>Formal written information generation</th>
<th>Information dissemination</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAFIND</td>
<td>0.7675</td>
<td></td>
<td>0.7402</td>
<td>0.7353</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(13.3418)</td>
<td></td>
<td>(12.5111)</td>
<td>(11.6101)</td>
<td></td>
</tr>
<tr>
<td>EAPROB</td>
<td>0.6555</td>
<td></td>
<td>0.7547</td>
<td>0.6696</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.8328)</td>
<td></td>
<td>(12.8312)</td>
<td>(10.4321)</td>
<td></td>
</tr>
<tr>
<td>EAFEEL</td>
<td>0.7990</td>
<td></td>
<td>0.7780</td>
<td>0.7079</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14.0986)</td>
<td></td>
<td>(13.3490)</td>
<td>(11.1198)</td>
<td></td>
</tr>
<tr>
<td>EATALKWO</td>
<td>0.6488</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.6938)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAAPPR</td>
<td></td>
<td>0.7402</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(12.5111)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAMEET</td>
<td></td>
<td>0.7547</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(12.8312)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAINTERA</td>
<td></td>
<td>0.7780</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(13.3490)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAIMR</td>
<td></td>
<td>0.7353</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(11.6101)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAQUAL</td>
<td></td>
<td>0.6696</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10.4321)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAINFLRS</td>
<td></td>
<td>0.7079</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(11.1198)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDREPORG</td>
<td></td>
<td></td>
<td>0.7552</td>
<td>0.7220</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(12.8663)</td>
<td>(11.9679)</td>
<td></td>
</tr>
<tr>
<td>EDREPWK</td>
<td></td>
<td></td>
<td>0.7901</td>
<td>0.7302</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(13.6470)</td>
<td>(12.1384)</td>
<td></td>
</tr>
<tr>
<td>EDMEET</td>
<td></td>
<td></td>
<td>0.6689</td>
<td>0.7968</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(10.9993)</td>
<td>(13.5449)</td>
<td></td>
</tr>
<tr>
<td>ERSUPER</td>
<td></td>
<td></td>
<td></td>
<td>0.7220</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(11.9679)</td>
<td></td>
</tr>
<tr>
<td>ERMODIFY</td>
<td></td>
<td></td>
<td></td>
<td>0.7302</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(12.1384)</td>
<td></td>
</tr>
<tr>
<td>ERFEEDBA</td>
<td></td>
<td></td>
<td></td>
<td>0.7968</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(13.5449)</td>
<td></td>
</tr>
<tr>
<td><strong>Composite Reliability</strong></td>
<td><strong>0.81</strong></td>
<td><strong>0.80</strong></td>
<td><strong>0.75</strong></td>
<td><strong>0.78</strong></td>
<td><strong>0.79</strong></td>
</tr>
<tr>
<td><strong>Variance Extracted</strong></td>
<td><strong>0.52</strong></td>
<td><strong>0.57</strong></td>
<td><strong>0.50</strong></td>
<td><strong>0.55</strong></td>
<td><strong>0.56</strong></td>
</tr>
</tbody>
</table>

Table 5 Results of Confirmatory Factor Analysis for IMO Items
<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal information generation</td>
<td>0.193</td>
<td>0.000</td>
</tr>
<tr>
<td>Formal F-2-F information generation</td>
<td>0.117</td>
<td>0.005</td>
</tr>
<tr>
<td>Formal written information generation</td>
<td>0.157</td>
<td>0.000</td>
</tr>
<tr>
<td>Information dissemination</td>
<td>0.102</td>
<td>0.013</td>
</tr>
<tr>
<td>Response</td>
<td>0.103</td>
<td>0.006</td>
</tr>
<tr>
<td><strong>Dependant variable: customer satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F ratio for equation is 49.993, df 5, 750, p=0.000, adjusted $R^2 = 0.245$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Informal information generation | 0.056 | 0.191 |
| Formal F-2-F information generation | 0.018 | 0.695 |
| Formal written information generation | 0.106 | 0.011 |
| Information dissemination | 0.072 | 0.111 |
| Response | 0.186 | 0.000 |
| **Dependant variable: relative competitive position** |
| F ratio for equation is 18.207, df 5, 740, p=0.000, adjusted $R^2 = 0.104$ |

| Informal information generation | 0.224 | 0.000 |
| Formal F-2-F information generation | 0.136 | 0.002 |
| Formal written information generation | -0.018 | 0.636 |
| Information dissemination | 0.187 | 0.000 |
| Response | 0.046 | 0.226 |
| **Dependant variable: staff compliance** |
| F ratio for equation is 40.891, df 5, 749, p=0.000, adjusted $R^2 = 0.209$ |

| Informal information generation | 0.028 | 0.516 |
| Formal F-2-F information generation | 0.167 | 0.000 |
| Formal written information generation | -0.008 | 0.858 |
| Information dissemination | 0.083 | 0.069 |
| Response | 0.029 | 0.489 |
| **Dependant variable: staff retention** |
| F ratio for equation is 9.986, df 5, 750, p=0.000, adjusted $R^2 = 0.056$ |

| Informal information generation | 0.115 | 0.002 |
| Formal F-2-F information generation | 0.198 | 0.000 |
| Formal written information generation | 0.004 | 0.920 |
| Information dissemination | 0.197 | 0.000 |
| Response | 0.203 | 0.000 |
| **Dependant variable: staff attitudes** |
| F ratio for equation is 65.470, df 5, 748, p=0.000, adjusted $R^2 = 0.300$ |

Table 6 Regression Coefficients for Analysis of the Effect of IMO on Dependant Variables
<table>
<thead>
<tr>
<th>Dimension</th>
<th>VIF</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal information generation</td>
<td>0.661</td>
<td>1.513</td>
</tr>
<tr>
<td>Formal F-2-F information generation</td>
<td>0.570</td>
<td>1.755</td>
</tr>
<tr>
<td>Formal written information generation</td>
<td>0.687</td>
<td>1.457</td>
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<tr>
<td>Information dissemination</td>
<td>0.597</td>
<td>1.675</td>
</tr>
<tr>
<td>Response</td>
<td>0.730</td>
<td>1.371</td>
</tr>
</tbody>
</table>

Table 7 VIF and Tolerances for IMO Dimensions
APPENDIX 1 Items used in the survey

Informal information generation
1. When at work I try to find out what employees want from the company.
2. When at work if I notice one of my employees is acting differently to normal I will try to find out if there is a problem which is causing a change in behavior.
3. When at work I try to find out my employees’ real feelings about their jobs.
4. When at work I regularly talk to my staff to find out about their work.

Formal face-to-face information generation
1. In this store we have regular staff appraisals in which we discuss what employees want.
2. *In this store management meet with our employees at least once a year to find out what expectations they have of their jobs for the future.
3. *In this store management interact directly with our employees to find out how to make them more satisfied.

Formal written information generation
1. *In this store we do a lot of internal market research.
2. *In this store we survey our employees at least once a year to assess the quality of employment.
3. *In this store we often talk with or survey people to identify influences on our employees’ behavior (e.g. Unions, sales representatives, customers).

Information dissemination
1. In this store I regularly meet with all my staff to report about issues relating to the whole organization.
2. In this store I regularly report back to my staff about issues, that affect their working environment.
3. In this store we have regular staff meetings with employees at all levels attending.

Response
1. *In this store when we find out that employees are unhappy with our supervision or management, we take corrective action.
2. In this store when we find that employees would like us to modify their conditions of employment, the departments make concerted efforts to do so.
3. *In this store we make changes to what we do when employee feedback indicates that they are dissatisfied with the status quo.

* Indicates items adapted from Jaworski’s and Kohli’s 1993 market orientation instrument.

Attitude of Managers to IMO (alpha = 0.78)
1. It is important to understand all of the factors that affect employees’ satisfaction with their employment
2. Keeping my employees satisfied is as important as keeping my customers satisfied
3. A good employer makes sure that all employees are happy in their jobs
4. Employees are the most important resource that the firm has
5. Keeping employees satisfied should be one of the main goals of any firm

IMO Behaviors of the Organization (alpha = 0.86)
1. The organization for which I work is genuinely concerned with the welfare of all its
employees
2. The firm for which I work tries to accommodate the different personal needs of all its employees
3. The firm for which I work does not recognize the importance of its employees
4. My firm treats all employees in a way that demonstrates that they are valued

Staff Attitudes ($\alpha = 0.90$)
1. Staff are generally happy working here.
2. Staff are happy to put in extra effort when I need them to.
3. Staff are well motivated.
4. Staff are willing to help out if I need them to.
5. Staff are happy to take on more responsibility.
6. In this store the atmosphere is positive.

Staff Retention ($\alpha = 0.86$)
1. Staff stay with us for a long time.
2. We have a lower turnover of staff than stores in our company.
3. Most employees have been with us for five years or more.
4. We do not have a high turnover of staff.

Staff Compliance ($\alpha = 0.83$)
1. In this store staff act in a way which is consistent with the image that the company wishes to develop.
2. In this store staff are aware of the image that the company wishes to develop.
3. In this store I rarely have to check that work has been done properly.
4. Staff are always smart and well presented.
5. In this store I am happy with how my staff perform.
6. Staff in this store generally do not need to be chased up to make sure that jobs are done on time.

Relative Competitive Position ($\alpha = 0.80$)
1. This store has higher sales than our local competitors
2. This store has a significant impact on the local economy
3. This store consistently outperforms our local competitors
4. This store has a significant impact on the fortunes of the whole organization
5. This store has higher profits than other stores in our firm

Customer Satisfaction $\alpha = 0.87$
1. Customers of this store are satisfied with the service that they receive
2. Customers of this store receive a very friendly service from staff
3. I would be happy to be one of our customers
4. We pride ourselves on the friendliness of our staff
5. Customer service is the key factor that differentiates us from our competitors