Linking service to profit: the business case for service excellence

Ken Bates, Hilary Bates and Robert Johnston
Warwick Business School, University of Warwick, Coventry, UK

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Abstract Adds to the stream of research concerned with understanding the relationship between good service and profit. Takes a broader perspective than recent studies and asks does the financial performance of those organisations with a reputation for service excellence differ markedly from those with a poor reputation? Focuses on three questions: “Does size matter?”; “Are the better organisations more productive?” and “Are the better organisations more profitable?” The findings, based on a large and wide-ranging empirical study undertaken in the UK, found that, whether measured in terms of total assets, turnover or number of employees, both large and small organisations are capable of being both excellent and poor. In terms of productivity the findings suggest that provision of better service is staff intensive but yields significantly greater profit per employee. The better service providers have significantly better return on equity and return on total assets than the poorer ones.

Introduction
Much of the service management literature takes a consumer perspective and is predicated on the belief that customers appreciate better service, in terms of quality, flexibility and innovation for example. Recent research has focused on understanding whether such activities translate into financial benefits. Several studies have focused on particular relationships, such as those between customer satisfaction and loyalty and profit, (see for example Anderson et al., 1994; Jones and Sasser, 1995; Loveman, 1998; Rust and Zahorik, 1993; Rust et al., 1995) or customer satisfaction and employee satisfaction and profit (Silvestro and Cross, 2000). Other research has been concerned with developing models incorporating several dimensions, for example the Balanced Business Scorecard (Kaplan and Norton, 1996), the Service Profit Chain (Heskett et al., 1997), the Results Determinants Framework (Fitzgerald et al., 1991), the Performance Pyramid (Lynch and Cross, 1991), Return on Quality (Rust et al., 1995) the Business Excellence Model (EFQM, 1999) and the Service Performance Network (Johnston and Clark, 2001). Several studies have been concerned with applying such frameworks to individual organisations (see for example Heskett et al., 1997; Loveman, 1998; Rucci et al., 1998; Silvestro and Cross, 2000).

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This paper adds to this stream of work by taking a broader perspective and asks does the financial performance of those organisations with a reputation for service excellence (SE) differ markedly from those with a poor reputation? The paper reports the results of a recent major research project, commissioned by the Institute of Customer Service in the UK, into how organisations can develop and sustain a reputation for SE.

This paper focuses on three questions:

1. Does size matter? Does it tend to be the larger organisations that are able to deliver higher levels of customer service or is small beautiful?

2. Are the better organisations more productive? Do the organisations with a reputation for excellent or good service generate more revenue per employee or profit per employee than those with a reputation for poorer service quality?

3. Are the better organisations more profitable? Are the organisations with a reputation for excellence able to generate higher levels of return on investment (ROI)?

Methodology
Four focus groups made up of 15-20 randomly selected members of the public were used to generate a list of organisations with a reputation for poor and excellent service. The most frequently mentioned organisations (both poor and excellent) together with a small “control” group of infrequently mentioned organisations, were rated on a scale of −3 to +3 (from poor to outstanding) by 65 customer service managers. This “expert panel” comprised the delegates at the Institute’s Annual Conference and represented a variety of organisations. Using these SE ratings, we investigated their relationship with the financial performance for each of the organisations individually and collectively.

Our assessment of financial performance covered the period of five years up to the financial year ending in 2000. The source data were either extracted from two databases, Fame and Amadeus[1], or the company’s own annual report and accounts or, in some instances, obtained directly from the organisation itself. We draw on Bates and Whittington (1997) who used the disaggregation of return on equity (ROE) to determine how a company’s strategy has influenced its financial performance.

There are many problems inherent in both the collection and analysis of data of this nature. Allowing focus groups a free choice in the selection of organisations provides a rich and valid database, but it increases complexity when one comes to data comparison. The selected organisations encompass a wide variety of businesses, including both public and private companies, as well as activities operated as joint ventures, government bodies and regulated industries (see Table I).

Of the 47 organisations 24 are public quoted companies (PLCs), of which 18 are in the group of organisations that were rated with a service excellence score
of above zero (see section 2). Five of these 18 are overseas companies. There are six PLCs which were rated zero or below on the excellence scale. There are 14 subsidiary companies, part of both public and private groups, five of which lie within the positive group, all of which are subsidiaries of PLCs. In the zero and below group, six of the subsidiaries belong to PLCs and three belong to privately-owned companies. There are four private organisations in the sample, three of them in the positive group and two not-for-profit organisations, also both in the positive group. The remaining three “organisations” include one government agency, the Driver Vehicle Licensing Agency (DVLA), and two public sector institutions the National Health Service and local government.

It should be noted that the service excellence assessments were sometimes related to a subsidiary within a diversified group whose financial results are consolidated into the group accounts. In some cases we have been able to extract reasonable data for the relevant segment (e.g. Homebase out of J Sainsbury plc.) but when no segmental information or subsidiary accounts were freely available the companies have had to be excluded. In the case of some foreign owned companies with UK operations (e.g. Pret A Manger and Aldi) we have obtained the accounting information relating to the UK operations only and this information could be distorted because of inter-group dependencies which are not fully reflected in the UK operation’s accounts.

We were not always able to obtain all five years of data because some of the companies had only recently floated or had been sold or acquired during the period under investigation. Other organisations have had to be totally eliminated from the financial analysis due to lack of data, for example: Local Government, the National Health Service and the DVLA. Two companies, NTL and On-Digital, have been excluded because both companies have only recently been set up to undertake new ventures and neither has yet reached an economic activity level. Consequently both companies have shown year on year

<table>
<thead>
<tr>
<th></th>
<th>Number rated above zero</th>
<th>Number rated zero or below</th>
<th>Total</th>
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<tbody>
<tr>
<td>Government</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Utilities</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Airlines</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Banks</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Entertainment</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Retail</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Vehicle rescue</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>Vehicle repair</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Private health</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Transport</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>28</td>
<td>19</td>
<td>47</td>
</tr>
</tbody>
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Table I.
Categorisation of the organisations in the study
increasing losses that have produced negative equity (i.e. the original capital invested has been wiped out by accumulated losses) and distorted ratios[2].

Not all of the companies were UK based and hence some of the financial data was in a foreign currency. We have adjusted these to sterling at an average exchange rate to ensure that certain comparisons, particularly those relating to size, are valid. Such adjustments do not affect the financial ratios such as ROI. Perhaps slightly more important is that those companies not registered in the UK will prepare accounts using a different set of accounting standards and policies. This distorts comparability to some extent but it would be very difficult to eliminate such distortions and hence we have not tried. We do not believe such distortions materially affect our analysis. We have also ignored the fact that the businesses in our sample may make up their annual accounts to different year-ends and, therefore, the balance sheet may be distorted by seasonal effects and profit and loss information is not strictly comparable. Again, we do not believe this to adversely affect our analysis.

Wherever possible we extracted the following information for the five-year period:

- turnover (sales);
- profit before interest and tax (PBIT);
- earnings attributable to the ordinary shareholder;
- total assets;
- shareholders’ funds (equity);
- number of employees.

From this data we could gain an overview of the growth of the business during the period in terms of sales, assets, equity and number of employees and we could also calculate some key profitability and efficiency ratios to help us assess the overall business performance. A spreadsheet model was developed to provide a summary of the input data, the ratios calculated, growth rates and accompanying graphical analysis. A summary of the results is shown in Table II.

**Findings and discussion**

*Does size matter?*

An analysis of the data suggests the relationship between an organisation’s size, measured in terms of assets, turnover or number of employees and its excellence rating is quite weak. (The correlation coefficients for assets, turnover and number of employees against the SE scale are −0.02, 0.09 and 0.15 respectively).

Measured in terms of assets, there is a spread of sizes of organisations either side of zero. The organisations with a poorer reputation (SE zero and below) have assets ranging from £68 million to £242,000 million and the organisations
with a better reputation (SE above zero) have assets ranging from £3.7 million to £187,000 million. The average asset size for the two groups are similar, £19,851 million and £25,071 million respectively. (An analysis of variance was carried out which confirmed the weak correlations – see Appendix.)

The four organisations with assets exceeding £100,000 million are all banks and banks are not strictly comparable with other organisations in this group. Included in total assets are debtors which are relatively small for most organisations but in a bank this would include loan advances and is therefore an extremely large figure. Removing the banks the correlation coefficient moves from 0.02 to 0.11, still not statistically significant but indicates a slight trend towards the larger organisations delivering higher levels of service.

When the banks are excluded the gap between the asset size of the two groups of organisations is more marked. The average asset size of the two groups becomes £2,792 million and £6,607 million respectively.

The organisations with a poorer reputation (SE rated zero and below) have turnovers ranging from £264 to £9,799 million (average £2,888 million) and the organisations with a better reputation (SE rated above zero) have turnover ranging from £49 million to £16,164 million (average £4,209 million). So the organisations with the better reputation for SE have an average turnover about 45 per cent higher than the organisations with a poor service excellence reputation. Note that banks do not have a turnover, as such, they make their money from loans, investments and provision of other services. In broad terms their turnover is the difference between interest receivable and interest payable.

<table>
<thead>
<tr>
<th></th>
<th>Organisations with a poorer reputation</th>
<th>Organisations with a better reputation</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average assets</td>
<td>£19,851m</td>
<td>£25,071m</td>
<td>26</td>
</tr>
<tr>
<td>Average turnover</td>
<td>£2,888m</td>
<td>£4,209m</td>
<td>46</td>
</tr>
<tr>
<td>Average number of employees</td>
<td>26,291</td>
<td>44,808</td>
<td>70</td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average turnover per employee</td>
<td>£126,129</td>
<td>£113,226</td>
<td>-10</td>
</tr>
<tr>
<td>Average profit per employee</td>
<td>£8,365</td>
<td>£14,362</td>
<td>72</td>
</tr>
<tr>
<td><strong>Profitability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average profit before interest and tax</td>
<td>£390m</td>
<td>£678m</td>
<td>74</td>
</tr>
<tr>
<td>Average return on equity</td>
<td>14.6%</td>
<td>19.4%</td>
<td>33</td>
</tr>
<tr>
<td>Average return on total assets</td>
<td>7.8%</td>
<td>25.6%</td>
<td>228</td>
</tr>
<tr>
<td>Average net margin</td>
<td>7.9%</td>
<td>14.3%</td>
<td>81</td>
</tr>
<tr>
<td>Average asset utilisation</td>
<td>16 times</td>
<td>6 times</td>
<td>-62</td>
</tr>
</tbody>
</table>

Table II. Summary of the results
on monies borrowed and loaned respectively, but bearing the other services in mind we have used total operating income as roughly comparable to a company’s turnover.

The number of employees in the organisations with a poorer reputation (SE of zero and below) ranged from 1,152 to 81,820 (average 26,291) and in the organisations with a better reputation (SE above zero) ranged from 899 to 219,518 (average 44,808).

There was no statistical correlation between SE rating and size for any of our three measures of size. It would appear that both large and small organisations are capable of being both excellent and poor. However, many of the larger organisations are above zero on the excellence scale suggesting that small is not necessarily beautiful and size is not a barrier to service excellence. Also the grouped data show consistently, across all three measures, that the group of above zero-rated organisations were, on average, bigger than the zero and below rated organisations. This could indicate that SE might be a factor influencing an organisation’s ability to grow.

Are the better organisations more productive?
We looked at productivity at two levels, first, in terms of turnover per employee, and second, and perhaps the more important measure, in terms of profit per employee.

In most service organisations a key “asset” is a well-trained and efficient staff. This is reflected to some extent by the fact that a large proportion of costs will relate to staff costs but of course staff do not appear on the balance sheet. Although their productivity is critical to the success of the company it is not specifically captured in the financial ratios we have calculated. For those organisations committed to SE one might surmise that their turnover per employee may be smaller than the poorer organisations given the potential need for staff availability in delivering excellent service. We used the ratio of turnover per employee to provide an indication of each organisation’s productivity of their human assets.

An analysis of the individual company data suggests that there is a difference between organisations though not a statistically significant relationship with a correlation coefficient of 0.16. The average turnover per employee for those organisations with SE rating of zero or below is £126,129 which is about 11 per cent higher than the average turnover per employee for those with SE rated above zero at £113,226.

It is likely that there are strong industry sector influences on this figure, and our data cuts across a wide variety of different organisations each with very different staffing needs. To assess the effect of this we have looked in more detail at just one sector, the airline industry as four companies were included in our sample, Singapore Airlines, Virgin Airlines, British Airways and easyJet. These companies were spread across the excellence scale with SE rates of 2.2,
2.0, 0.4 and −1.3 respectively. Over all five years the rank order for SE corresponds with the rank order for turnover per employee. (We only have one year’s data for easyJet, as it was a private company prior to 2000.)

Providing SE may be marginally more staff intensive but it should enable organisations to charge premium prices and hence generate a healthy profit per employee. There is considerable variability (although no statistical correlation with a coefficient of 0.1) but six companies with a positive SE rate have profits per employee of over £20,000 compared with only three with zero or negative SE rate.

Looking at the grouped data we can see that the profit per employee in the organisations with a poorer reputation (zero and below) ranged from −£2,112 to £30,505 (average £8,365). In the organisations with a better reputation (above zero) it ranged from −£11,344 to £72,290 (average £14,362), so the positive SE rated organisations yielded a 71 per cent higher profit per employee.

The findings would suggest that although it may require more employees to provide better service this investment may be worthwhile as it yields the advantage of significantly greater profit per employee. Indeed each additional excellence point generates around an additional £800 of profit per employee.

Are the better organisations more profitable?
At a simple level there is a marked contrast between the average PBITs of the two groups of nearly 50 per cent. The average PBIT of the zero and below rated organisations is £390 million compared with £678 million for the above zero group.

ROI is the primary profitability ratio, which considers the profit earned in the light of the amount of capital employed within the business. Given that assets employed in any business have to be financed and all businesses compete for such finance one might expect that all firms have to achieve a similar ROI (or at least a threshold ROI). In practice, ROI will vary considerably from business to business. One reason for this is the asset intensity of the business, for example a company in a high volume equipment based-mass service such as a train operating company may have a considerable investment in assets whereas a professional service needs relatively little investment in assets and relies on “investment” in its staff which are not the sort of “assets” that appear on the balance sheet. Another key reason is risk. A business that is considered to be of higher risk will not attract finance unless it can offer higher returns than a “safer” investment, consequently the higher the exposure to risk the higher the ROI will have to be in the long term. Other reasons for differences in the ROI of businesses are the stage of their development and the cyclical nature of business. In early years a company may make losses and have negative ROI and even once in profit ROI may remain low because the business has not yet reached the critical size needed to gain the benefit of full
asset utilisation. Both the economy in which a business operates and the sector itself will go through cycles and inevitably ROI will fluctuate with the ups and downs of the cycles.

ROI was measured in two alternative ways, first, as ROE and second, as return on total assets (ROTA).

ROE is calculated as the earnings (profit attributable to the ordinary shareholders or equivalent) divided by shareholder’s funds i.e. the equity of the business. This compares the profit after all charges (including interest, tax and preference dividends but before any dividends to the ordinary shareholders) to the ordinary shareholder’s investment in the company. It is therefore the return on investment from the shareholders’ point of view i.e. after having rewarded the other providers of finance.

From the grouped data we can see that the organisations with a positive SE rate generate an average ROE of 19.4 per cent while organisations with a zero or negative SE rate generate an average ROE of 14.6 per cent. The better companies appear on average to generate a more acceptable return to shareholders.

ROTA is calculated as PBIT divided by total assets and shows the before interest and tax return that management is able to generate from the total assets at their disposal. Profit before interest and tax is used so as to eliminate the effect of specialist decisions on financing ( gearing) and tax policy and to concentrate on the efficiency of the operations given the total assets employed[3]. From the grouped data it can be seen that the organisations with a reputation for poorer service derived a significantly poorer return on their assets than did the better organisations. The better organisations generated average ROTA of 25.6 per cent, a good return, while the poorer organisations averaged under 7.8 per cent, an inadequate level of return to cover the cost of capital. To explain ROTA we can break it down into secondary ratios measuring the profitability of sales (net margin) and the asset utilisation. The relationship between these ratios is as follows:

$$\text{ROTA} = \text{Net Margin} \times \text{Asset Utilization}.$$ 

Looking at the grouped data we can see that the net margins of the organisations with a poorer reputation (zero and below) ranged from $-5.4$ per cent to 26.1 per cent (average 7.9 per cent) and in the organisations with a better reputation (above zero) ranged from $-10.4$ per cent to 89.5 per cent (average 14.3 per cent). The positive SE rated organisations yielded more profitable sales with a 24 per cent higher average net margin.

The reason for organisations with positive SE rates being able to generate a higher ROTA appears to be their ability to achieve a higher net margin. This is achieved despite the need to employ more staff (depressing turnover per employee), through being able to charge more than enough to cover the increased staff costs.
The grouped data show that the organisations with zero or negative SE rates have an average asset utilisation of 16 (sales are 16 times the total assets employed), compared with the organisations with a positive SE rate whose average asset utilisation is 6. This difference may be due to the differing strategies of the two groups. We saw that poorer SE rated organisations generated a slightly higher turnover per employee because they make do with fewer employees and reduced service levels but may sell more if they offer cheap prices. This “pile it high, sell it cheap” strategy also leads to high asset utilisation as more sales can be generated per pound of asset invested as there is less front office infrastructure and back office equipment needed to support the more basic service offering.

It would appear that lower asset utilisation is therefore the trade-off accepted when choosing a high service excellence strategy, but our data seem to show that the trade-off is worthwhile as it results in sufficiently higher net margins to yield a higher ROTA.

Conclusions
Despite the inherent complexities of this sample of organisations and the many variables that affect financial performance, the preceding analysis is adequately robust to provide some insights into the relationship between SE and financial performance. The analysis highlights interesting issues and supports the logical notion that there are financial benefits to be gained from providing a better service to customers.

This paper focused on three questions:
(1) Does size matter?
(2) Are the better organisations more productive?
(3) Are the better organisations more profitable?

In summary, whether measured in terms of total assets, turnover or number of employees, both large and small organisations are capable of being both excellent and poor. In terms of productivity the findings suggest that provision of better service is staff intensive but yields significantly greater profit per employee. The better service providers have significantly better ROE and ROTA than the poorer ones.

It is important to recognise that for some of the organisations in the sample, SE is clearly not the main selling point and a strategic decision has been made to focus on low prices and reduced service levels. Our analysis indicates that this is a less successful strategy than one focused on delivering SE. Our data analysis supports the conclusion that good service may require more employees and larger asset investment putting downward pressure on measures such as turnover per employee and asset utilisation. However once an organisation gains a reputation for SE it can improve profit per employee and reap the rewards of high net margins, thus driving up its ROTA.
This paper is not without its limitations. It has attempted to compare organisations which are very different in nature, from different countries, with different accounting systems and practices. In part these problems were created by the way the organisations were chosen and as a result several of them, such as public sector organisations, could not be included in the database. Based on the insights from this broad spectrum of organisations the next stage is to test and refine the findings further using more focused data from a set of country and sector specific organisations.

Notes
1. Fame provides summary company reports for c. 440,000 public and private UK and Irish companies including descriptive data for both holding and subsidiary companies. Amadeus provides up to five years of consolidated and unconsolidated annual accounts for the top 20,000 European companies (including Eastern Europe). Datastream was not used in this instance because it deals solely with PLCs.
2. Dividing negative earnings (losses) by negative equity results in a positive percentage for ROE but this is clearly nonsensical.
3. An alternative would be to use return on net assets, these being total assets less current liabilities, thus reducing the denominator to only the net amount that has to be financed after deducting that part that is financed free by credit from suppliers. ROTA was preferred in this case as it gives practically the same information and it proved easier to obtain the relevant data. Note that ROI measured by ROTA is inevitably lower than if measured using return on net assets (RONA).

References
Appendix. Analysis of variance
A one-way analysis of variance (ANOVA) was carried out (using Minitab) between the two groups (those with an SE ranking above zero and those with an SE ranking of zero and below) and earnings, ROTA, ROE, net margin and profit per employee. The results show that there is no statistical evidence of any dependency or relationships between the group and any of the other variables (ROE, ROTA etc):

- The average values and their corresponding dispersions overlap, so one could not conclude that the average values of one group could not correspond to another group.
- The $F$ value ($F = \frac{\text{found variation of the group averages}}{\text{expected variation of the group averages}}$) also corroborates that there is no statistical evidence of any relationship between the groups and any of the other variables. Values for $F$ greater than 14 are normally considered to be acceptable to confirm that there is a relationship between the compared variables, and the values are 1.05 (earnings v. group), 0.49 (ROTA v. group), 0.08 (ROE v. group), 1.35 (net margin v. group) and 0.11 (profit/employee v. group). If the null hypothesis is correct we would expect $F$ to be about one. How big should $F$ be before we reject the null hypothesis? $P$ reports the significance level.

- $P$ should be less than 0.001 in order to accept that there is a relationship between the variables. In the same order as above $P = 0.312, 0.487, 0.774, 0.253$ and $0.744$. There are several factors within these data which prevent them from responding to this sort of test. First, the number of samples is small and within each group the types of company and sector are very different, and the structure of their assets and liabilities can be very different.