

**Fitness map:
A classification of internal strategic fit in service organisations**

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Introduction

The level of strategic fit within an operation is defined as the degree of linkage or consistency between its competitive priorities, operations strategy and delivery system (Hayes and Wheelwright, 1984; Kotha and Orne, 1989; Anderson et al., 1989; Leong et al., 1990; Hill, 1994; Hill and Hill, 2009). To achieve strategic fit, organisations must identify, prioritise, communicate, achieve commitment to and implement strategic initiatives within two different dimensions (Stephanovich and Mueller, 2002):

- **External** - External strategic fit exists within a company when all of its actions and interests are focused on its key goals (Robinson and Stern, 1998) and thus its resources, capabilities and strategies all match the demands of the external environment in which it competes (Stephanovich and Mueller, 2002).
- **Internal** - Internal strategic fit exists when all the employees from the different levels and functions within an organisation agree on what is most important for the business to succeed and the relative importance of the competitive criteria it must support (Boyer and McDermott, 1999). This occurs when its operations strategy matches its other functional strategies and its overall business strategy (Draaijer, 1993).

The need to create strategic fit is an important building block in strategy development (Venkatraman and Camillus, 1984; Drazin and de Ven, 1985) and is one of the most established ideas in strategic management (Porter, 1996). However, although the importance of achieving fit is implicit in almost every operations strategy study, it has received relatively little explicit examination (Boyer et al., 2005). Table 1 summarises the research to date on strategic fit within operations management and shows that it has predominantly focused on manufacturing businesses. Most of the limited research into service organisations has looked at external fit: both Nayyar (1992) and Smith and Reece (1999) investigated the external fit-performance relationship while Verma et al. (1999) looked at how to link operations to market-based objectives. The only authors to investigate internal strategic fit in services are Hill and Brown (2007) who developed the ‘strategic profiling’ framework to help businesses understand the level of fit that exists within their organisation and develop strategies for improving it. As with most operations strategy frameworks, the ‘strategic profiling’ model is built on a proposition that increasing levels of misfit have a negative impact on business performance. However, this proposition has not been empirically validated. Similarly, the framework does not show the different classifications of fit that exist, how changes in fit will impact business performance or which variables businesses should focus on first as they try to develop fit within their organisation.

Insert Table 1 around here

This research starts to address some of these gaps. It identifies two significant internal fit-performance relationships, proposes six classifications of internal fit and shows how firms can move from one classification to another. Fit within a firm’s operations strategy was found to positively and directly impact market share, whereas fit within its service delivery system positively and directly impacts return on sales. The following six classifications of fit were also identified.

Low fit (poorly aligned) firms are either ‘understanding processes’ or ‘understanding markets’. Firms that are ‘understanding processes’ have reengineered their processes, reviewed performance measures and reduced the level and type of customer interaction within the delivery system; whereas companies that are ‘understanding markets’ are using performance measures to understand customer requirements and measure how well they are being met. Medium fit businesses are either ‘managing processes’ or ‘developing service offerings’. Those ‘managing processes’ understand their processes and are now managing them with performance measures linked to employee incentives, rewards and development; whereas those ‘developing service offerings’ understand their markets and are developing service offerings using performance measures and employee incentivisation, reward and development to create fit with their markets. High fit organisations are either ‘leveraging services and process-capabilities’ or ‘leveraging markets and design-capabilities’. Firms that are ‘leveraging services and process-capabilities’ not only understand their processes and manage them well, but are now using their organisation layout, structure and key delivery system tasks to leverage services and process-capabilities to grow sales with existing customers and enter new markets. Businesses ‘leveraging markets and design-capabilities’ are also using their organisation structure and layout, but they are growing sales by leveraging their existing customers and design-capabilities, rather than services and process-capabilities.

The findings have important implications for both academics and practitioners. Using the methodology described in the paper, firms are able to identify their classification of fit and understand how it has been created. They can then benchmark their level of fit within different parts of their own organisation (internally) and against other organisations (externally) to identify areas for improvement. These insights will help them understand how and why to move from one level of fit to another, and understand how changes in fit may impact different measures of business performance. In doing so, this paper addresses the current gap within the literature around the lack of research into internal strategic fit in service organisations. It also meets the need for a more focused, in-depth investigation into fit (Menda and Ditts, 1997; Meredith, 1998, Boyer et al., 2005; and Sousa and Voss, 2008) and further approaches, concepts and guidelines for analysing and testing it (da Silveira, 2005; Santala and Parvinen, 2007).

Internal strategic fit

Although the concept of ‘fit’ has always been at the core of operations strategy research, its empirical measurement has proved to be a challenging and elusive task (da Silveira, 2005; Sousa and Voss, 2008). Frameworks such as Chase and Aquilano’s (1981) strategic audit, Shostack’s (1994) service positioning strategy, Heskett’s (1986) strategic service vision and Hill and Brown’s (2007) strategic profiling are useful for guiding broad strategic discussions within service organisations, but provide limited guidance to the measurement and analysis procedures required for empirical research. The research approach used here is similar to that established by da Silveira (2005). However, instead of applying the Hill (2000) product profiling framework developed for manufacturing organisations, this research applies the Hill and Brown (2007) strategic profiling framework developed for service organisations. This is because it is the only framework that has been developed for specifically checking internal fit within service operations and it also has a high degree of consistency with the approaches used to investigate internal fit within manufacturing operations (such as Mills et al., 1998; Hill, 2000; Hill and Hill, 2009).

The Hill and Brown (2007) strategic profiling framework represents a configurational view of fit by assessing whether or not the highly interdependent elements of the operation such as its activities, policies and structures are consistent with and reinforce each other (Miller, 1996; Siggelkow, 2002). It assesses the level of fit between three dimensions: what a business needs to do, how it operates, and how it delivers products and services:

- **Market competitive criteria (what the business needs to do)** – determine what the business needs to do by identifying the competitive criteria executives consider important within its markets and understanding how their importance varies between the different markets served (Menda and Ditts, 1997; Boyer and McDermott, 1999; Hill and Brown, 2007; Hill and Hill, 2009).
- **Operations strategy (how the business operates)** – assess how the company operates by checking if functional strategies are consistent with each other in terms of aspects such as organisation, investments, performance measurement orientation and how employees are rewarded (Heskett, 1986; Hill and Brown, 2007).
- **Delivery systems (how the business delivers products and services)** – understand how products and services are delivered to see if the different steps in the service delivery system that are provided by different functions are aligned with each other (Heskett, 1986; Hill and Brown, 2007).

Each aspect can be assessed by looking at the characteristics of a number of elements as shown in Figure 1. Based on these characteristics a strategic profile is created that indicates the level of fit within and between an organisation's market competitive criteria, operations strategy and delivery system. This profile can then be used to identify ways to improve or reinforce the level of fit within the business. Figure 1 shows a company with 'high-fit' and one with 'low-fit'. The number of points in the profile that are aligned with each other indicates the degree of fit. Hence, a straight line shows that all aspects are aligned with each other and there is a high level of fit. However, this straight line can be at any point on the continuum shown in the framework. For example, companies competing in price sensitive high volume markets selling standard services would want the points in their profile to be towards the left-hand side of the continuum, whereas a company competing in low volume markets winning orders through their design capability selling a high customisable service would want their profile to be towards the right-hand side of the continuum.

Insert Figure 1 around here

Business performance

There is general agreement among researchers that measuring performance is difficult as “the adoption of any particular set of indicators embroils the researcher in the quagmire of problems of quantification and dimensionality, not to mention the issue of validly choosing the set of indicators which meets universal acceptance” Bourgeois (1980: 235). According to several authors, for example Kaplan and Norton (1992) and Nilsson and Kald (2002), the use of both financial and non-financial indicators creates a more accurate performance measurement system. Examples of non-financial indicators widely used are market share (Anderson and Sohal, 1999), overall competitiveness (Lau, 2002), productivity (Ross, 2002) and growth in market share (Tracey et al., 1999).

The measures of performance used in this study were adopted from Ramanujam and Venkatraman (1987), Kotha and Swamidass (2000) and Papke-Shields and Malhotra (2001) where they had a high level of internal consistency. One item measures growth (domestic market share) and two items measure profitability (return on sales and return on investment). All three measures have been used in prior operations strategy research, for example Boyer et al. (1997), Swamidass and Newell (1987), Vickery et al. (1993) and Ward et al. (1994).

Methodology

A case study approach was used as it allows the questions of why, what, and how, to be answered with a relatively full understanding of the nature and complexity of the phenomenon being studied (Benbasat et al., 1987; Eisenhardt, 1989; Ellram, 1996; Meredith, 1998; Voss et al., 2002; Yin, 1994). By studying the concept of fit in its 'natural' setting, richer insights and explanations can be developed (Weick, 2007; Sousa and Voss, 2008). Before commencing the research, the research team created a case study research protocol to guide the overall study design and execution. Figure 2 outlines the research methodology used to investigate each case study, compare findings across cases, identify fit-performance relationships and develop a classification of internal strategic fit. To ensure that the findings and conclusions from the research are both valid and comparable across different contexts, twenty-one fitness variables and three business performance variables were used to investigate fit and performance in twelve case studies as shown in Tables 2 and 3. Given the difficulties of obtaining objective measures (Boyer et al., 1997; Vickery et al., 1993; Ward et al., 1994) and the acceptance of perceptual measures as a substitute (Dess and Robinson, 1984; Joshi et al., 2003), the level of business performance was based on respondents' perceptions of how well the company performed relative to their major competitors. Where possible, these perceptions were then tested against data or evidence from archival information to further increase their validity.

Insert Figure 2, Table 2 and Table 3 about here

Twelve case studies were investigated to ensure empirical grounding for the findings without reducing the depth of research within each case (Glaser and Strauss, 1967; Eisenhardt, 1989; Voss et al., 2002). Cases were selected using replication logic to either produce similar results to other case studies or contrary results for predictable reasons (Voss et al., 2002). For example, the Utility Metering Service (Company 1) and Emergency Response Service (Company 2) were both expected to produce a high level of fit (literal replication), whereas the Large Business Utility Provider (Company 6) was expected to produce a low level of fit (theoretical replication). Equally, the Domestic Utility Provider (Company 3) and the Small Business Utility Provider (Company 8) were selected because they had low domestic market share (literal replication), whereas the Medium-sized Retail Group (Company 9) and the Large-sized Retail Group (Company 11) were selected because they had high domestic market share (theoretical replication). By contrast, the Retail Bank (Company 4) was selected because it had low domestic market share, but high return on sales and return on investment, whereas the Utility Metering Service (Company 1) had low domestic market share and low return on investment, but high return on sales. Selecting organisations in this way increased the richness and robustness of the case study database and the subsequent theories built (Eisenhardt, 1989; Yin, 1994). Cases with varying market and organisational characteristics, management styles, employee numbers and types, operations strategies and service delivery systems were researched to create the literal and theoretical replication required to build theory (see Table 4). Once theoretical saturation had been reached no further case studies were added (Eisenhardt, 1989).

Insert Table 4 about here

All variables were measured using a mix of both perceptual (executive opinion) and objective (data and evidence) scales as shown earlier in Table 2. Quantitative and qualitative data were collected from multiple sources in a systematic way using structured interviews, site visits, archival information analyses and observations (Eisenhardt, 1989; Patton and Appelbaum, 2003; Yin, 2003). Following the suggestions of Swamidass (1986), Menda and Dilts (1997), Boyer and McDermott

(1999) and Sousa and Voss (2008), multiple questions were used to guide on-site, face-to-face interviews with several executives within each organisation that lasted between one and two hours per executive depending on the number of variables reviewed. Standardised formats and formal procedures were used to ensure the quality of the data collected.

Table 5 shows the number of executives interviewed in each case study by function and level beneath the managing director or chief executive officer (CEO). The types of executive interviewed reflected the nature of the organisation being researched and the aspect of fit being assessed. For example, more senior executives know more about the relevant importance of competitive criteria and operations strategy, whereas less senior executives better understood how a service was delivered. Typically, executives worked in operations, sales, marketing or another support function and ranged from the managing director/CEO to executives working three levels beneath them. Interviews started with the managing director/CEO in each organisation and then moved down the hierarchy (Menda and Ditts, 1997). Interviews stopped when a complete understanding of the level and type of fit within the organisation had been established. Although structured interviews formed the main source of data within each case study, these findings were then tested against archival information such as operational performance, financial performance and minutes of meetings as shown in Table 5. Site visits were undertaken and observations were also made to understand how businesses actually operated. The findings from these data sources were systematically triangulated against those from the structured interviews. Inconsistencies then lead to further interviews to clarify insights and findings.

Insert Table 5 about here

Within each case study, explicit links between the questions asked, data collected and the conclusions drawn increased the reliability of the information obtained and used within the research. A detailed write-up was completed for each case and tables were used to categorise the data, analyse the level of internal fit and review its market, operations strategy and service delivery system characteristics.

The level and type of fit within the organisation was then calculated using four steps. Firstly, the ideal profile was identified based on the mode position of the 'market competitive criteria' fit dimensions. This is based on the view that 'operations strategy' and 'service delivery system' must match an organisation's market needs rather than requirements defined within the literature (as in Ahmad and Schroeder, 1990) or a sample of top performers (as in Venkatraman and Prescott, 1990). Secondly, the level of misfit was measured within each variable by calculating the Euclidean distance between the position on the profile and the ideal position on the profile (Venkatraman, 1989; Venkatraman and Prescott, 1990; Choe et al., 1997; Ahmad and Schroeder, 2003; da Silveira, 2005). Thirdly, the level of fit within each variable was calculated by subtracting the measure of 'misfit' from the maximum Euclidean distance possible, which in this case is 4 because we are measuring on a five point scale. For example, the level of fit would be '4' if the position was at the ideal point on the profile or '3' if the position was one point away from the ideal position. Finally, the mean level of fit within each category was calculated for the 'market competitive criteria', 'operations strategy' and 'service delivery system' using the approach outlined by da Silveira (2005). This represents the degree of alignment within each category.

These findings were presented back to fellow academics and executives within that organisation for each case study. Where appropriate, modifications were made to the case study and then re-presented back to the organisation involved. In eight of the twelve case studies, subsequent action was then taken by the organisation to modify the level and type of fit within their business.

Once the data from each organisation had been analysed, a case study database was developed to identify within-group similarities and inter-group differences (Eisenhardt, 1989). The mean level of fit within the ‘market competitive criteria’, ‘operations strategy’ and ‘delivery system’ was then correlated against their domestic market share, return on sales and return on investment for each case. The Spearman’s rho non-parametric technique was used to this as ordinal data was being correlated with ratio data. Once these correlations had been identified, illustrations from the companies researched were used to both challenge and help explain them. As ‘mean operations strategy fit’ and ‘mean service delivery system fit’ were found to positively and significantly impact performance, the twelve companies researched were then plotted on a 2-dimensional graph with ‘mean operations strategy fit’ on the x-axis and ‘mean service delivery system fit’ on the y-axis to develop a classification of internal strategic fit. This graph was then used to cluster similar organisations and identify different fit classifications. To understand the differences between each fit classification, the mean level of fit within the twenty-one fitness variables shown in Table 3 was calculated for the companies within each classification and compared to those in other classifications. The change in fit within each variable was then used to compare the alternative fit classifications and show how companies had moved from one classification to another.

To test the validity of these conclusions, they were presented to a representative number of executives from each participating firm at a one-day workshop. This gave them the opportunity to verify that the analysis had captured the critical points about how fit was generated or prevented and that the conclusions reached were meaningful and relevant for their businesses. The outputs from these presentations and workshop were then used to further develop the findings and conclusions from the research.

Findings

The research found varying levels of fit and business performance within the cases investigated. The findings from each case are summarised before showing how the data was analysed to identify the fit-performance relationships, develop a classification of internal strategic fit within service organisations and show how firms can move from one classification to another.

Case descriptions

A twenty to twenty-five page report was written outlining the level of fit and business performance within each case study. For brevity, this has been summarised in Tables 6, 7 and 8 which show interesting differences in terms of the markets served by the organisations and the operations strategies and service delivery systems they have developed to support them. Through joint discussions supported by the data collected, the research team identified the ideal profile for an organisation based on the market competitive criteria it had to meet before determining the level of fit within the market competitive criteria, operations strategy and service delivery system. These mean levels of fit were then compared against the business performance for that organisation.

Table 9 summarises this analysis and shows that of the twelve companies researched, five companies had an ideal profile of 1, three companies an ideal profile of 3 and four companies had an ideal profile of 5. The maximum potential level of fit was 4.0 and ‘-’ indicates that there was no fit between that variable and the ideal profile.

Insert Tables 6, 7, 8 and 9 about here

Impact of internal strategic fit on business performance

Using the data in Table 9, the mean level of fit within the market competitive criteria, operations strategy and service delivery system was calculated and then correlated against each of the three measures of business performance. As the analysis in Table 10 shows, two significant relationships were identified. Firstly, mean fit within a firm's operations strategy was found to have a significant positive and direct impact on market share. However, its impact on return on sales or return on investment is not as significant. For example, although the Utility Metering Service (Company 1) had only medium fit within its operations strategy, it still had high return on sales and return on investment. Further analysis of this organisation found that it had a strong cost focus and a very centralised structure, which did not fit its market needs. Whilst this was instrumental in reducing market share, it did lead to greater return on both sales and investment. The same was true for the Retail Bank (Company 4), although to a lesser extent. Therefore, we forward our first proposition.

P1: Mean operations strategy fit is significantly and positively related to market share

Insert Table 10 about here

The second significant positive relationship identified was between mean service delivery system fit and return on sales. However, it does not have as significant a relationship with domestic market share or return on investment. For example, the Product Developer (Company 5), Utility Metering Service (Company 1), Emergency Response Service (Company 2) and the Medium-sized Retail Group (Company 9) all have high delivery system fit and return on sales but, although the Small Business Utility Provider (Company 8) has medium service delivery system fit, it has very low market share and return on investment. Further investigation showed that the decision by the Small Business Utility Provider (Company 8) to automate 88 per cent of its activities had increased its profitability, but reduced its market support as customers wanted serving by a person rather than a computer. As a result its market share fell significantly, but it was able to profitably serve the customers it retained. Similar findings were true for Utility Metering Service (Company 1) where cost reduction had created fit within its delivery system, but reduced market share and return on investment. Therefore, we forward our second proposition.

P2: Mean service delivery system fit is significantly and positively related to return on sales

As Table 11 shows, although mean market competitive criteria fit did not have a significant relationship with business performance, it was found to have positive relationship with a firm's operations strategy and service delivery system. For example, the Large Business Utility Provider (Company 6) and the Construction Service (Company 7) accept orders from a wide range of customers and have to support a wide range of market competitive criteria. Both companies accepted these orders to increase sales revenue, but now find they are unable to fit their operations strategies and service delivery systems to such wide market requirements. By contrast, the high market competitive criteria fit within the Utility Metering Service (Company 1), Emergency Response Service (Company 2) and Product Developer (Company 5) enabled them to develop high fit within their operations strategy and service delivery system. However, this is not always true as the Communications Group (Company 12) has high market competitive criteria fit, but low operations strategy and service delivery system fit. These illustrations show that market competitive criteria fit facilitates, but does not necessarily result in, operations strategy or delivery system fit.

However, a lack of market competitive criteria fit will subsequently reduce operations strategy and service delivery system fit. Therefore, we forward our third and fourth propositions:

P3: A lack of fit within a firm's market competitive criteria leads to a lack of fit within their operations strategy and service delivery system

P4: Fit within a firm's market competitive criteria facilitates operations strategy and service delivery system fit development

Insert Table 11 about here

Companies created high market competitive criteria fit through market debate, discussion and market analysis using clear customer selection criteria. Cross-functional teams discuss which customers to target, assess their needs and determine if they are an appropriate fit with the rest of the customers currently served. Their existing customer base is also regularly reviewed to ensure customers still fit the market they want to serve. If customers do not meet the necessary criteria, the company supports them with another part of their business, encourages them to modify their behaviour or, if all else failed, declines to serve them in the future. The Utility Metering Service (Company 1), Emergency Response Service (Company 2) and Product Developer (Company 5) all had similar policies in place to ensure this happened and their high market competitive criteria fit was maintained.

Classification of internal strategic fit in service organisations

Given the relationships between mean operations strategy fit and market share and between mean service delivery system fit and return on sales, the twelve companies researched were plotted onto a 2-dimensional graph with 'mean operations strategy fit' on the x-axis and 'mean service delivery system fit' on the y-axis. This graph was then used to cluster organisations with similar levels of fit and develop the 'fitness map' framework shown in Figure 3. In this way, the framework enables companies to compare the mean level of fit from their 'strategic profile' with other organisations and understand how best to move to another part of the map. The companies cluster into six groups: low fit (poorly aligned) companies are either 'understanding processes' or 'understanding markets', medium fit companies are either 'managing processes' or 'developing service offerings' and high fit (well-aligned) companies are either 'leveraging services and process-capabilities' or 'leveraging markets and design-capabilities'. The top left and bottom right corners of the framework are considered to be 'unsustainable positions' and none of the twelve companies were not found to be in either of these extreme parts of the fitness map.

Insert Figure 3 about here

To understand the difference between each fit classification, the mean level of fit on each variable was calculated for the companies within each classification and compared with those in other classifications as shown in Table 12. For example, the mean fit on 'level of flexibility' was 1 for companies 'understanding processes' and fit on this dimension increased from 1 to 3, for companies 'managing processes' and then further from 3 to 4, for companies 'leveraging services and process-capabilities'. The key differences in Table 12 have summarised in Figure 4 to clearly show how organisations can move from one classification of fit to another and the key differences between each classification.

Insert Table 12 and Figure 4 about here

The characteristics of each fit classification and differences between them are now discussed in more detail.

Understanding processes. The Domestic Utility Provider (Company 3) and Retail Bank (Company 4) are both ‘understanding processes’. They have both recently mapped their business processes to understand them and this has led to a reengineering exercise and performance measurement review. As a result, the level and type of customer interaction has been improved and both companies are starting to differentiate their services from competitors. For example, the Retail Bank (Company 4) has created a front and back office to reduce the level of customer contact within its delivery system while also automating some back office processes. However, its organisational structure is still decentralised and fragmented and it uses diverse and conflicting performance measures to manage different parts of its business. Although the level of customer service is starting to improve and the business is more price competitive, delivery system fit is still low and operations strategy fit even lower. The Domestic Utility Provider (Company 3) is in a similar position, it has reduced the level and type of customer interaction within its delivery system using a semi-automated telephone-based front office call management system. However, its performance measures are still too broad and are used to manage delivery costs rather than understand how well customers are served.

Understanding markets. Instead of trying to ‘understanding processes’, the Large Business Utility Provider (Company 6) and the Construction Service (Company 7) have started developing fit by ‘understanding markets’. Performance measures are being used to understand customer requirements and measure how well they are met. This has started to orientate their businesses more towards their markets, but employee incentivisation is not linked to these measures and their decentralised and fragmented organisation layouts and structures do not fit their price-sensitive markets. Although both businesses are starting to better understand their markets, service delivery system fit is still low as they are too paperwork-driven, using non-standard processes with too many hand-offs. For example, the Construction Service (Company 7) has realised it is serving price-sensitive markets and, as a result, has started delivering some lower cost telephone-based services rather than using its traditional face-to-face delivery system. Customers are responding well to this new service offering and market share is growing, but return on sales is still very low as its back office processes are complex and difficult to manage.

Managing processes. The Small Business Utility Provider (Company 8) and the Small-sized Retail Group (Company 10) understand their processes and are now managing them with performance measures that are linked to employee incentives, rewards and development. For example, until recently the Small-sized Retail Group (Company 10) struggled to profitably support its design-led customers. Three years ago it mapped its processes to understand how it operated and if its markets were supported. After understanding these processes, it standardised them, made them less flexible and put in system checks to ensure service quality levels were met. Although its processes became more efficient, market share did not increase. A review of its performance measures showed that they helped control costs rather than support customers. By modifying these measures to reflect customer needs and linking them to employee incentives, rewards and development, it increased market support and its market share started to grow. However, although it is now managing its processes more effectively, its fragmented organisation structure and layout appear to prevent further increases in return on sales and market share. The Small Business Utility Provider (Company 8) is in a similar position, it understands its processes and has started managing them, but has not yet modified its organisation layout and structure to reflect market needs. Although its processes are well managed, it struggles to support its wide range of price-sensitive

and design-led customers. As a result its return on sales has improved, but market share is still low. These have therefore both been classified as ‘managing processes’.

Developing service offering. The Large-sized Retail Group (Company 11) and the Communications Group (Company 12) understand their markets and are now ‘developing service offerings’ to meet customer needs. As with companies ‘managing processes’, they have used performance measures and employee incentivisation, reward and development to create fit within their operations strategy. However, their performance measures use is more sophisticated than the Small Business Utility Provider (Company 8) and the Small-sized Retail Group (Company 10) who are ‘managing processes’. Using their market understanding, they have developed measures that reflect all customer requirements. Both organisations have created customer-based teams to develop and deliver services to a range of price-sensitive and design-driven customers, as shown by their ideal profile of ‘3’. Each customer-based team has identified the key delivery system task, key resource, level of flexibility and level of automation required to support their customer group. For example, the Large-sized Retail Group (Company 11) delivers services using a standardised and automated system to its price-sensitive customers, but uses a more flexible and manual system for its design-led customers. In this way, the customer-based teams have developed the appropriate service offering for their market and are building competitor barriers to entry. The Communications Group (Company 12) uses a similar approach to develop and deliver services to its different customer groups and, as with the Large-sized Retail Group (Company 11), has significantly increased return on sales and market share since adopting this strategy.

Leveraging services and process-capabilities. The Utility Metering Service (Company 1) and the Emergency Response Service (Company 2) not only understand their processes and manage them well, but are now ‘leveraging their services and process-capabilities’ to enter new markets and grow sales. Both firms use a matrix organisation structure with managers having responsibility for both a key service and a key process. Their organisation layout reflects this structure and the key delivery system tasks ensure skill and resource use is maximised at each step. As a result, their processes are substantially more efficient and effective than their competitors and there are high barriers to entry. Both companies are now leveraging their process-capabilities to deliver a wider range of services, and leveraging their services to sell them into new markets. For example, the Emergency Response Service (Company 2) made a substantial process technology and equipment investment five years ago to reduce delivery costs and lead-times. Its return on sales grew significantly, but its market share remained relatively low. To further grow its market share, it is now leveraging these processes to deliver a wider range of services to its customers, and is selling its services into new markets with similar requirements. The Utility Metering Service (Company 1) is using a similar strategy to leverage the processes and services that it has developed. As with the Emergency Response Service (Company 2), it has a high return on sales, but is now starting to increase market share by offering more services to existing customers and selling existing services into new markets.

Leveraging markets and design-capabilities. As with companies ‘leveraging services and process-capabilities’, the Product Developer (Company 5) and the Medium-sized Retail Group (Company 9) have also made significant investments to fit their organisation structures and layouts around market needs. However, whereas the Utility Metering Service (Company 1) and the Emergency Response Service (Company 2) structured their organisations around services and process-capabilities, the Product Developer (Company 5) and the Medium-sized Retail Group (Company 9) have structured theirs around markets and design-capabilities. Both companies use customer-based teams to identify market needs and design and deliver services to meet them. They both have developed strong customer relationships and unique design-capabilities that differentiate them from competitors and create strong barriers to entry. As a result, both have significantly

increased market share and return on sales. Both companies are now ‘leveraging their markets and design-capabilities’ to develop and sell additional services to existing customers. Unlike companies ‘leveraging services and process-capabilities’, these innovations are customer-driven, rather than process-driven, and leverage their strong customer relationships and design-capabilities. For example, the Product Developer (Company 5) uses customer-based teams to contact customers, identify their current and future service requirements, develop new offerings and deliver them. Throughout this process, regular customer contact ensures needs are being met and new service developments identified. The Medium-sized Retail Group (Company 9) works with its customers in a similar way and has significant organisation structure and layout developments that clearly distinguish it from companies who are just ‘developing service offerings’. By orientating their organisations around their customers and design-capabilities, both the Product Developer (Company 5) and the Medium-sized Retail Group (Company 9) are able to leverage them to further grow their return on sales and market share.

Conclusions and recommendations for further research

This research makes several contributions to the study of internal strategic fit within service organisations. Firstly, it found two positive and significant relationships between fit and performance. A well-aligned operations strategy is significantly and positively related to market share, whereas a well-aligned service delivery system is significantly and positively related to return on sales. However, neither a well-aligned operations strategy nor a well-aligned service delivery system is significantly related to return on investment. Also, although well-aligned market competitive criteria were not significantly related to business performance, it was found to be positively related to alignment within a firm’s operations strategy and service delivery system. These findings offer more clarity than previous research about which aspects of internal alignment affect which measures of business performance. They support the view that alignment within certain elements is of greater importance than the overall strategy chosen by an organisation (Smith and Reece, 1999) and build on the findings that external fit increases business performance within service firms (Nayyar, 1992 and Smith and Reece, 1999) and that internal fit increases business performance in manufacturing firms (Papke-Shields et al., 2001). Future research can now more fully test these propositions on a wider sample of organisations using the definitions and measurements contained within this research.

Secondly, a classification of internal strategic alignment is proposed using the ‘fitness map’ framework. Six types of alignment emerge from these analyses: poorly aligned organisations are either ‘understanding processes’ or ‘understanding markets’, medium fit companies are ‘managing processes’ or ‘developing service offerings’ and highly aligned firms are ‘leveraging services and process-capabilities’ or ‘leveraging markets and design-capabilities’. Businesses that are ‘understanding processes’ have reengineered their processes, reviewed performance measures and reduced the level and type of customer interaction within the delivery system; whereas companies ‘understanding markets’ are using performance measures to understand customer requirements and measure how well they are being met. Firms that are ‘managing processes’ understand their processes and are now managing them with performance measures linked to employee incentives, rewards and development. Whereas businesses ‘developing service offerings’ understand their markets and are developing service offerings using performance measures and employee incentivisation, reward and development to create fit with their markets. Companies ‘leveraging services and process-capabilities’ not only understand their processes and manage them well, but are now using their organisation layout, structure and key delivery system tasks to leverage services and process-capabilities to grow sales with existing customers and enter new markets. Businesses ‘leveraging markets and design-capabilities’ are also using their organisation structure and layout,

but are growing sales by leveraging their existing customers and design-capabilities, rather than services and process-capabilities.

These findings regarding the fit-performance relationship, the classifications of internal strategic fit that exist and how to move from one classification to another (see Figure 4 earlier) all have significant implications for practitioners. In particular, they can be used to help businesses identify their classification fit and understand how fit has been created. They can then use these findings to benchmark the level of fit within different parts of their own organisation (internally) and against other organisations (externally) to identify areas for improvement. They can also start to understand how to move from one level of fit to another. For example, as Figure 3 shows, if they are currently 'understanding processes', then they need to start managing them effectively by linking performance measures to employee incentives, rewards and development before they start changing the organisation layout, structure and key delivery system tasks to leverage their services and process-capabilities. Equally they can start to understand how changes in fit might impact their business performance. For example, operations strategy fit is positively related to market share, whereas service delivery system fit is positively related to return on sales. So, as Figure 4 shows, if they are 'managing processes', then they can either increase market share by using performance measures to develop new service offerings or restructure their organisation and layout around key services and processes to increase return on sales.

These fit-performance relationships and classifications of fit now need testing more fully to see if the classifications are true for a wider sample of organisations. Although the classifications were developed for service firms, they could also provide a starting point for developing manufacturing business fit classifications. This would test if operations strategy concepts are applicable to both service and manufacturing operations (Smith and Reece, 1999) and meet the call for a more comprehensive and integrated manufacturing fitness framework (Kim and Lee, 1993, da Silveira, 2005). Equally, further research could explore the link between the six internal fit classifications proposed and the three external fit classifications proposed by Nayyar (1992): fit with customer segment, fit with internal capability and fit with geographical region.

As with any case study research, there are limits to the findings and conclusions generated. While the case studies were chosen using replication logic, the findings may not be generalisable to all organisations. Also, the research looked at the level of fit at a static point in time. It would be useful to complete a longitudinal study to understand if, how and why companies might move their position on the 'fitness map' over a period of time. Authors such as Zajac et al. (2000) and Siggelkow (2002) have started to look at this within corporate level strategy, but this area is still unexplored within service operations strategy. A longitudinal study would help assess how fit is achieved over time and confirm the evolutionary patterns associated with each type of fit, thus creating a greater understanding of the likely impact of management priorities on the development of a firm.

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Table 1

Summary of research conducted on 'strategic fit' in operations showing the type of operation and dimension of strategic fit researched (1980 – 2010)

Type of operation	Research conducted		Dimension of fit researched	
	Topic		Author (date)	External Internal
Manufacturing	Presence or absence of external fit		Schroeder et al. (1986) Swamidass, (1986)	✓ ✓
	Fit between Operations task and Production systems		Van Dierdonck et al. (1980) Miller (1981) Kim and Lee (1993)	✓ ✓ ✓
		Product strategy	Stobaugh and Telesio (1983)	✓
		Employee management	Kathuria and Davis (2001)	✓
		Process choice	Safizadeh et al. (1996)	✓
		Production technology, business strategy and organisational structure	Parthasarthy and Sethi (1992)	
		Managers' market view and business strategy	Menda and Ditts (1997)	✓
		Operators and managers strategic perspectives	Boyer and McDermott (1999)	✓
		Fit-performance relationship	Youndt et al. (1996) Ketokivi and Schroeder (2004)	✓ ✓
		Factors that create fit	Papke-Shields et al. (2001)	✓
	Measuring, managing and maintaining fit	Witcher and Chau (2007)	✓	
Service	Fit-performance relationship		Nayyar (1992) Smith and Reece (1999)	✓ ✓
	Market based objectives and operating decisions		Verma et al. (1999)	✓
	Measuring, managing and maintaining fit		Hill and Brown (2007)	✓

Table 2

Measures of internal strategic fit based on Hill and Brown (2007) strategic profiling framework

Dimension and variable	Definition	Scale
Market competitive criteria		
How are orders won?	Importance of 'offer fast deliveries' in winning orders	1 (very important) – 5 (not important)
	Importance of 'offer newer products more frequently' in winning orders	1 (very important) – 5 (not important)
	Importance of 'have lower selling price' in winning orders	1 (not important) – 5 (very important)
What does the company sell?	Importance of a 'capability unique from competitors' in winning orders	1 (very important) – 5 (not important)
	Similarity of product/service sold to that of competitors	1 (not similar) – 5 (very similar)
Product customisation	Frequency with which designs are subject to change between orders	1 (all the time) – 5 (never)
Key business task	Importance of 'responding to customer needs' in maintaining future business	1 (very important) – 5 (not important)
	Importance of 'reducing costs' in maintaining future business	1 (not important) – 5 (very important)
Key management task	Required level of management time spent designing new products/services	1 (very significant) – 5 (not significant)
	Required level of management time spent improving process throughput and efficiency	1 (not significant) – 5 (very significant)
Order volume	Volume of similar products or services sold in a year	1 (less than 5) – 5 (more than 1,000)
Technical similarity	Level of technical similarity of the products or services sold within different customer orders	1 (not similar) – 5 (very similar)
Operations strategy		
Organisation layout	Percentage of activities that are centralised across operations units	1 (0%) – 5 (100%)
Organisation structure	Percentage of activities grouped into cross-functional teams rather than functions	1 (100%) – 5 (0%)
Organisation orientation	Percentage of activities structured around customers rather than processes	1 (100%) – 5 (0%)
Performance measure orientation	Percentage of performance measures used to monitor and develop customer support	1 (100%) – 5 (0%)
	Percentage of performance measures used to monitor and reduce operations costs	1 (0%) – 5 (100%)
Employee incentivisation, reward and development orientation	Percentage of employee incentivisation, reward and development linked to improvements in customer support	1 (100%) – 5 (0%)
	Percentage of employee incentivisation, reward and development linked to reduction in operations costs	1 (0%) – 5 (100%)
Service delivery system		
Key task	Percentage of time within the delivery system spent processing work	1 (0%) – 5 (100%)
Key resource	Percentage of key tasks processed by technology or equipment	1 (0%) – 5 (100%)
Level of flexibility	Level of investment required to modify system to deliver new service designs	1 (very significant) – 5 (not significant)
Level of automation	Percentage of steps processed by a technology or equipment	1 (0%) – 5 (100%)
Level of customer interaction	Percentage of tasks processed in the presence of the customer	1 (100%) – 5 (0%)
Type of customer interaction	Percentage of tasks processed face-to-face with the customer	1 (100%) – 5 (0%)
Quality management orientation	Percentage of service quality checks completed by technology or equipment	1 (0%) – 5 (100%)
Level of service differentiation	Percentage of services that are also delivered by competitors	1 (0%) – 5 (100%)
Competitor barriers to entry	Percentage of services that could also be delivered by competitors	1 (0%) – 5 (100%)

Table 3
Measures of business performance

Dimension and variable	Definition	Scale
Business performance		
Domestic market share	Figure for current year	0-100%
Return on sales	Earnings before interest and taxes/sales for current year	0-100%
Return on investment	Earnings before interest and taxes/total assets for current year	0-100%

Table 4
Some examples of the varying characteristics of the case studies researched

Case study	Annual sales		Markets (#)		Type of operation (#)					# delivery system	
	Revenue (£M)	Volume (000s)	Customers (000s)	Markets served	Services offered	Location	Sites	Employ-ees	Func-tions		Typical levels of hierarchy
1 Utility Metering Service	156	1,430	1,430	5	3	UK	16	1,560	5	9	7
2 Emergency Response Service	234	1,820	1,820	5	3	UK	16	1,820	5	9	8
3 Domestic Utility Provider	1,313	5,608	5,603	9	7	UK	7	1,560	7	9	7
4 Retail Bank	8,320	910	845	8	13	UK	1	975	10	7	8
5 Product Developer	702	507	7	3	10	UK	4	39	7	4	8
6 Large Business Utility Provider	4,823	130	130	9	7	UK	5	390	4	8	7
7 Construction Service	273	241	72	5	7	UK	8	845	7	9	14
8 Small Business Utility Provider	5,486	312	312	5	7	UK	7	1,235	5	7	7
9 Medium-sized Retail Group	1,634	4,618	1,603	9	7	NOR	13	1,430	7	8	7
10 Small-sized Retail Group	642	497	27	3	10	UK	3	24	7	4	8
11 Large-sized Retail Group	5,323	2,130	1,350	9	7	UK	24	990	5	7	7
12 Communications Group	6,131	3,512	2,130	7	7	UK	32	1,120	4	8	7

Table 5

Number and type of executives interviewed and type of archival records reviewed in each case study to analyse the three elements of internal strategic fit

Type of executive and archival record		# interviewed or reviewed within in each case study											
		1	2	3	4	5	6	7	8	9	10	11	12
Executives interviewed													
Function	Managing Director	1	1	1	1	1	1	1	1	1	1	1	1
	Operations	25	25	26	10	6	9	16	11	6	10	6	8
	Sales and Marketing	2	2	7	3	4	11	3	10	4	3	5	7
	Support	2	2	-	2	-	-	2	2	-	3	-	2
	Other	-	-	2	-	2	-	2	-	2	2	2	-
	Total	30	30	36	16	13	21	24	24	13	19	14	17
# levels beneath the Managing Director	0	1	1	1	1	1	1	1	1	1	1	1	1
	1	5	5	5	4	5	3	4	4	5	5	5	4
	2	8	8	11	5	7	8	8	5	7	7	8	5
	3	16	16	18	6	-	9	11	14	-	6	-	7
	Total	30	30	36	16	13	21	24	24	13	19	14	17
Archival records reviewed													
	Customer surveys	7	7	3	-	-	-	1	4	4	6	5	7
	Customer behaviour	5	5	3	1	12	1	1	4	2	4	4	3
	What are the important elements of the strategy within each function?	2	2	5	4	4	4	4	2	2	4	4	3
	Where are investments made?	2	2	4	2	4	2	6	3	3	3	4	3
	How is the performance of the business measured?	7	7	7	4	2	4	9	8	7	6	7	8
	How are employees incentivised, rewarded and developed?	2	2	4	1	1	1	1	2	3	2	3	2
	What are the key steps in the service delivery system?	3	3	6	5	3	5	10	5	7	8	5	9
	What is the role of people, technology, equipment, layout and procedures?	2	2	4	3	2	2	5	4	3	5	4	4
	How are capacity and demand managed?	2	2	2	2	1	2	4	2	3	2	2	3
	How are quality standards ensured?	2	2	3	2	1	2	2	2	3	3	2	2
	How is the service differentiated from the competition?	1	1	1	1	1	1	2	1	1	2	1	1
Total		35	35	42	24	31	24	45	37	38	45	41	45

Table 6
Summary of market competitive criteria for each case study

Aspect	Case study											
	1	2	3	4	5	6	7	8	9	10	11	12
	Utility metering service	Emergency response service	Domestic utility provider	Retail bank	Product developer	Large business utility provider	Construction	Small business utility provider	Retail group	Retail group	Retail group	Communication
Order winners (in order of importance)	Price Customer service Safety	Delivery speed Price Customer service	Price Brand name	Price Customer service Brand name	Product design Customer relationship Technical support	Customer service Product design Price	Price Delivery reliability	Price Customer service	Customer relationship Product design Customer service	Customer relationship Product design Customer service	Price Product design	Price Product design Customer relationship
What does the company sell?	Standard product	Standard product	Standard product	Standard product	Design capability	Customised product	Standard product	Semi-customised product	Customised product	Customised product	Semi-customised product	Semi-customised product
Product customisation	None	None	Low	Low	High	Medium to high	Low	Medium	High	Medium to high	Medium	Medium
Key business task (in order of importance)	Reduce costs	Reduce costs	Reduce costs	Reduce costs	Respond to customer needs	Respond to customer needs	Reducing costs	Reducing costs	Respond to customer needs	Respond to customer needs	Reducing costs	Reducing costs
Key management task (in order of importance)	Improve efficiency	Improve efficiency	Improve efficiency	Improve efficiency	Design new products and services	Design new products and services	Improve efficiency	Improve efficiency	Design new products and services	Design new products and services	Improve efficiency	Improve efficiency
Order volume	High	High	High	High	Low	Low	High	Medium	Medium	High	High	Medium
Technical similarity (% similar orders)	96	95	93	88	5	30	96	42	16	18	56	59

Table 7
Summary of operations strategy for each case study

Aspect	Case study											
	1	2	3	4	5	6	7	8	9	10	11	12
	Utility metering service	Emergency response service	Domestic utility provider	Retail bank	Product developer	Large business utility provider	Construction	Small business utility provider	Retail group	Retail group	Retail group	Communication
Organisation layout (% activities centralised)	90	95	15	12	3	48	90	86	7	87	90	88
Organisation structure (% activities grouped into functions)	100	90	18	10	5	51	93	89	12	79	53	88
Organisation orientation (% activities oriented to processes rather than customers)	100	90	24	84	4	54	96	84	9	84	12	85
Performance measure orientation (% measures focused on cost reduction)	90	84	28	52	Varies by customer (based on their needs)	61	5	9	58	75	53	58
Employee incentivisation, reward and development orientation	Incentives linked to cost and delivery performance	Incentives linked to cost and delivery performance	No incentives	No incentives	Incentives linked to customer specific performance targets	No incentives	No incentives	No incentives	Incentives linked to customer specific performance targets	Incentives linked to cost and profit	Incentives linked to cost and profit	No incentives
	Structured appraisal system linked to promotion	Structured appraisal system linked to promotion	Minimal unstructured development	Formal development linked to skill assessment	Formal development around customer needs	Minimal unstructured development	Minimal unstructured development	Minimal unstructured development	Formal development around customer needs	Minimal unstructured development	Minimal unstructured development	Minimal unstructured development

Table 9
Ideal profile and level of fit within each case study

Dimension and variable	Case study											
	1	2	3	4	5	6	7	8	9	10	11	12
Ideal profile	5	5	5	5	1	1	1	3	1	1	3	3
Market competitive criteria												
How are orders won?	4.0	4.0	4.0	4.0	4.0	3.5	3.0	4.0	4.0	4.0	4.0	4.0
What does the company sell?	4.0	4.0	4.0	3.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
Product customisation	4.0	4.0	4.0	3.0	4.0	3.0	2.5	4.0	4.0	4.0	4.0	4.0
Key business task	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Key management task	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0
Order volume	4.0	4.0	3.0	2.5	4.0	4.0	2.0	4.0	2.5	1.5	2.5	4.0
Technical similarity	4.0	4.0	3.0	3.5	4.0	3.0	3.5	4.0	3.5	3.5	3.5	4.0
Operations strategy fit												
Organisation layout	4.0	4.0	-	-	4.0	2.0	-	2.0	4.0	-	2.0	2.0
Organisation structure	4.0	4.0	-	-	4.0	2.0	-	2.0	4.0	1.0	4.0	2.0
Organisation orientation	4.0	3.5	-	3.0	4.0	2.0	-	2.0	4.0	1.0	2.0	2.0
Performance measure orientation	1.0	2.0	1.0	1.5	4.0	-	4.0	2.0	1.5	4.0	4.0	4.0
Employee incentivisation, reward and development orientation	1.0	3.0	1.0	0.5	3.0	-	2.0	2.0	3.5	4.0	4.0	4.0
Service delivery system fit												
Key task	4.0	4.0	1.0	-	3.5	-	1.5	2.0	3.5	1.0	3.5	4.0
Key resource	4.0	4.0	1.0	2.0	3.5	1.0	0.5	3.5	2.0	2.0	3.5	4.0
Level of flexibility	4.0	4.0	-	2.0	3.5	1.0	-	2.0	3.5	4.0	2.0	4.0
Level of automation	3.0	3.5	-	2.0	3.0	-	1.5	2.5	2.0	1.0	3.0	2.0
Level of customer interaction	4.0	4.0	-	4.0	4.0	2.0	-	3.0	2.0	4.0	2.0	2.0
Type of customer interaction	2.0	2.5	2.0	4.0	4.0	2.0	-	2.0	4.0	4.0	2.0	2.0
Quality management orientation	4.0	3.5	1.0	-	3.0	2.0	-	2.0	3.5	4.0	2.5	2.0
Level of service differentiation	4.0	4.0	3.0	2.0	3.0	-	-	2.0	3.5	1.0	2.0	2.0
Competitor barriers to entry	4.0	4.0	1.0	-	3.5	-	1.5	2.0	3.5	1.0	3.5	4.0
Mean fit within												
Market competitive criteria	4.0	4.0	3.7	3.4	4.0	3.5	3.2	4.0	3.7	3.6	3.7	4.0
Operations strategy	2.8	3.3	0.4	1.0	3.8	1.2	1.2	2.0	3.4	2.0	3.2	2.8
Service delivery system	3.2	3.4	0.9	1.8	3.1	0.9	0.4	2.1	2.7	2.3	2.3	2.4
Business performance												
Domestic market share	2.5	3.0	1.0	1.5	3.5	2.0	2.0	1.0	5.0	2.0	4.0	3.0
Return on sales	5.0	4.5	1.0	4.5	4.5	1.5	0.5	2.5	3.5	1.5	3.0	3.0
Return on investment	2.0	3.5	1.5	4.0	4.5	2.0	1.5	1.0	3.0	2.5	4.0	1.0

Note:

1. The maximum potential level of fit is 4.0 in each variable.
2. '-' indicates that there was no fit.

Table 10

Spearman's rho correlation between mean fit within each dimension and business performance

Mean fit within	Business performance		
	Market share	Return on sales	Return on investment
Market competitive criteria	0.34	0.61	-0.03
Operations strategy	**0.88	0.65	0.47
Service delivery system	0.65	**0.84	0.38

Key:

* significant to 0.005

** significant to 0.001

Table 11

Impact of market competitive criteria fit on operations strategy fit and service delivery system fit

Dimension and variable	Case study											
	5	2	1	12	8	9	11	3	10	6	4	7
Fit												
Within market competitive criteria	4.0	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.6	3.5	3.4	3.2
Within operations strategy	3.8	3.3	2.8	2.8	2.0	3.4	3.2	0.4	2.0	1.2	1.0	1.2
Within service delivery system	3.1	3.4	3.2	2.4	2.1	2.7	2.3	0.9	2.3	0.9	1.8	0.4

Table 12

Analysis of differences in level and type of fit of companies within the six classifications of fit identified in the 'fitness map' framework

Dimension and variable	'Understanding processes' of fit and performance	Improvement as move from 'Managing processes' to 'Leveraging services and processes'	'Understanding level of fit and performance	Improvement as move from 'Understanding markets' to 'Developing service offerings'	'Understanding level of fit and performance	Improvement as move from 'Developing service offerings' to 'Leveraging customers and capabilities'	Change as move from 'Understanding processes' to 'Developing service offerings'	'Leveraging services and processes' to 'Leveraging customers and capabilities'
Operations strategy fit								
Organisation layout	-	1.0	3.0	1.0	1.0	2.0	1.0	-
Organisation structure	-	1.5	2.5	1.0	2.0	1.0	1.0	-
Organisation orientation	1.5	-	2.3	1.0	1.0	2.0	0.5	0.3
Performance measure orientation	1.3	1.8	-1.5	2.0	2.0	-1.3	0.8	1.3
Employee incentivisation, reward and development orientation	0.8	2.3	-1.0	1.0	3.0	-0.8	0.3	1.3
Service delivery system fit								
Key task	0.5	1.0	2.5	0.8	3.0	-0.3	0.3	0.5
Key resource	1.5	1.3	1.3	0.8	3.0	-1	0.8	1.3
Level of flexibility	1.0	2.0	1.0	0.5	2.5	0.5	0.5	0.5
Level of automation	1.0	0.8	1.5	0.8	1.8	-	0.3	0.8
Level of customer interaction	2.0	1.5	0.5	1.0	1.0	1.0	1.0	1.0
Type of customer interaction	3.0	-	-0.8	1.0	1.0	2.0	2.0	1.5
Quality management orientation	0.5	2.5	0.8	1.0	1.3	1.0	0.5	0.5
Level of service differentiation	2.5	-1.0	2.5	-	2.0	1.3	2.5	0.8
Competitor barriers to entry	0.5	1.0	2.5	0.8	3.0	-0.3	0.3	0.5

Notes:

1. Company 3 and 4 are 'understanding processes' and Company 6 and 7 are 'understanding markets'
2. Company 8 and 10 are 'managing processes' and Company 11 and 12 are 'developing service offerings'
3. Company 1 and 2 are 'leveraging services and process-capabilities' and Company 5 and 9 are 'leveraging customers and design-capabilities'

Figure 1

Hill and Brown (2007) strategic profiling framework showing a company with high strategic fit and a company with low strategic fit

Aspects			Typical characteristics		
Market competitive criteria	How are orders won?	Order-winning criteria	Design capability	● ————— ○ →	Price
		Qualifying criteria	Delivery reliability, price	● ————— ○ →	Delivery reliability, quality conformance
	What does the company sell?		Capability	● ————— ○ →	Standard product/service
	Product customisation		High	● ————— ○ →	Low
	Key task	Business	Responding to customer needs	● ————— ○ →	Cost reduction
		Management	Product design/meeting schedules	● ————— ○ →	Throughput speed/efficiency
	Order nature	Order volume	Low	● ————— ○ →	High
		Technical similarity	Low	● ————— ○ →	High
Operations strategy	Organisation	Layout	Decentralised	● ————— ○ →	Centralised
		Structure	Team based	● ————— ○ →	Functional
		Orientation	Customers	● ————— ○ →	Processes
	Performance measurement orientation		Level of customer support	● ————— ○ →	Cost reduction
	Employee incentivisation, reward and development orientation		Customer need	● ————— ○ →	Internal business need
Delivery system	Service delivery system	Key task	Managing customers	● ————— ○ →	Processing work
		Key resource	People	● ————— ○ →	Technology/ equipment
		Level of flexibility	High	● ————— ○ →	Low
		Level of automation	Low	● ————— ○ →	High
		Customer interaction	Level	High	● ————— ○ →
	Type		Face-to-face	● ————— ○ →	Telephone
	Quality management orientation		People	● ————— ○ →	Process
	Level of service differentiation and competitor barriers to entry		High	● ————— ○ →	Low

- Key
- Position of high fit company
 - Position of low-fit company
 - ◐ Position of both high-fit and low-fit company

Figure 2
Research methodology

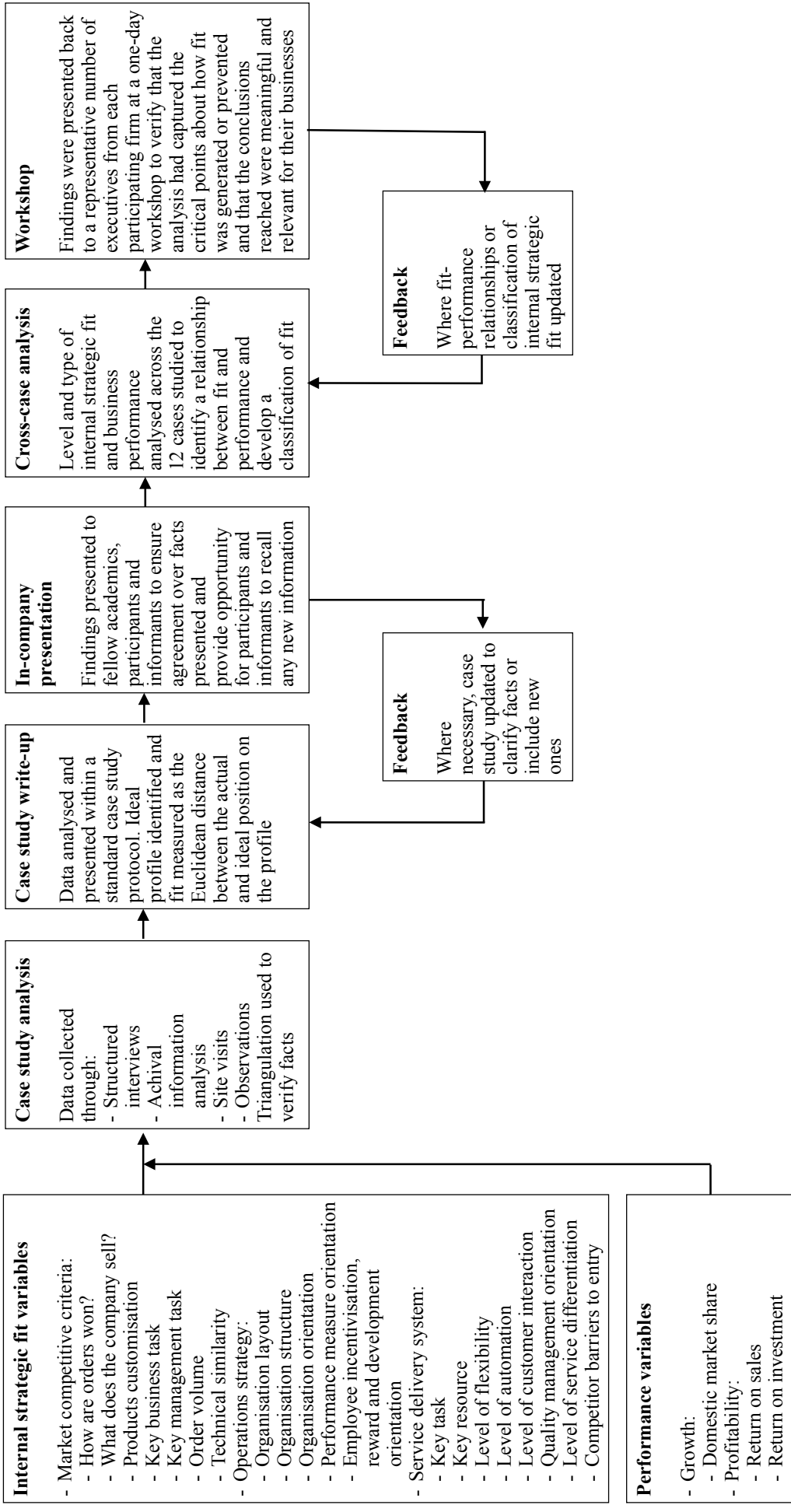


Figure 3
 Fitness map framework showing the level and type of strategic fit within each case study

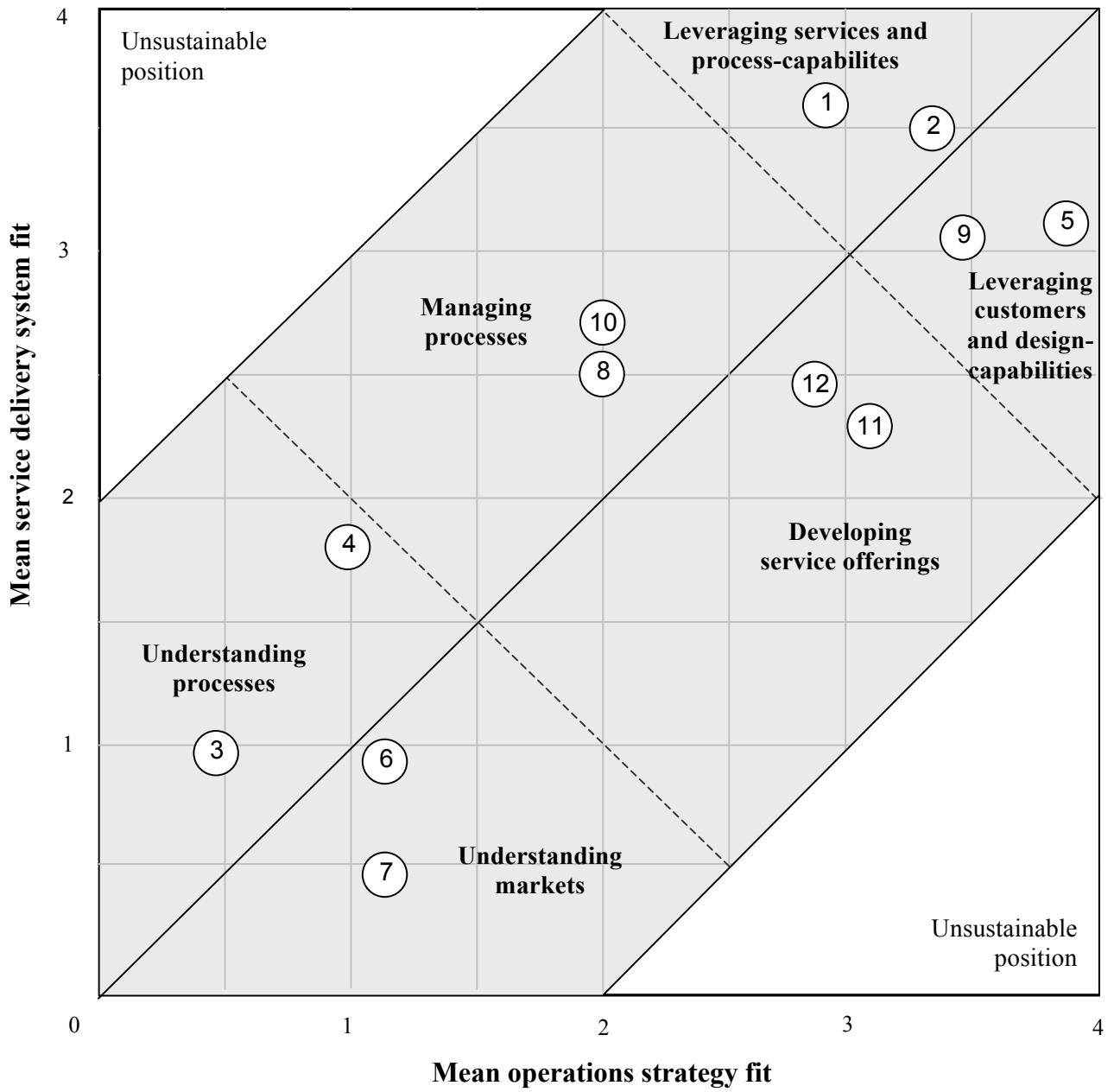


Figure 4
How to move between the different classifications of fit identified in the 'fitness map'

