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Examining competitive priorities and competitive advantage in service organisations using Importance-Performance Analysis matrix

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Abstract

Purpose – This paper aims to examine the ten competitive dimensions of service in terms of relative importance and contribution to business performance, using the Importance-Performance Analysis (IPA) matrix.

Design/methodology/approach – Empirical data for this study was drawn from 190 managers of Australian service organisations, with primary responsibilities related to day-to-day corporate operations. The targeted service organisations encompassed various sectors, including: transportation, communications, banking, insurance, health care, education, wholesale, retail, and professional services.

Findings – Based on the four quadrants of the IPA matrix, the results suggest that customer retention and productivity need to be maintained, while innovation and speed may receive a lower priority. Brand image and cost-effectiveness fall into the areas which need improvement, while quality by conformance and delivery are identified as “potential overkillers”. Furthermore, this paper tests the difference between high- and low-performing firms and shows that low-performing firms generally place a similar level of importance on the ten competitive dimensions as high-performing ones, yet are not successful in converting what is important into performance.

Research limitations/implications – This paper contributes to strategic management in service organisations by mapping the level of importance of the ten competitive dimensions of service against their effectiveness in improving business performance.

Practical implications – The findings could help firms identify the competitive dimensions within their organisation that are effectively-resourced, under-resourced, or over-resourced and provide guidance for, “fighting the good fight”.

Originality/value – This paper contributes to knowledge by identifying the competitive priorities held by service firms and their effectiveness in improving business performance.

Keywords Competitive dimensions, Performance, IPA matrix, Competitive advantage, Australia

Paper type Research paper



Introduction

In today's competitive world, success is often determined by the appropriateness with which firms choose their competitive strategies. With so much riding on choosing the best competitive strategy, it is particularly important to gather and categorise market

data to understand customer needs. In his organising framework, Hill (2000) identifies two types of market priority: order qualifiers and order winners. Order qualifiers are competitive elements that can prompt a customer to consider a purchase, but are incapable of winning their business. Order winners, on the other hand, are characteristics that, if present, and assuming the order qualifiers have been met, will be sufficient to win a customer's business. However, because of a scarcity of resources, firms cannot pursue all competitive bases, such as quality, delivery, speed, flexibility, and cost, to the same extent, simultaneously (Hayes and Wheelwright, 1984). In addition, strategic priorities are dynamic, shifting as a result of changes in competitor behaviour, the external environment, and industry life cycles (Bolwijn and Kumpe, 1990; Hamel and Prahalad, 1994). For example, quality was recognised as a major source of competitive advantage during the 1980s and 1990s, yet, recent literature suggests that quality has been increasingly shifted from a position of order winner to order qualifier. Therefore, it is important for firms to understand this shift in order to remain competitive in their industry. Moreover, emerging paradigms such as Service-dominant Logic (Vargo and Lusch, 2004), argue that all markets (whether there is a physical good involved or not) are fundamentally focused on the exchange of services (not the products themselves), and as such, organisations are best served to organise their thought and behaviour toward a service-focused understanding of the customer. This paper contributes to this topic by mapping the locus of competitive priorities and their effectiveness as a source of competitive advantage among service organisations, using the Importance-Performance Analysis (IPA) matrix. The primary objective of this paper is to explore and identify the strategic areas where firms have effectively deployed their resources, those that need more attention, and those that waste resources.

Competitive strategies in the service sector

Competitive priorities have been discussed in the operations management (OM) literature. In determining their competitive priorities, firms are driven by several factors, such as the business environment (Mady, 2008), customer needs (Connell, 2010) and competitor actions, as well as internal resources (Murray *et al.*, 2011). By balancing these elements, firms can establish competitive priorities to gain competitive advantage. When formulating a competitive strategy, it is important for firms to understand their competitive priorities in order to commit resources appropriately.

A good lesson can be drawn from the diffusion of total quality management (TQM), which is characterised by particular tools and techniques, such as statistical process control (SPC), seven quality tools, benchmarking, quality function deployment (QFD), and failure mode and effect analysis (FMEA). Galvanised by success stories of firms claiming to have benefited from TQM, many other firms "jumped on the bandwagon" by adopting these tools and techniques in the hopes of attaining similar success. However, the firms that adopted TQM experienced mixed results, with a large proportion failing to see any benefits at all from its implementation (Redman and Grieves, 1999; Taylor and Wright, 2003). Further studies have demonstrated that the success of TQM lies in its "soft" aspects (i.e., managerial attitudes, organisational culture, and people behaviour) rather than its "hard" aspects (i.e., tools and techniques) (Jimenez-Jimenez and Costa, 2009).

Studies have examined different types of competitive priority, particularly in the manufacturing sector, and define the four primary competitive priorities as quality, delivery, flexibility, and cost (Vickery *et al.*, 1993; Ward *et al.*, 1998; Boyer and Lewis, 2002; Nair and Boulton, 2008). Boyer and Lewis (2002) define competitive priorities in a manufacturing setting as, “a strategic emphasis on developing certain manufacturing capabilities that may enhance a plant’s position in the marketplace”. As noted earlier, choosing the correct set of competitive priorities is key to the achievement of competitive advantage, which itself, is directly linked to business performance. However, the present study focuses on competitive priorities within the service sector. This paper’s authors, therefore, define competitive priorities for services in much the same way as those listed above. Competitive priorities in a service setting comprise a strategic emphasis on developing certain service capabilities that may enhance an organisation’s position in the marketplace.

Studying the service sector is important because services have played a significant part in growing developed economies, absorbing unemployment, and promoting the diffusion of service constituents in manufacturing goods (Voss *et al.*, 1997). Moreover, studies on competitive priorities within the service industry lag behind those addressing the manufacturing sector (Roth and van der Velde, 1991; Kellogg and Nie, 1995; Voss *et al.*, 1997; Smith and Reece, 1999). One major reason why fewer studies have been conducted on competitive priorities, thus far, could be that the examination of services is more difficult than that of manufacturing products. Nie and Kellogg (1999) articulate the key characteristics that make managing services more complex than manufacturing. The intangible nature of services makes for a challenging assessment of the criteria necessary for service quality and, as a result of this intangibility, there is often a huge variation in the services output. The customer factor (i.e., contact, interaction, encounters, participation, or involvement) brings complexity to the management of service operations, as their presence can, to a certain degree, influence the outcome of operations. The simultaneity of production and consumption of services also demands that managers direct their attention to delivery processes, as well as outcomes. Furthermore, many more services continue to be performed by people (high-touch) than automated by technology (high-tech). These differences also impact the way service firms define their competitive strategies. Therefore, while the typology of competitive strategies used in the manufacturing sector is still applicable to the service industry, the components comprising these service strategies differ from those normally recognised in the manufacturing sector.

Much of the extant literature on the service sector is based or referenced on how services differ from manufacturing, i.e., what they are “not”: not tangible, not storable, not transportable (Sampson and Froehle, 2006; Spring and Araujo, 2009). This is because the predominant model in the current literature is framed around the IHIP model: i.e., intangibility, heterogeneity, inseparability, and perishability (Lovelock and Gummesson, 2004). The backlash to this “service is not manufacturing” model has driven the creation of several alternative paradigms, such as Service-dominant Logic (Vargo and Lusch, 2004) and Unified Services Theory (Sampson and Froehle, 2006), which focus on the transaction and the customer, respectively. Service-dominant Logic is notable within the context of the present study, in that it argues that all markets (whether there is a physical good involved or not) are fundamentally focused on the exchange of services (not the products themselves), and as such, organisations are best

served to organise their thought and behaviour toward a service-focused understanding of the customer. This line of thinking clearly points to the importance of understanding the effective management of organisations from a services perspective. While there remains no consensus with regard to a theory of service, the literature has subsequently suggested various, more broadly-defined dimensions of competitive strategy that can prove effective for service organisations, including responsiveness, speed, customer retention, innovation, and brand image. However, the effectiveness of these competitive dimensions has yet to be tested empirically. In addition, managerial perception of the degree of importance of various competitive strategies will determine which strategies are pursued and how available resources are distributed among them. This raises a question that is central to the present study: Do investments made by service firms in the ten competitive dimensions pay off and yield satisfactory returns? This study seeks to explore this topic by examining the competitive priorities pursued by service firms against the effectiveness of these strategies in generating competitive advantage.

Importance-performance analysis (IPA)

The IPA matrix was first introduced into the marketing domain by Martilla and James (1977) to help target audiences identify and rate certain product or service attributes, based on their importance to the rater and their impact on the organisation’s overall performance. By using this matrix, management can draw insights on attributes that require and deserve improvement, versus those that have consumed excessive resources with minimal benefit to customer satisfaction. Originally, the IPA matrix was presented using a two-dimensional matrix with the *x*-axis depicting “performance” (then defined as “customer satisfaction”) and the *y*-axis depicting “importance”, as illustrated in Figure 1.

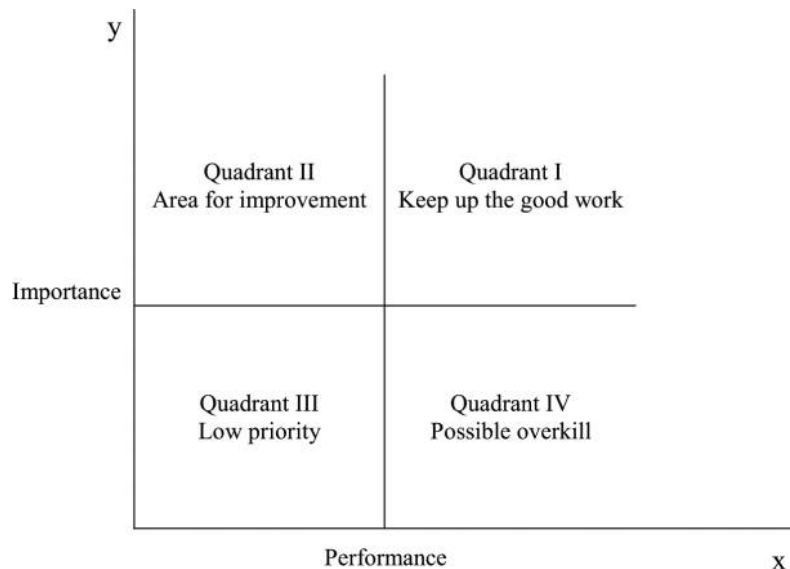


Figure 1.
The Importance-
Performance Analysis
(IPA) matrix

In this two-dimensional matrix, four quadrants are depicted. Quadrant I, reflecting high levels of both customer satisfaction and importance, represents areas which contribute to competitive advantage and is labelled “Keep up the good work”. Quadrant II is characterised by low levels of satisfaction in attributes considered to be high in importance and is thus termed as an “Area for improvement”, demanding immediate managerial attention. Quadrant III represents attributes that are low in both satisfaction and importance and thus only merit a “Low priority” ranking in the strategic direction of the firm. Quadrant IV represents attributes that are rated high in satisfaction but low in importance, and are thus considered to fall into the category of “Possible overkill”. The latter term implies that resources committed to these attributes could be more judiciously employed elsewhere (Quadrant II or Quadrant I).

Other scholars have modified the use of the IPA matrix (Bacon, 2003). This study follows the work of Slack (1994), who used the IPA matrix to determine key areas of a firm’s operations, based on managerial perceptions. More specifically, the perceptual importance of a firm’s various competitive dimensions is compared against the latter’s contribution to business performance. Slack (1994) argued that using the modified matrix provides managerial implications for priorities in service operations and in a more effective manner. The modified matrix, claimed Slack, also facilitates the formulation of operations strategy, enabling managers to prioritise the relative importance of various competitive variables, based on their contribution to the competitiveness of the organisation.

The modified IPA matrix used in the current study therefore seeks to compare competitive priorities against their effectiveness in improving business performance within service firms. It is important to understand how the matrix contributes to the formulation of an operations strategy, whereby firms are required to choose priorities from a number of areas. In order to do this, firms may develop a rating system or rank strategic areas by their perceived level of importance. Ideally, areas which contribute to a firm’s competitive advantage will receive a higher priority and more resources. The assignment of the correct resources to the correct priorities can be a key differentiating factor between high- and low-performing firms.

Based on above discussion, the research questions posed in this study are:

- Which competitive dimensions are important to service managers?
- Do the competitive dimensions which rate as high priorities contribute most to business performance? In other words, are the most important competitive dimensions, as perceived by managers, also the most effective competitive dimensions in the marketplace?
- Are there any differences between high-performing and low-performing firms in terms of competitive priorities?

Method

Sample and procedures

Empirical data for this study were gathered from managers in a range of Australian service organisations, with primary responsibilities related to the day-to-day operations of the firm. This data set was selected, since the competitive dimensions examined in this study are assessed at the operational level. The list of respondents was purchased from a mailing list company. In total, 1,200 surveys were mailed out

and 190 usable responses received; signifying a response rate of 15.8 per cent. Respondents predominantly held middle to senior managerial positions: a fact that shores up the validity of the survey's responses.

The service organisations examined encompass various sectors, including: transportation, communications, banking, insurance, health care, education, wholesale, retail, and professional services. Table I presents a breakdown of the various service industries that participated in the study, using the Australian and New Zealand Standard Industrial Classification (ANZSIC). The authors also provide a comparison of the sample's spread with one based on the counts of Australian businesses ca. 2009, obtained from the Australian Bureau of Statistics (www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0). Because of sampling errors, several sectors show a proportional discrepancy when comparing an entire firm's population to that of Australia. Therefore, precaution is recommended when generalising the findings of this study.

Table II illustrates organisational size in terms of number of employees. Nearly sixty per cent of respondents worked at firms with 100 + employees.

Measures

Ten competitive dimensions were examined in this study. These competitive dimensions were derived from literature focusing on operations strategy, capability, and performance within both manufacturing and service contexts. The first five items are related to quality performance and were derived specifically from literature on service quality. This step was taken, since services possess key characteristics that are

| ANZSIC | Service sectors | Number of firms | Valid % of the sample | % Australian firms (2009) |
|------------------|---|-----------------|-----------------------|---------------------------|
| D | Electricity, gas, water and waste services | 11 | 5.8 | 0.3 |
| E | Construction | 5 | 2.6 | 20.1 |
| F | Wholesale trade | 31 | 16.4 | 4.5 |
| G | Retail trade | 13 | 6.9 | 8.1 |
| H | Accommodation and food services | 9 | 4.8 | 4.5 |
| I | Transport, postal, and warehousing | 26 | 13.8 | 7.8 |
| J | Information, media, and telecommunications | 15 | 7.9 | 1.0 |
| K | Financial and insurance services | 14 | 7.4 | 8.8 |
| L | Rental, hiring, and real estate services | 8 | 4.2 | 12.7 |
| M | Professional, scientific, and technical services | 23 | 12.2 | 13.6 |
| N, O, P combined | Administrative and support services, public administration and safety, education and training | 9 | 4.8 | 6.4 |
| Q | Healthcare and social assistance | 10 | 5.3 | 5.4 |
| R | Art and recreation services | 7 | 3.7 | 1.6 |
| S | Other services | 8 | 4.2 | 5.0 |
| | Missing data | 1 | | |
| | Total | 190 | | |

Table I.
Service sectors of the respondents

fundamentally different from those of manufacturing; they are often intangible, idiosyncratic, heterogeneous, and depend on a different, often more personal-based type of loyalty (Nie and Kellogg, 1999). The scale of quality capabilities comprises five items. The first item, conformance to specification, refers to the extent to which the end product corresponds to its original design specifications. Conformance to specification gained wide recognition, particularly during the TQM era (Crosby, 1979), but has also been applied in the service context (Collier, 1994; Harvey, 1998; Brah and Chong, 2004). The next two items, customer retention and service recovery, are considered of particular importance within the service sector, due to their effect on customer loyalty. Customer retention refers to a firm's ability to retain existing customers. The basis of this argument is that retaining existing customers yields higher profit margins than winning new ones (Heskett *et al.*, 1997). Similarly, service recovery refers to the actions taken by a firm that has failed to provide the level of service expected by its customers. Service recovery has also been widely-recognised as a strong indicator of a firm's commitment to provide service quality to its customers (Miller *et al.*, 2000; Goldstein *et al.*, 2002; DeWitt and Brady, 2003). The scale's fourth item is responsiveness. The authors define responsiveness as the provision of prompt customer service and a flexible response to customer requests, both of which generate customer satisfaction. Responsiveness has long been considered a key element of service quality (Zeithaml *et al.*, 1990). Also, because services are not storable, a service firm's ability to promptly react to customer needs is of elevated importance. The fifth item on the scale of quality capabilities is brand image. Brand image refers to the unique associations, perceptions, and beliefs about a product that take hold within the mind of the customer. The concept behind brand image centres on the fact that the customer purchases not just a service, but also the image associated with the service. The concept of brand image is used to reflect the quality dimension of "perceived quality", as defined by Garvin (1984). Although the concept of perceived quality was originally applied in the manufacturing sector, it is equally pertinent in the service context for defining service quality. This is because, in the absence of any tangible aspects of service, customers are obliged to rely on brand image when evaluating the quality of a service during the pre-purchase phase (Hellier *et al.*, 2003; Jiang, 2004).

The next two items pertain to service delivery, since a defining characteristic of service is that, typically, its production/delivery and consumption occur simultaneously (Nie and Kellogg, 1999). It remains difficult to "inventory" services in anticipation of future demand, irrespective of which service is examined: airlines, restaurants, or consulting services. The two items that reflect the critical characteristics of service are on-time delivery and speed. For the purpose of this

| Number of employees | Number of firms |
|---------------------|-----------------|
| Less than 10 | 2 |
| 10-19 | 14 |
| 20-99 | 62 |
| 100-199 | 32 |
| 200 or more | 79 |
| Missing data | 1 |
| Total | 190 |

Table II.
Organisational size based
on the number of
employees

paper, on-time delivery refers to a firm's ability to meet a customer's promised delivery date. Speed, on the other hand, refers to the amount of elapsed time between order taking and service fulfillment. While on-time delivery affects customer expectations, speed is measured against competitor performance. This group of five items comprises the key dimensions of customer service strategies (Maltz and Maltz, 1998).

One item not yet considered, pertains to service innovation. Service innovation is increasingly regarded as a competitive weapon (Akamavi, 2005) by firms that are compelled to seek innovation by the market's constant hunger for better services (Berry *et al.*, 2006).

The last two items capturing the low-cost capabilities are measured by two elements also adapted from manufacturing studies. These two items (i.e., cost-effectiveness and productivity) were consistent with others used in previous empirical studies on operations strategy, although those studies sometimes labeled productivity as increased utilisation (Ward and Duray, 2000; Boyer and Lewis, 2002). Productivity refers to the ratio of services produced by an operational process to the resources required to produce them, or, simply put, the ratio of actual output to input over a period of time (Johnston and Jones, 2003). Cost-effectiveness refers to a firm's productivity relative to expenses incurred in the production of its service outputs.

The 190 respondents engaged in this study were asked to assess the ten competitive dimensions listed above in terms of their importance and then evaluate their firm's relative performance in their respective service sector. Two types of measurement were employed, both using a five-point Likert-type scale, with the importance measure ranging from 1 (not important) to 5 (very important) and the firm's relative performance scale ranging from 1 (weakest in industry) to 5 (industry leader). Therefore, each competitive dimension had two scores, one indicating its relative importance for the firm (column 2 of Table III), and the second indicating the relative performance of the firm itself (column 3 of Table III).

| Strategic performance | Relative importance | Relative performance | Correlation between relative importance and business performance | Correlation between relative performance and business performance |
|------------------------------|---------------------|----------------------|--|---|
| Conformance to specification | 4.28 | 3.91 | 0.49* | 0.10 |
| Service innovation | 3.24 | 3.18 | 0.59* | 0.24* |
| Customer retention | 4.38 | 3.86 | 0.42* | 0.44* |
| Speed | 3.88 | 3.71 | 0.49* | 0.27* |
| Service delivery | 4.32 | 3.90 | 0.48* | 0.12 |
| Responsiveness | 4.26 | 3.81 | 0.41* | 0.24* |
| Brand image | 3.76 | 3.66 | 0.60* | 0.43* |
| Cost-effectiveness | 3.81 | 3.41 | 0.38* | 0.32* |
| Productivity | 4.10 | 3.63 | 0.48* | 0.35* |
| Service recovery | 3.76 | 3.50 | 0.62* | 0.31* |

Table III. Summary of importance, performance, and effect on business performance

Note: * $p < 0.05$

Overall, the competitive dimensions incorporated in this study are similar to those used by Voss *et al.* (1997). The use of a single item to measure competitive dimensions has been adopted in a number of previous studies (e.g., Vargas and Manoochehri, 1995; Nie and Kellogg, 1999; Wright and Mechling, 2002; Matzler *et al.*, 2004). These studies commonly aimed at ranking the various items of operations strategies or performance, based on their importance or effectiveness, in accordance with this study.

Following previous studies on operations strategies and performance (Yamin *et al.*, 1997; Ward and Duray, 2000), the business performance scale was measured using three items: sales, profit, and market share. Respondents provided their perceived rating of various performance measures relative to their firm's industry. The measure was gauged using a five-point Likert scale ranging from 1 (behind) to 5 (leader).

Data analysis

IPA

As previously mentioned, this study echoes other authors, who have modified the use of the importance-performance analysis matrix to determine several strategic areas in firms' operations, based on managerial, rather than customer, perceptions (Slack, 1994). Therefore, the perceptual importance of different competitive dimensions of firms is mapped against the effectiveness of these competitive dimensions in their contribution (i.e., correlation) to the firms' business performance. In this study, the IPA matrix was used for mapping the ten competitive dimension scores in terms of importance (*x*-axis) against the scores of effectiveness (*y*-axis). As discussed below, these effectiveness scores reflect the correlation coefficients between the performance score of each competitive dimension and the scores of business performance. The higher the coefficient values, the more effective the competitive dimension is perceived to improve business performance.

As a preliminary test, a multivariate analysis of variance (MANOVA) was performed to check if there was any difference between the ten competitive dimensions across service sectors. The MANOVA was statistically significant ($F = 1.54$; $p < 0.01$ for importance and $F = 1.60$; $p < 0.01$ for performance). Following Tabachnick and Fidell (2007), follow-up analyses of variance (ANOVAs) were conducted using a Bonferroni-corrected alpha of 0.005. The results show that only one variable in the importance scores (customer retention) and two variables in the performance scores (on-time service delivery and service recovery) were significantly different across service sectors. Overall, given there were few significant differences across service sectors, it is deemed appropriate to pool the data in this analysis.

As previously stated, this study builds on the work of Slack (1994), which compared the levels of importance and performance with regard to several competitive dimensions in operations management. However, this study did not make a direct comparison (or mapping) between importance and performance scores, due to the potential for bias between the two scores, since they were all assessed by a single respondent in the organisation. Implicitly, respondents who considered one strategic area to be important might (though not necessarily) be inclined to claim that the firm achieved high performance in that same area. Therefore, the authors converted the performance scores into effectiveness scores by performing zero-order correlations between the performance scores of the ten dimensions and the business performance measure. The resulting effectiveness score thus reflects the extent to which

performance in each of the ten dimensions is associated with the measures of overall business performance. By employing this method, the above potential bias is reduced, as it is unlikely that the importance scores will have a significant influence on the effectiveness scores.

Zero-order correlation, using Pearson's coefficient, was performed to identify the correlation between each of the relative performances of the ten competitive dimension scores and the composite score of business performance. This calculation was used as a proxy for their effectiveness scores. The results are presented in Table III, which illustrates the importance scores (column 1), performance scores (column 2), and effectiveness scores (column 3). Among the ten competitive performance dimensions, customer retention and brand image are shown to have the strongest correlation with business performance; and thus, have the highest effectiveness scores. Surprisingly, quality and service delivery are among the dimensions that showed the weakest correlation with business performance.

In the third step, the IPA matrix was constructed to map the level (i.e., score) of importance against the effectiveness of the ten competitive dimensions. When constructing the matrix, "the scaling of the axes and the location of attributes into the four quadrants is critical since that determines the interpretation of the results" (Matzler *et al.*, 2003, p. 116). Following Martilla and James (1977), the four quadrants were determined by identifying the mid-points of both axes using the average scores of the ten competitive performance variables (3.98 for importance and 0.28 for effectiveness, respectively). The IPA matrix is presented in Figure 2.

Customer retention and productivity fall into Quadrant I ("Keep up the good work"), which is characterised by high levels of both importance and effectiveness on business

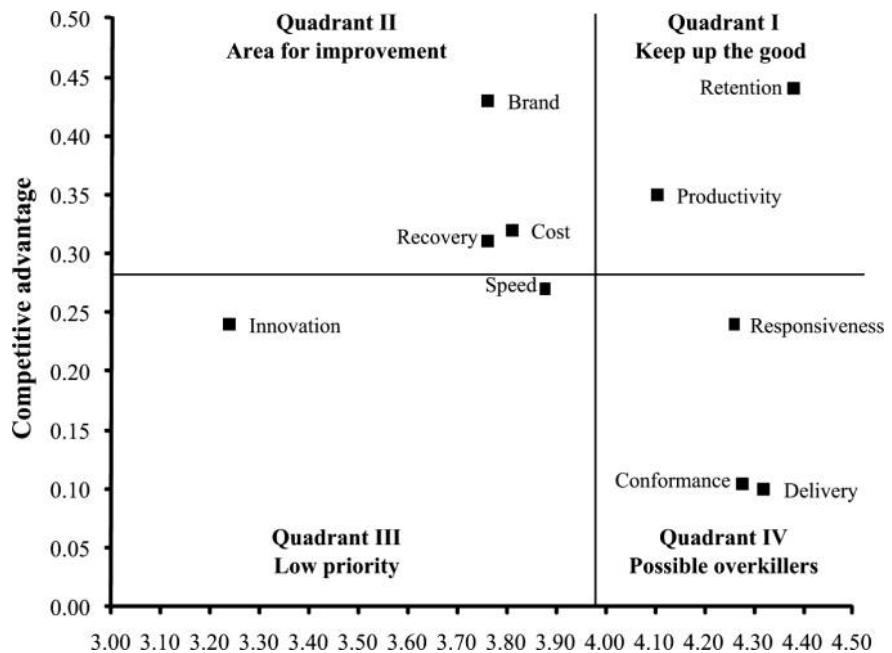


Figure 2.
Competitive priorities –
competitive advantage
matrix

| Competitive bases | High-performing firms | | Low-performing firms | | Δ mean |
|--------------------|-----------------------|------|----------------------|------|---------------|
| | Mean | SD | Mean | SD | |
| <i>Importance</i> | | | | | |
| Quality | 4.27 | 0.82 | 4.21 | 0.82 | 0.06 |
| Innovation | 3.37 | 1.03 | 3.14 | 0.98 | 0.23 |
| Retention | 4.61 | 0.71 | 4.24 | 0.99 | 0.37** |
| Speed | 4.05 | 0.94 | 3.78 | 1.02 | 0.27* |
| On-time delivery | 4.39 | 0.84 | 4.24 | 0.80 | 0.16 |
| Responsiveness | 4.42 | 0.64 | 4.09 | 0.75 | 0.33** |
| Brand image | 4.01 | 1.16 | 3.61 | 1.21 | 0.40* |
| Cost | 3.92 | 0.91 | 3.73 | 1.00 | 0.19 |
| Productivity | 4.16 | 0.75 | 4.05 | 0.75 | 0.11 |
| Recovery | 3.90 | 1.00 | 3.67 | 1.08 | 0.22 |
| <i>Performance</i> | | | | | |
| Quality | 4.04 | 0.79 | 3.69 | 0.89 | 0.35** |
| Innovation | 3.45 | 1.05 | 2.85 | 1.02 | 0.61** |
| Retention | 4.18 | 0.83 | 3.41 | 0.79 | 0.77** |
| Speed | 3.95 | 0.79 | 3.46 | 0.85 | 0.49** |
| On-time delivery | 3.96 | 0.84 | 3.72 | 0.87 | 0.24* |
| Responsiveness | 4.00 | 0.81 | 3.56 | 0.76 | 0.44** |
| Brand image | 4.09 | 0.98 | 3.15 | 1.05 | 0.94** |
| Cost | 3.62 | 0.89 | 3.25 | 0.82 | 0.37** |
| Productivity | 3.85 | 0.77 | 3.38 | 0.72 | 0.47** |
| Recovery | 4.27 | 0.82 | 3.27 | 0.72 | 0.48** |

Note: * $p < 0.05$; ** $p < 0.01$

Table IV.
Comparative analysis
between high- and
low-performing firms on
relative importance and
relative performance of
competitive dimensions

performance. On the other hand, innovation and speed fall into Quadrant III (“Low priority”), which has a low level of importance and effectiveness on business performance. These first two quadrants indicate the strategic areas where firms have done the “Right things”. Brand image, cost-effectiveness, and service recovery fall into Quadrant II (“Area for improvement”), which has a low level of importance but a high level of effectiveness. Finally, quality, on-time delivery, and responsiveness fall into Quadrant IV (“Possible overkill”) with a high level of importance but a low level of effectiveness on business performance. These two quadrants, especially Quadrant II, require particular attention.

Differentiating high- and low-performing firms

Prior to conducting correlation analysis for calculating these effectiveness scores, the authors determined the composite scores of the business performance scale, comprising three items: sales, profit, and market share. The reliability and validity of the scale were analyzed and both tested exceptionally well. The results of a construct validity test, using factor analysis, showed that the three items were strongly loaded into one factor with a variance extracted of 75 per cent. Reliability was estimated using Cronbach’s alpha (coefficient of reliability) which scored 0.8. The composite score was calculated by taking the mean of the three items (Hair *et al.*, 1998).

Once the IPA matrix was mapped, the study focused on comparing high- and low-performing organisations, with respect to the level of importance and the relative performance of the ten competitive dimensions. When splitting the sample into high- and low-performing firms, the authors used the median business performance score (3.67) as the cut-off point. Firms with a business performance score of 3.67 and above were grouped as high performers ($n = 85$ or 46 per cent of the sample), and firms with a business performance score of less than 3.67 were grouped as low performers ($n = 99$ or 54 per cent of the sample). An independent t -test (statistical hypothesis test) was then conducted to examine the difference between these two groups, with respect to the level of importance and performance of the ten competitive strategies. The results are presented in Table IV.

In terms of the importance scores, the results demonstrate that only three competitive dimensions show statistically-significant differences between the high- and low-performing firms, namely: brand image, customer retention, and responsiveness. This suggests that, in general, low- and high-performing firms place a similar level of importance on the competitive dimensions. In terms of performance scores, however, the high-performing firms show significantly higher scores in all ten competitive dimensions than the low-performing firms. This suggests that the difference between high- and low-performing firms lies in the realisation of their strategic priorities.

Discussion

The IPA matrix exhibits several findings, which deserve further attention. First, among the four strategic areas related to quality, conformance to specification has the least influence on business performance, while brand image and customer retention are much stronger contributors. This finding reflects the difference of the importance of quality dimensions between manufacturing and service firms. While conformance to specification has been the most prominent dimension of quality in the manufacturing sector, the intangible nature of services could lessen the impact of conformance on business performance.

On the other hand, brand image and customer retention are shown to be sources of competitive advantage. This concurs with the extant literature, which suggests that keeping existing customers yields higher profit margins than winning new ones (Heskett *et al.*, 1997; Reichheld and Markey, 2000). This is closely associated with the importance of brand image, which is related to customer loyalty: a pertinent issue in service sectors (Tax and Brown, 1998). This is because the absence of tangible aspects of service makes it difficult for customers to make pre-purchase assessments of services. As a result, they tend to rely on brand image as an indicator for service quality (Javalgi and Moberg, 1997; Hellier *et al.*, 2003). However, the matrix reveals that firms do not put a similar level of importance on brand image as they do on customer retention. The implication is that firms might be better served by managing the link between customer retention and brand image to build synergy between these two competitive dimensions (Keiningham *et al.*, 2006).

Second, despite the increasing attention given to innovation, the latter received the lowest priority level and had a relatively weak effect on business performance. This perhaps confirms, as Gallouj and Weinstein (1997, p. 537) suggest, that innovation in services is more problematic than in manufacturing because, “the ‘fuzzy’ nature of

service outputs make it particularly difficult to measure and detect improvement or change". With regard to the impact of service innovation on business performance, Voss *et al.* (1992) suggest that service innovations are often more rapidly implemented, but also more easily copied, than manufacturing ones. As a result, it is difficult to create differentiation in services through innovation. The study, authored by Easingwood and Arnott (1991), also shows the weak effect of product development (a component of innovation) on business performance.

Third, cost and productivity are shown to be strong predictors of competitive advantage. This finding is interesting, given that the service sector differs greatly from manufacturing, and often finds it difficult to achieve the high levels of productivity commonly found in high-volume manufacturing (Boyer and Metters, 2004). Also, the heterogeneous nature of services makes it difficult to produce repeated services in many sectors (Nie and Kellogg, 1999). However, several studies have shown that productivity can be achieved in service firms. For example, the study by Parast and Fini (2010) within the US airline industry, shows the positive relationship that exists between labour productivity and profitability. At the same time, this finding could perhaps be related to the results revealed on innovation, in the sense that the difficulties experienced by firms competing through innovation may have driven them to pursue an alternative strategy by exploiting existing capabilities and becoming more efficient. The results indicate that both cost and productivity are stronger than innovation as competitive priorities and as contributors to competitive advantage.

What about quality by conformance and service delivery? Are they really "Overkillers", as indicated by their position in the matrix? Furthermore, does this result indicate that firms have placed incorrect priorities on the competitive value of these two strategies? While the results would seem to suggest this, the inference is not so clear-cut. Thus, the authors refer once again to the concepts of order winner and order qualifier (Hill, 2000). As previously discussed, an order qualifier is a product/service characteristic that is required for the product/service to even be considered by a customer. Firms must provide order qualifiers to enter or stay in a market, but need only perform as well as their competitors. An order winner, on the other hand, is a characteristic that will win the bid or customer purchase, and therefore, firms must outstrip their competitors in these areas. In light of these concepts, the authors can consider quality and service delivery as order qualifiers. This is because, while they do not necessarily make firms competitive, losing ground in either of these two areas will negatively impact a firm's performance, as their absence will remove the firm from the running in the customer's eyes. In other words, these elements only function as a market entry "threshold" (Matzler *et al.*, 2004). The results, therefore, demonstrate the shift of competitive bases from quality (by conformance) and delivery that were so commonly emphasised in the 1980s, to a position where quality by conformance might now be considered an order qualifier (Hamel and Prahalad, 1994; Boer and Gertsen, 2003). Overall, the findings support the need for defining quality in a service context beyond conformance to specification, which represents a critical difference between the service and manufacturing sectors.

A similar line of argument can be applied for responsiveness. While responsiveness can be used as an effective competitive weapon in manufacturing (Gerwin, 1993), it is considered as merely an order qualifier in services. This is because, as mentioned above, services are, by nature, heterogeneous and idiosyncratic, and therefore,

customers already assume that service providers will be responsive and flexible in responding to their needs (Chaniotakis and Lymperopoulos, 2009; Ramseook-Munhurrin *et al.*, 2009).

The practical implications of the above discussion are that, while firms need to maintain their “basic” competitive bases, including quality and delivery, they also need to build other areas in which to find superiority over their competitors. There is a danger in holding onto the past “rules of the game” and losing sight of the changes taking place in service-based markets (Vandermerwe, 2003). As this study’s results demonstrate, customer retention (e.g., through excellent customer service and customer relationship management), together with the enhancement of brand image, have shown to be a primary source of competitive advantage within the service industry.

Finally, with regard to the difference between high- and low-performing firms, the results indicate that low-performing firms seem to have similar priorities to high-performing ones, with the exception of a few dimensions, such as brand image, yet fail to implement the correct priorities. Interestingly, the two areas that low-performing firms considered less important (i.e., brand image and customer retention) are among the most effective predictors of business performance, as shown by their correlation coefficients in Table III. On the other hand, high-performing firms show higher performance scores across the ten competitive dimensions. These results, therefore, demonstrate that while low-performing firms show a similar level of importance (or priorities) across most of the competitive performance dimensions, they fail to convert them effectively into tangible performance. Hence, they fail to improve their business performance. In other words, low-performing firms, in general, fail to transform their strategic intent into strategic performance.

From a theoretical perspective, the findings show that the failure of low-performing firms does not lie in the realm of strategy formulation; but rather, strategy implementation. This is consistent with the current literature, which suggests that, while strategy formulation, or choice, is important, it is the strategy deployment which delivers results, signifying that “doing is harder than dreaming” (Olson *et al.*, 2005). This concurs with what literature and research have long suggested: the current challenge for management lies in strategy implementation, rather than strategy formulation (Dobni, 2003; Miller *et al.*, 2004).

Conclusion

This study examined the competitive priorities and competitive advantage of ten strategic areas in various service sectors using the IPA matrix. Four quadrants were established using the mid points of the competitive dimensions in terms of their relative importance and their influence on business performance. The results provide several ideas relating to the fact that service firms need to put a higher priority on gaining competitive advantage by prioritising specific dimensions, for example, brand image. The insights drawn from this study could help organisations balance their priorities and suggest the optimal areas on which emphasis should be placed. The analysis on the differences between high- and low-performing firms clearly shows that it is important for firms to not only understand the strategic choices they need to make, but also the challenges involved in realising them effectively.

The results discussed above notwithstanding, there are several limitations inherent in this study, which necessitate circumspection when interpreting the findings. The

primary limitation is the use of a cross-sectoral dataset, which did not permit an examination of the differences within different sectors. An inter-sectoral analysis was not feasible with this data set, due to the imbalanced proportions of the sample across different sectors. However, the authors tested the industry effect using MANOVA and found only three variables that showed significant differences between service sectors. On balance, generic strategies (by definition) should apply at the cross-sectoral level, meaning that a firm's strategic choice is not necessarily dictated by the sector within which the firm operates. However, future studies could pursue this avenue of research, using industry-specific data, to improve the generalisability of the findings and examine whether different sectors possess different sources of competitive advantage (Voss *et al.*, 1997).

Further analysis could be performed to seek further insights. First, the impact of the previous ten strategic areas (using correlations) on both the high and low ends of business performance could be analyzed to identify the order qualifiers and order winners, following the example of Johnston (1995) and Matzler *et al.* (2004). Second, the links between different strategic areas and their interactions (synergistic or antagonistic) in affecting business performance could also produce useful insights. Examining these interactions would contribute to the understanding of the relationship between trade-offs and the cumulative strategic capabilities of firms (Boyer and Lewis, 2002). For example, do cost and brand image produce strategic congruency? Third, the possible path dependency between competitive dimensions is also worthy of investigation. For example, which competitive dimensions play a significant role in building brand image? Also, is it possible that the achievement of certain competitive dimensions could lead to success in other dimensions? For example, does quality by conformance lead to cost reduction in services, as is the case in manufacturing? This could help managers better understand how to develop the potential building blocks of competitive capabilities.

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