

Northumbria Research Link

Citation: Robson, Andrew and Prabhu, Vas (2001) What can we learn from "leading" service practitioners about business excellence? *Managing Service Quality*, 11 (4). pp. 249-261. ISSN 0960-4529

Published by: Emerald

URL: <http://dx.doi.org/10.1108/EUM0000000005610>
<<http://dx.doi.org/10.1108/EUM0000000005610>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/177/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

www.northumbria.ac.uk/nrl



What can we learn from “leading” service practitioners about business excellence?

The Authors

Andrew Robson, *Andrew Robson is Senior Lecturer in Business Modelling, Division of Business Modelling, School of Operations Analysis and Human Resources Management, Newcastle Business School, University of Northumbria, Newcastle upon Tyne, UK.*

Vas B. Prabhu, *Vas B. Prabhu is Professor at the Centre for Business Excellence at Newcastle Business School, University of Northumbria, Newcastle upon Tyne, UK.*

Abstract

It is reasonable to assume that levels of business excellence will vary considerably amongst a group of organisations; two recent studies of organisations in north east England support this hypothesis. Draws on these benchmarking data. Relates to 28 business excellence practices and 19 operational performance measures covering strategy, human resources, service delivery and quality, service design and innovation, service value and measurement and business performance. Identifies the extent of any significant differences in overall practice and performance attainment levels between service leaders and their counterparts. Also considers combinations of attributes that best discriminate between levels of attainment. Derives a subset of measures that have the potential to provide an insight into a service organisation’s level of practice adoption and corresponding performance. Also considers additional characteristics to ascertain what association, if any, they have with the level of practice adoption and operational performance amongst the service organisations. All significant differences are highlighted at the 5 per cent significance level unless otherwise stated.

Article Type:

Research paper

Keyword(s):

Benchmarking; Model; Service industries; Operations; Performance measurement.

Journal:

Managing Service Quality

Volume:

11

Number:

4

Year:

2001

pp:

249-261

ISSN:

0960-4529

Introduction

During the 1980s those service organisations in the UK that were once regarded as public sector and non-profit making have increasingly become market and customer-oriented businesses striving to adopt world-class practices from leading multinationals in the (private) manufacturing sector. High profile changes include the introduction of the market economy in both primary and secondary health care, the market testing of a variety of local authority services during the 1980s followed more recently by “best value” initiatives and the introduction of performance league tables across all tiers of education. These innovations have had an enormous impact upon the service sector as a whole (both public and private) and are all aimed at introducing professional managerial disciplines to both the value and quality of the services being provided.

To what extent has this business excellence culture really permeated the service sector within the UK? How widespread is the use of good practice and what impact has it had on those organisations and their business performance?

Using empirical evidence from a large sample of service organisations, this paper identifies any significant differences in the overall practice and performance attainment levels between service leaders and the rest of that sample. The statistical analysis undertaken also suggests a combination of attributes that best discriminate between the levels of attainment indicated. A subset of measures is derived that has the potential to provide an insight into a service organisation's level of practice adoption and corresponding performance. Additional characteristics such as size (measured by number of employees on site), service sector, markets and type of ownership are also considered to ascertain what association, if any, they have with the level of practice adoption and operational performance amongst the service organisations. All significant differences are highlighted at the 5 per cent significance level unless otherwise stated.

Research methodology

Analytical framework used

The analysis presented relates to 28 measures of practice adoption and 19 measures of business performance. These have been categorised into the broad areas of strategy, human resources, service design and innovation, service delivery and quality, service value and measurement and business performance. These groups represent the business areas that have been used in the service management model, applied in the “Service in Britain” studies (Voss and Johnson, 1995). The service management model is shown by Figure 1.

In developing this model, Voss and Johnson (1995) considered a number of recognised models of service practice and performance such as the service value chain, Chartermark and the European/UK Quality Award. They combined these into a model that associates service management practice to service and business performance. Voss and Johnson (1995) consider that leadership drives the service and in turn this leads to a customer/service-oriented culture. These components correspond to the measures referred to as strategy and human resources in this paper. Voss and Johnson (1995) also state that “central to good service is the service concept and design” (represented in this paper by service design and innovation) and “high quality service must be delivered at low cost” (service delivery and quality). They also state that “a well managed service organisation sets demanding standards and ensures that these are met through performance measurement and feedback” and “a focus on productivity and value will result in low costs”. These initiatives and outcomes are considered in this paper by measures labelled as service value and measurement and business performance respectively. In this paper the authors have used a tool called PILOT (for details see section below) to obtain measures of practice and performance related to business excellence and have categorised these in terms of the established service management model. The model can potentially highlight those areas of service management where the Leaders have the greatest advantage and by referring to the work of Voss and Johnson (1995), the findings from the north east survey can be compared with a sample of service

organisations located throughout the UK. This survey provides a useful comparison (based on a single region) with the UK wide findings. Closer to home it will be of interest to individual service organisations and business support agencies in the region. It can not only help to answer questions regarding the extent to which the leading organisations are at an advantage, where they can improve further and what activities must be given priority amongst their weaker counterparts.

Measuring instrument used

The authors have had a unique opportunity to record current levels of best practice and performance in nearly 450 service organisations in the north east of England. This was part of a much bigger benchmarking exercise which involved over 750 businesses studied in the late 1990s (Prabhu *et al.*, 2000a; 2000b). The methodology was based on the widely recognised benchmarking metrics used in the “Service in Britain” studies (Voss and Johnson, 1995) and subsequently in the International Service Study (Voss *et al.*, 1997a; 1997b). It is now available in the form of “SERVICE PROBE”, marketed by the CBI, London. The University of Northumbria at Newcastle has adapted SERVICE PROBE for the purposes of the North East study, to be applicable to smaller businesses and to be more readily applied to a large sample of organisations from both the public and private sectors. The adapted tool, PILOT, compares an organisation’s operational practices and performance with standards regarded as world-class. Data were collected via a self-assessment process using a questionnaire and undertaken by a small group of organisational representatives. This was facilitated by the research team and quality assured through benchmarking workshops (see Robson and Yarrow, 2000 for further details).

Categorisation of service organisations and their key characteristics

The practice and performance questions used in the PILOT survey used scores on a scale from 1-5, where 5 represented world class attainment for the particular measure. For an organisation to have achieved world class status, they needed on average an 80 per cent attainment in both business practices and operational performance. The results of the North East service

study have been sub-divided into six categories based on average practice and performance scores, as indicated by Figure 2.

In this paper only four broader categories are considered: leaders, laggards, vulnerable and promising. The small proportion of organisations who have achieved world-class (WC) status (based on the definition above) and those described as potential winners (PW), who have achieved relatively high levels of practice and performance, have been combined to represent the service leaders in the sample. In contrast, the two groups, room for improvement (RFI) and could do better (CDB), who average below 60 per cent (i.e. have an average score of under 3 for both practice and performance measures from PILOT) represent the service laggards. Two other groups exist in the sample. The first, vulnerable (VULN) organisations, achieve a high overall level of operational performance without the underlying support of good practices. The second, promising (PROM) organisations, adopt good to better levels of business practice but have yet to attain corresponding levels of high operational performance.

When considering the properties of the region's leading service organisations, other factors such as ownership, markets served, size and sector have also been considered. In terms of the latter two categories, the participating organisations and their proportions are categorised as micro (up to 20 staff) (36 per cent), small (21-50) (24 per cent), medium (51-200) (22 per cent) and large (more than 200 staff) (18 per cent). Additionally, the organisations considered belong to four broad sectors. These sectors are education and public services (27 per cent), consultancy and professional (27 per cent), industrial services (14 per cent), leisure and retail (11 per cent) and other (22 per cent).

Each of the four cohorts described above has a "typical" attainment for practice and performance. For example, this is represented by an average score of 3.5 for both types of measure for the leaders. Table I gives an indication of these typical levels for each group as well as their other key characteristics, which are described below.

Sector is significantly associated to this categorisation. Public services/education are over represented amongst the promising and laggards, whilst professional/consultancy tend to be found amongst the leaders and vulnerables, and industrial services also tend to be vulnerable.

Size also plays a part in the attainment of the service organisations (1 per cent level). Large organisations are over represented amongst the promising and laggards, whilst medium-sized organisations are found in high proportion amongst the leaders. Micro and small organisations are over represented amongst vulnerables, but a large proportion of micros can also be found amongst the service leaders.

Providers of services overseas are over represented amongst the leaders, but none of the specific locations considered (Western and Eastern Europe, USA and Asia Pacific) show significant association to organisation category. Ownership is associated to world-class attainment, where subsidiaries of larger firms are in high proportion within the promising group. Self-perception of their competitiveness is also related to this categorisation (0.1 per cent level). Promising, vulnerable and lagging organisations tend to believe they can only compete partially at best or not compete at all. However, the time scale for being able to compete shows no significant association with this classification.

Preliminary analysis of the chosen measures indicates that the high practice adoption levels amongst the services does lead to higher overall performance. There is a statistically significant association (0.1 per cent level) between overall practice and performance score, which is consistent with the shape of the points in Figure 2 and consistent with the results from "Service in Britain" (Voss and Johnson, 1995). Equally, there is significant association between the two aggregate measures amongst service leaders and also service laggards. This would suggest that where strong underlying practices exist, there is a resultant high level of operational performance and the converse for low levels of practice adoption.

A number of questions can be considered at this point:

- To what extent are leading organisations superior to the laggards in terms of practice and performance?
- Which areas of the service management model display the greatest differences between these two groups?
- What performance indicators discriminate leaders from laggards?
- Are there any areas of practice (as defined by the service management model) where the leaders are significantly better?
- What underlying business practices discriminate between leaders and laggards?
- Are there any performance indicators (again related to the service management model) where leaders are significantly better?

Leaders vs laggards

Practices

The service leaders in the north east region have a clear advantage on all 28 practice measures. Each of the five components of the service management model has measures where the differences (in average score) are in excess of 50 per cent, as indicated by Table IIa and Table IIb.

In terms of key enablers, the lagging organisations are at a clear disadvantage in terms of strategy and human resources, particularly with respect to the former. In terms of absolute attainment, the leaders are particularly strong with leadership's role in the developing service culture and quality values. Staff are customer oriented and have good teamwork initiatives. They listen to the customer and have established systems for responding to problems and failures. The leading organisations have their greatest relative advantage over their weakest counterparts in terms of strategies relating to measurement systems and quality values. HR issues are an area of concern for the laggards. For each measure there is at least a 40 per cent difference in average attainment between them and the service leaders. Emulating the leaders would benefit the laggards given the positive impact a formal human resource strategy can have on raising the levels of competitive advantage (Appleby and Mavin, 2000). In terms of the key

components of service management, the greatest disparity between the two groups is in the area of quality and delivery. Practices relating to problem solving, using complaint data and developing a quality mindset amongst employees show the greatest differences. In addition, the laggards are particularly weak in generating innovative product concepts and are poor in terms of their measurement of customer satisfaction.

While they are at a clear advantage in all aspects of service management, the region's leaders can still improve on a number of their practices. Examples include weak benchmarking practices, poor performance measurement and reporting systems and inadequate customer satisfaction measurement (despite the relative advantages described above). Their scores are significantly lower on average compared to the typical attainment for other initiatives and reflect serious weaknesses. Other areas for concern are practices for generating innovative product concepts, the adoption of formal quality procedures and frameworks, and perhaps more importantly, their practices on employee recognition and rewards.

While the laggards need "across-the-board" improvements, some of their practice adoption levels are significantly lower than the average expected for this group and require the greatest and most immediate attention. Examples cover performance measurement strategies, employee recognition and reward initiatives, product innovation and new service design, empowering staff to solve problems and the use of formal quality procedures.

Performance

Given the advantages demonstrated by the Leaders in terms of practice adoption, their advantage in performance is equally considerable (all measures again showing significance at the 0.1 per cent level). The Leaders score highly with regard to employee loyalty, across the board in terms of delivery and quality, meeting customer needs and customer retention. The greatest relative advantage the leaders have over the service laggards is in terms of service design and innovation. The leaders are at an advantage in terms of clearer service concepts, their ability to innovate and the speed at

which they can develop new services. They also have a clear advantage in terms of their employees' satisfaction. The results suggest that the laggards have focused their attention on performance measures related to service delivery and quality, as well as service value and measurement, given the much smaller differences in attainment.

There is still room for improvement for the leaders. They need to improve their performance on employee satisfaction (significantly lower compared to typical attainment despite their advantage over the laggards), on their record of corporate social responsibility and they need to pay attention to specific business performance indicators, such as return on net assets and operating costs.

Other factors

A number of other factors highlight significant differences between leaders and laggards. Whilst size shows no statistical significance, there are significant sectoral differences. Consultancy/professional organisations are more likely to be amongst the leaders, whilst education and public services are found in large numbers amongst the laggards. The leaders are more likely to offer services overseas (1 per cent level).

In terms of self-perception, significant differences (0.1 per cent level) are observed on the extent to which organisations believe they can compete. Leaders believe they can mostly or fully compete, whilst laggards if they know believe they can only partially compete at best. The time scale for competitiveness shows significant differences, where the leaders believe they can compete now, whilst the laggards expect to wait five to ten years before they are competitive.

Leaders vs promising organisations

Practices

Promising organisations are those with strong underlying practices, but whose performance has yet to match the leaders. This is borne out by the practice measures considered in Table III.

An overwhelming majority of practices show no significant difference between the two groups. However, where it does occur, it is concentrated in two specific components of the service management model. These are human resources, where leaders have greater workforce flexibility and display greater levels of staff recognition and reward, and service delivery and quality, where the leaders again have the edge on most practices. This component of service management is the only one from the model where significant differences occur (one measure apart) in respect to practice adoption.

Promising organisations demonstrate particular weaknesses in several practices, with significantly lower adoption levels than expected. These include benchmarking and the adoption of performance measurement and reporting systems, including customer satisfaction measurement. Human resources are another area of concern in terms of shared vision of service and in the recognition and reward of staff achievements. Service delivery and quality as suggested is the area with considerable potential for further improvement over a range of practices.

Performance

Whilst the differences in practice adoption are limited, the Leaders have significant advantage over the Promising organisations for all performance indicators (all at the 0.1 per cent level). Areas for greatest improvement for the Promising group in relation to the service management model are human resources and service value and measurement and overall business performance. However, apart from the “hard” and established measures of business performance, Promising organisations are closer to leaders in terms of their performance than laggards. This suggests that superior levels of practice adoption may have had some impact upon operational performance, although this impact could be improved considerably, perhaps over time as

their practices have an opportunity to mature. Encouragingly, the differences in performance attainment with respect to design and innovation and delivery and quality are relatively close in percentage terms.

Other factors

When comparing leaders and promising alone size proves to be a significant factor. Promising organisations are primarily large, while leaders are predominantly medium-sized. Ownership is also significant (1 per cent level), with independently owned organisations tending to be leaders and subsidiaries tend to be promising, although this factor could well be related to size.

The extent to which organisations believe they can compete is also associated to organisation status. Promising organisations are more likely to believe they can only partially compete. Despite their solid foundations in terms of established business practices, their relatively poor levels of operational performance is the most likely cause for this perception.

Leaders vs vulnerable organisations

Practices

Vulnerable organisations are those who have achieved good levels of operational performance without the support or adoption of solid business practices. For all practices, the leaders have a significant advantage (all at the 0.1 per cent level). Compared with the sector's laggards, vulnerables are performing better on average for each practice, but are closer to the laggards in terms of the average scores than they are to the leaders. This does give an indication of the extent of work to be done across-the-board by vulnerable organisations if they expect to become service leaders. The greatest percentage differences in average scores in relation to the service management model are in core business strategies (particularly those involving measurement) and in service delivery and quality issues. Indeed, their adoption level in terms of measurement practices is significantly lower than the average level of practice adoption for this group. A similar picture is

seen with respect to adopting quality procedures and frameworks and the generation of innovative product concepts.

Performance

In terms of performance, vulnerable organisations have attained good levels but Table IV indicates that relative weaknesses still exist when they are compared with the leaders.

The weaknesses highlighted cover all aspects of the service management model with the exception of business performance. It would appear that work has been done to ensure good results in terms of the established measures of business success, but much less attention has been paid to the supporting parts of the business process. Service design and innovation is a key area for performance improvement followed closely by human resources, and service value and measurement. Poor underlying practices in vulnerable organisations will have had some impact on lower performance levels. This is supported by lower than average performance levels on employee satisfaction, on corporate social responsibility, on innovation and service design and in terms of business measures relating to productivity, return on net assets and operating costs.

The comparison made so far of promising and vulnerable organisations with service leaders highlights one key difference. Both groups have their relative strengths and weaknesses, but the promising organisations are perhaps much closer to service leaders in terms of their practices than the vulnerable are in terms of their performance indicators.

Other factors

The only additional factor that shows a significant difference between leaders and vulnerable organisations is the extent to which they perceive they can compete. Leaders tend to believe they can mostly or fully compete, whilst a significant proportion of vulnerable organisations believe they can only partially compete at best. However, time scale for competitiveness showed no significant difference between the two groups.

Factors that best indicate performance “winners”

Is there a combination of performance measures that best indicate whether an organisation is likely to be a performance “winner”? Each of the 19 performance factors was considered and stepwise discriminant analysis was applied to them. The objective was to determine the significant combination of factors which best discriminated between those organisations that averaged at least 60 per cent for performance and those who can make major improvements in operational performance. The factors identified and the level of accuracy in the discrimination is displayed in Table V.

The discriminating factors provide a useful checklist to predict the status of the organisation. The level of accuracy in terms of predicting performance status is almost 90 per cent and nearly all of the components of the service management model are represented in the discriminating group. The leading performers (i.e. leaders and vulnerable organisations) are performing significantly better in terms of the traditional “hard” business measures such as market share, cash flow and operating costs but also from staff related issues such as responsiveness and loyalty. In turn, they are recording significantly higher levels of customer satisfaction. External to their business, they are performing better in terms of social responsibility.

Initiatives that best indicate practice “winners”

Equally, does a combination of business practices best indicate whether an organisation is a winner and hopefully equipped to deal with future developments and market changes? Each of the 28 practices was considered and the objective was to determine the significant combination of factors which best discriminated between those averaging at least 60 per cent in adoption levels with those who do not (i.e. leaders and promising combined versus vulnerable and laggards). The factors identified and the level of accuracy in the discrimination is displayed in Table VI.

The discriminating factors again provide a checklist to predict the status of the organisation in terms of practice adoption. The level of group prediction exceeds 80 per cent and each of the areas of the service management model

is included in the discriminating group. In comparison to their weaker counterparts, those exhibiting high practice-adoption levels are performing significantly better in terms of implementing core business strategies, in encouraging employees to become customer oriented and problem solvers and focusing on eliminating operational “waste”.

Discussion

Research findings

This paper presented four types of service organisations based on their practices and performance and other key characteristics. It also presented a detailed analysis of the differences between service leaders and the other three groups, laggards, promising and vulnerable.

Significant differences exist between leaders and laggards in both practice and operational performance. The differences in average scores for each practice and performance measure are significant at the highest level and cover all of the components of the service management model. Clearly, laggards have to make widespread, across-the-board improvements both in business practice and corresponding performance, although an indication has been given in the paper regarding those initiatives and outputs which require the greatest and most immediate attention.

Clear discrimination between leaders and promising exists in terms of operational performance. However, in relation to the service management model, these differences are more pronounced in terms of human resources, service value and measurement and overall business performance. On a positive note, promising organisations have few disadvantages in terms of business practices, although to become leaders, more has to be done in terms of developing strategies in two specific areas of service management, human resources and service quality.

In terms of business practice, the leaders have a recognisable advantage over the vulnerables. These differences are significant at the highest level and cover all aspects of the service management model. In terms of supporting practices, vulnerable organisations are much closer to service laggards than

leaders. Although they perform reasonably well, there are specific areas for concern here, particularly in the area of service design and innovation. To a lesser extent, there are also significant differences between the vulnerables and leaders in terms of service delivery, value and measurement and human resources.

All cohorts can improve in terms of the practices they adopt and the performances they attain. Across the sector, significant improvements can be sought in terms of key human resource issues, namely recognition and rewarding of staff and resultant employee satisfaction. Quality procedures can also be improved across the sector and formal measurement systems provide a major challenge for the north east services. There is scope for improvement in terms of innovation amongst the leaders and vulnerable and with respect to delivery and quality for the promising and laggards.

Finally, what can others from the north east services learn from their leading organisations? Table VII summarises their key strengths in terms of practices that they are good at and performance measures where they perform best for the sector as a whole.

In terms of practices, there is a consistent theme of quality and service with employees at the core of service design and delivery and a strong emphasis on meeting customer expectations. In terms of performance, the critical measures of success are again related to meeting customer needs in terms of quality, reliability and accessibility through staff responsiveness and employee loyalty. However, the region's leaders have a lot more to learn themselves in terms of better practices and higher performance levels. In each of the business areas some further improvements are still possible as shown in Table VIII. Service Design and Innovation is one such area as is the whole issue of performance measurement and reporting.

Ideas for further study

Perhaps a limitation of this research is that it relates to one specific region within the UK. It would be interesting to ask whether the findings presented are representative of service organisations further afield. Certainly, the characteristics shown by the region's leaders are consistent with those seen by leading service organisations, both in terms of major strengths and challenges, although the north east services seem relatively weak in terms of implementing measurement systems and being able to design and innovate. The results also have some differences with regard to size being a significant factor and also on organisational perception. Smaller organisations in the PILOT study seem more service oriented and the weaker organisations from the region seem to be more realistic than their counterparts elsewhere in recognising their ability to compete.

In comparison to other studies (Voss and Johnson, 1995; Voss *et al.*, 1997b), the leading service organisations in the north east display a number of similar characteristics. However, this comparison raises the issue of the time lag between the collection of the various data. It would be reasonable to ask whether the services located in the north east are performing as well as the rest of the country or merely playing "follow-my-leader". An interesting further study could involve service organisations located throughout the UK. Such a study would permit comparisons to be made by region as well as size and sector.

Additional studies on the participating organisations from PILOT to determine to what extent, if any, practice and performance levels have improved since this benchmarking exercise has taken place will shed further light, given that for many participants PILOT represented their introduction to benchmarking. It may also be useful in future research to concentrate on specific aspects of service management rather than providing a wider diagnosis. This in-depth analysis could focus on issues such as design and innovation and human resources that have proved problematic for a number of PILOT respondents. Finally, the authors are currently undertaking similar research with respect to the manufacturing sector in the north east region to identify the key

characteristics of its leading manufacturers using benchmarking data from the manufacturing variant of PILOT. Again, turning this into a longitudinal study could be useful in identifying the extent of any improvements in practice adoption and corresponding performance.

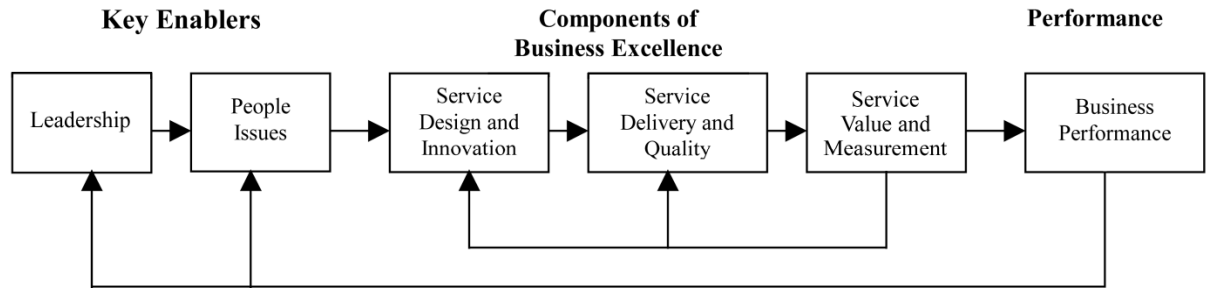


Figure 1 The service management model

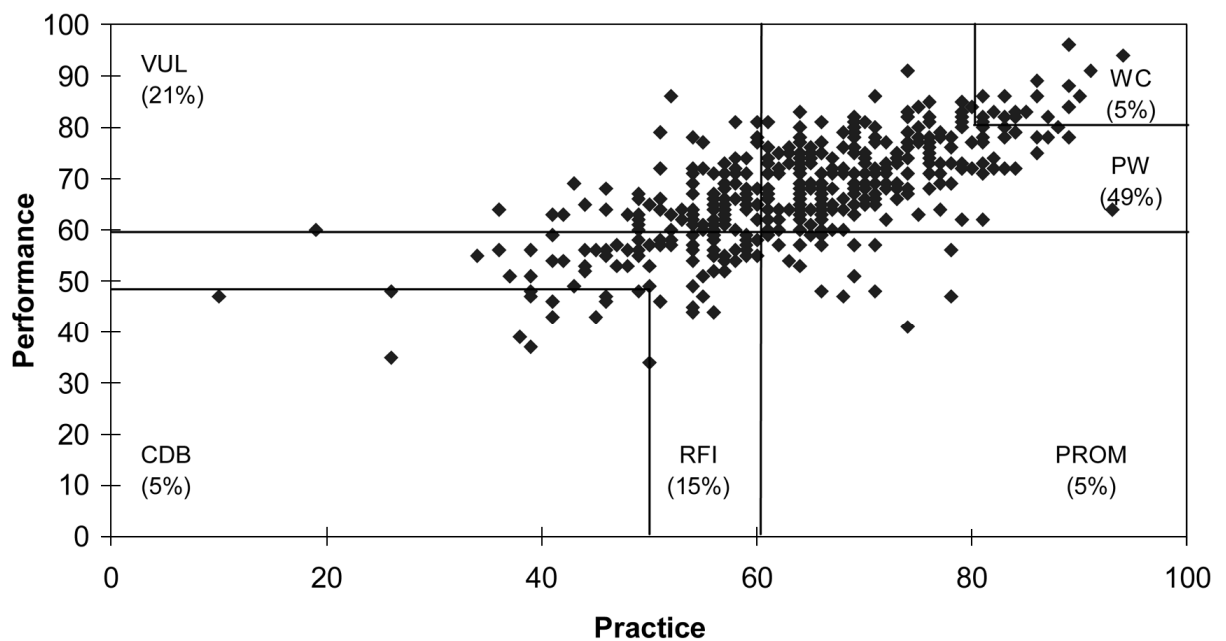


Figure 2 Categories of service organisation defined by practice-performance model

Table I "Typical" characteristics for each category of organisation

	Leaders	Vulnerable	Promising	Laggers
Boundaries of practice/performance scores (%)	>60, >60	<60, >60	>60, <60	<60, <60
Typical score (out of 5) for practice/performance	3.5, 3.5	2.5, 3.5	3.5, 2.5	2.5, 2.5
Size of company (mainly) represented	Micro, Medium	Small	Large	Large
Service sector (mainly) represented	Professional	Professional industrial services	Public services	Public services
Ownership (mainly) represented	Independent	Independent	Subsidiaries	Independent
Provision of services	Overseas			
Competitiveness perception	High	None	Low	None

Table I "Typical" characteristics for each category of organisation

Table II Relative advantage of the "leading" services

	Leaders	Practice measure		
		Laggers (%)	Promising (%)	Vulnerable (%)
<i>Strategic issues</i>				
Role of leadership in developing service culture	4.0810	38	14	21
Quality values	3.9637	53	3	33
Skill and job training and education	3.5547	47	-7	50
Competitive positioning	3.6169	39	5	24
Benchmarks	2.6598	76	-11	69
Performance measurement and reporting	3.1700	76	11	67
<i>Human resource issues</i>				
Shared vision, mission and goals	3.4130	44	4	28
Customer orientation	4.0040	58	6	29
Recognition and reward	3.3984	51	17	39
Employee involvement	3.5668	41	5	24
Listening to staff	3.7247	40	4	24
Day to day teamwork	4.0207	45	-1	35
Workforce flexibility	3.7126	40	26	18
<i>Service design and innovation</i>				
Listening to the customer	3.9676	35	2	29
New service design and development process	3.2794	43	-2	23
Role of support functions	3.4208	29	20	18
Management of business processes	3.4262	35	3	23
Current use of information technology	3.4939	35	1	25
Generation of innovative product concepts	2.8250	69	13	36
<i>Service delivery and quality</i>				
Problem solving	3.4758	63	14	46
Quality mindset	3.7298	51	19	39
Quality procedures and framework	3.0121	39	0	35
Real time employee handling of service problems/ failures	3.9109	28	24	13
Use of customer complaint data	3.6976	54	8	45
<i>Service value and measurement</i>				
Elimination of "waste"	3.0576	28	9	22
Clarity of goals	3.7642	33	5	19
Visibility and communication of service standards	3.5830	56	8	35
Customer satisfaction measurement	2.9224	73	2	60
<i>Strategic issues</i>				
Strategy towards corporate social responsibility	3.0517	38	31	18
<i>Human resource issues</i>				
Employee loyalty, relative to industry	4.1510	29	25	5
Employee satisfaction	3.2105	53	38	12
<i>Service design and innovation</i>				
Innovativeness	3.2602	54	16	22
Clarity of service concept	3.6774	58	14	30
Speed of development relative to competition	3.5287	53	37	16
Service meeting customer needs	3.8750	35	18	10
<i>Service delivery and quality</i>				
Reliability	3.9234	30	14	6
Quality performance, relative to industry	3.9798	36	23	8
Staff responsiveness	4.0243	44	21	3
Accessibility	3.8548	12	16	3

Table Iia Relative advantage of the “leading” services

Table II

	Leaders	Practice measure		
		Laggers (%)	Promising (%)	Vulnerable (%)
<i>Service value and measurement</i>				
Value (quality/price)	3.7368	34	25	12
Customer retention	3.8525	31	38	4
Level of customer satisfaction	3.7258	37	30	8
<i>Business performance</i>				
Market share (of primary services or line of business)	3.8148	36	32	4
Cash flow	3.7676	38	41	4
Overall productivity within organisation	3.5143	29	31	7
Return on net assets	3.3692	26	51	9
Operating costs	3.0814	18	16	0

Table Iib Relative advantage of the “leading” services

Table II

	Leaders	Practice measure		
		Laggers (%)	Promising (%)	Vulnerable (%)
<i>Service value and measurement</i>				
Value (quality/price)	3.7368	34	25	12
Customer retention	3.8525	31	38	4
Level of customer satisfaction	3.7258	37	30	8
<i>Business performance</i>				
Market share (of primary services or line of business)	3.8148	36	32	4
Cash flow	3.7676	38	41	4
Overall productivity within organisation	3.5143	29	31	7
Return on net assets	3.3692	26	51	9
Operating costs	3.0814	18	16	0

Table III Leaders vs promising for practices

Table III Leaders vs promising for practices

Percentage differences between leaders and promising – practices	Sig level	% diff	Leaders	Promising
<i>Strategic issues</i>				
Role of leadership in developing service culture	**	14.3	4.0810	3.5710
Performance measurement and reporting		11.0	3.1700	2.8570
Competitive positioning		5.5	3.6169	3.4290
Quality values		2.8	3.9637	3.8570
Skill and job training and education		-7.0	3.5447	3.8100
Benchmarks		-11.3	2.6598	3.0000
<i>Human resource issues</i>				
Workforce flexibility	***	25.8	3.7126	2.9520
Recognition and reward	**	17.0	3.3984	2.9050
Customer orientation		6.4	4.0040	3.7620
Employee involvement		5.5	3.5668	3.3810
Listening to staff		4.3	3.7247	3.5710
Shared vision, mission and goals		3.9	3.4130	3.2860
Day to day teamwork		-0.7	4.0207	4.0480
<i>Service design and innovation</i>				
Role of support functions	**	20.0	3.4208	2.8500
Generation of innovative product concepts		13.0	2.8250	2.5000
Management of business processes		2.8	3.4262	3.3330
Listening to the customer		1.6	3.9676	3.9050
Current use of information technology		0.5	3.4939	3.4760
New service design and development process		-1.6	3.2794	3.3330
<i>Service delivery and quality</i>				
Real time employee handling of service problems/failures	***	24.4	3.9109	3.1430
Quality mindset	**	18.7	3.7298	3.1430
Problem solving	*	14.0	3.4758	3.0480
Use of customer complaint data		7.8	3.6976	3.4290
Quality procedures and framework		0.4	3.0121	3.0000
<i>Service value and measurement</i>				
Elimination of "waste"		8.8	3.0576	2.8100
Visibility and communication of service standards		7.5	3.5830	3.3330
Clarity of goals		5.4	3.7642	3.5710
Customer satisfaction measurement		2.3	2.9224	2.8570

Notes: *Significant at the 5 per cent level; **Significant at the 1 per cent level; ***Significant at the 0.1 per cent level

Table IV Leaders vs vulnerable for performance

Table IV Leaders vs vulnerable for performance

Percentage differences between leaders and vulnerable – performances	Sig level	% diff	Leaders	Promising
<i>Strategic issues</i>				
Strategy towards corporate social responsibility	***	17.7	3.0517	2.5930
<i>Human resource issues</i>				
Employee satisfaction	***	11.8	3.2105	2.8723
Employee loyalty, relative to industry	*	5.5	4.1510	3.9355
<i>Service design and innovation</i>				
Clarity of service concept	***	29.5	3.6774	2.8387
Innovativeness	***	21.9	3.2602	2.6739
Speed of development relative to competition	***	16.4	3.5287	3.0320
Service meeting customer needs	***	9.6	3.8750	3.5368
<i>Service delivery and quality</i>				
Quality performance, relative to industry	***	7.6	3.9798	3.6989
Reliability	**	6.5	3.9234	3.6842
Accessibility		2.9	3.8548	3.7447
Staff responsiveness		2.8	4.0243	3.9140
<i>Service value and measurement</i>				
Value (quality/price)	***	11.9	3.7368	3.3404
Level of customer satisfaction	**	7.6	3.7258	3.4632
Customer retention		3.7	3.8525	3.7158
<i>Business performance</i>				
Return on net assets	*	8.9	3.3692	3.0941
Overall productivity within organisation	*	6.7	3.5143	3.2947
Market share (of primary services or line of business)		4.1	3.8148	3.6632
Cash flow		3.6	3.7676	3.6380
Operating costs		-0.3	3.0814	3.0920

Notes: *Significant at the 5 per cent level; **Significant at the 1 per cent level; ***Significant at the 0.1 per cent level

Table V Factors that discriminate for performance attainment

Table V Factors that discriminate for performance attainment

	Discriminating factors	Component of service management model
	Strategy towards corporate social responsibility	Strategic issues
	Employee loyalty, relative to industry	Human resource issues
	Staff responsiveness	Service delivery and quality
	Level of customer satisfaction	Service value and measurement
	Market share	Business performance
	Cash flow	Business performance
	Operating costs	Business performance
	Predicted group membership	
	Laggers/promising (%)	Leaders/vulnerable (%)
Laggers/promising	63.5	36.5
Leaders/vulnerable	3.2	96.8
	89.0 correctly classified	

Table VI Factors that discriminate for practice adoption**Table VI** Factors that discriminate for practice adoption

	Discriminating factors	Component of service management model
	Benchmarking	Strategic issues
	Skill and job training and education	Strategic issues
	Customer orientation	Human resource issues
	Problem solving	Service delivery and quality
	Elimination of "waste"	Service value and measurement
	Predicted group membership	
	Laggers/vulnerable (%)	Leaders/promising (%)
Laggers/vulnerable	69.4	30.6
Leaders/promising	8.9	91.1
	82.0 correctly classified	

Table VII What can we learn from our leaders?

Table VII What can we learn from our leaders?

What practices are they exceptionally good at?	What are their best performance achievements?
<i>Strategic issues</i>	<i>HR issues</i>
Establishing quality values	Employee loyalty relative to industry
Leadership in service culture	<i>Service design and innovation</i>
<i>HR issues</i>	Service meeting customer needs
Customer orientation	<i>Service delivery and quality</i>
Day to day teamwork	Staff responsiveness
Workforce flexibility	Quality performance relative to industry
Listening to staff	Reliability
<i>Service design and innovation</i>	Accessibility
Listening to the customer	<i>Service value and measurement</i>
<i>Service delivery and quality</i>	Level of customer satisfaction
Quality mindset	Market share (of primary services or line of business)
Real time employee handling of service problems/failures	
<i>Service value and measurement</i>	
Clarity of goals	

Table VIII What can our service "leaders" learn to do better?

Table VIII What can our service "leaders" learn to do better?

What practices are they exceptionally good at?	What are their best performance achievements?
<i>Strategic issues</i>	<i>Strategic issues</i>
Benchmarking	Strategy towards corporate responsibility
Performance measurement and reporting	<i>HR issues</i>
<i>HR issues</i>	Employee satisfaction
Recognition and reward	<i>Service design and innovation</i>
Shared vision, mission and goals	Innovativeness
<i>Service design and innovation</i>	<i>Business performance</i>
Generation of innovative product concepts	Return on assets
New service design and development process	Operating costs
Current use of information technology	
Management of business processes	
Role of support functions	
<i>Service delivery and quality</i>	
Quality procedures and framework	
<i>Service value and measurement</i>	
Customer satisfaction measurement	
Elimination of waste	

Table IX

References

Appleby, A, Mavin, S (2000), "Innovation not imitation: human resource strategy and the impact on world-class status", *Total Quality Management*, Vol. 11 No.4/5, .

Prabhu, V.B, Robson, A, Yarrow, D.J., Appleby, A, Mitchell, E. (2000), "An Analysis and Findings From Nearly 300 Manufacturing Sites", *Manufacturing Management in the North East of England: Are We Adopting Best Practice and achieving World-Class Performance?*, University of Northumbria at Newcastle, Newcastle upon Tyne, .

Prabhu, V.B, Robson, A, Yarrow, D.J., Appleby, A., Mitchell, E. (2000), *Service Operations Management in the North East of England: Are We Adopting Best Practice and Achieving World-Class Performance? An Analysis and Findings From Nearly 300 Manufacturing Sites*, University of Northumbria at Newcastle, Newcastle upon Tyne, .

Robson, A, Yarrow, D (2000), "Getting to the facts – company benchmarking: issues in data collection and consistency", *OR Insight*, Operational Research Society, Vol. 13 No.1.,, pp.8-17.

Voss, C, Johnson, R (1995), *Service in Britain – How Do We Measure Up?*, Severn Trent plc, Birmingham, .

Voss, C, Blackmon, K, Chase, R, Rose, B, Roth, A.V (1997), *Service in the US – A Study of Service Practice and Performance in the United States*, Severn Trent plc, Birmingham, .

Voss, C, Blackmon, K.,, Chase, R, Rose, B, Roth, A.V (1997), *Achieving World-Class Service – An Anglo-American Benchmarking Comparison of Service Practice and Performance*, Severn Trent plc, Birmingham, .