BUSINESS EXCELLENCE AND PERCEIVED COMPETITIVENESS: EVIDENCE FROM NORTH EAST BUSINESSES

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ABSTRACT

The extent to which an organisation achieves excellence can be contingent upon the industrial environment in which its operates. For example how competitive is its market place? To what extent is it affected by changes to its external environment and is that likely to continue? How has the company performed in terms of growth in sales turnover, profitability, number of products, customers, employees etc.? Reviewing business excellence achievements in the context of a company's business environment and its organisational attributes would reveal any associations between them and provide some lessons for practitioners and researchers. This paper attempts to assess that linkage by analysing recent benchmarking data from nearly 750 manufacturing and service organisations from North-East England. In particular, it examines the relationship between an organisation's characteristics, such as its world class status, size and sector grouping, and its ability to grow and gain competitive advantage.

RESEARCH BACKGROUND

The data considered in this paper was collected as part of two benchmarking studies, which involved nearly 450 service organisations and 300 manufacturing companies respectively (See Prabhu et al, 2000a&b, Prabhu et al, 2000a&b). Using nearly 50 indicators, best practice and operational performance levels were recorded. Other characteristics on competitiveness, growth and change were also assessed, using another 21 questions within each survey. In terms of growth, a number of characteristics were measured on a scale ranging from 'declining rapidly', through 'little change' to 'growing rapidly'. The questions on business environment covered three issues; the markets in which the organisations operated, the competition – how the organisations compared to them, and impact of change. The issues explored here were measured on a scale from 'strongly disagree' to 'strongly agree'. The paper explores the differences in growth and competitiveness relative to organisational size (in terms of number of employees), sector and World Class Status. The last attribute, which is a measure of business excellence, is defined for participants in terms of their overall practice and performance score. The five categories used are shown in Table 1.

In addition, categorisation by size band and sector, along with proportions of organisations in each, are shown in Table 2. The 'Other' sector has been excluded from the analysis undertaken in both cases.

World Class Category	Label	Practice Mean	Performance Mean	% Service Organisations	% Manufacturing Companies
Could Do Better	CDB	< 50%	< 50%	5%	6%
Room for Improvement	RFI	> 50% - < 60%	> 50% - < 60%	15%	26%
Promising	PROM	> 60%	< 60%	5%	6%
Vulnerable	VULN	< 60%	> 60%	21%	25%
Potential Winner/World Class	PW/WC	> 60%	> 60%	54%	37%

Table 1: World Class Status categories

Service Sample			
Size	**Percentage**	**Sector**	**Percentage**
Micro (< 20 staff)	36%	Consultancy/Professional	27%
Small (21 - 50)	24%	Education/Public Services	27%
Medium (51 - 200)	22%	Industrial Services	14%
Large (201+ staff	18%	Leisure/Retail	11%
		Other	22%
Manufacturing sample			
Size	**Percentage**	**Sector**	**Percentage**
Micro (< 20 staff)	19%	Electrical	12%
Small (21 - 50)	20%	Engineering	37%
Medium (51 - 200)	37%	Household & General Goods	10%
Large (201+ staff	24%	Process Industries	29%
		Other	12%

Table 2: Size and sector characteristics

SURVEY FINDINGS

Are growth rates related to size, sector or world class status of the participants?

Figure 1 shows varying growth patterns between the four size bands of the service sector. Micro organisations are typically displaying higher levels of growth than the sector average. Their higher growth rates of turnover, profitability, product range and customers have been achieved with lower growth rates in number of employees and suppliers, demonstrating some elements of lean thinking. Small organisations are displaying vulnerability since they have relatively low growth in profitability, but have relatively high growth in num-

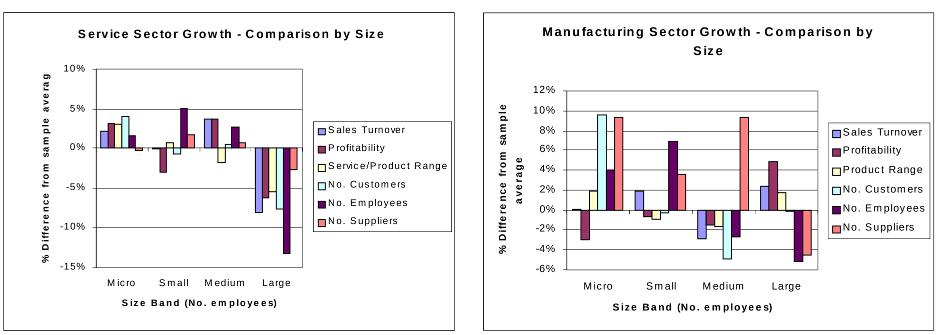

Figure 1 – Growth by Size

bers of employees and suppliers. Large organisations have the slowest growth rates of all. Their growth rates were well below the sector average for all of the factors considered, particularly with respect to numbers of employees and sales turnover. Both measures have actually shown a significant reduction on average for the large service organisations.
Distinct growth patterns can also be seen between the four size bands in the manufacturing sector. Large companies exhibit an almost ideal growth profile with above average growth in turnover, profitability, product range and customers, whilst demonstrating lean manufacturing with below average growth in numbers of employees and suppliers relative to the whole sector. Micros also exhibit above average growth rate on all counts other than profitability indicating an element of vulnerability. The slowest growth rates of all in the manufacturing sector can be found amongst the medium sized companies. Suppliers aside, their average growth rates are well below the sector average for all measures.

Growth rates vary widely by service sector, as indicated by Figure 2. Two sectors, Consultancy/Professional and Industrial Services display above average growth for all measures considered. Whilst the Consultancy and Professional sector demonstrates well above average growth rates for all measures, the Industrial Services sector has seen above average growth rates in sales turnover, profitability and clear growth in numbers of employees and suppliers. In contrast, Education and Public Services, and to a lesser extent, Leisure and Retail have seen well below average growth rates for most of the indicators considered. The former is particularly weak in relation to turnover and profitability, but has lower growth rates in numbers of employees and suppliers. Growth patterns also vary between the four main manufacturing sectors. The Household and General Goods sector demonstrates an above sector average growth rate for each measure. The Process Industries sector has seen above average growth rates in sales turnover, profitability and to a slightly less extent growth in customers and suppliers. This is the only sector out of the four whose growth in number of employees is below average, therefore demonstrating productivity rates or efficiency gains that are superior to those in other sectors. The Electronics and Electrical Engineering and Engineering sectors demonstrate below sector average growth rates on nearly every measure, with the former performing relatively poorly in terms of profitability.

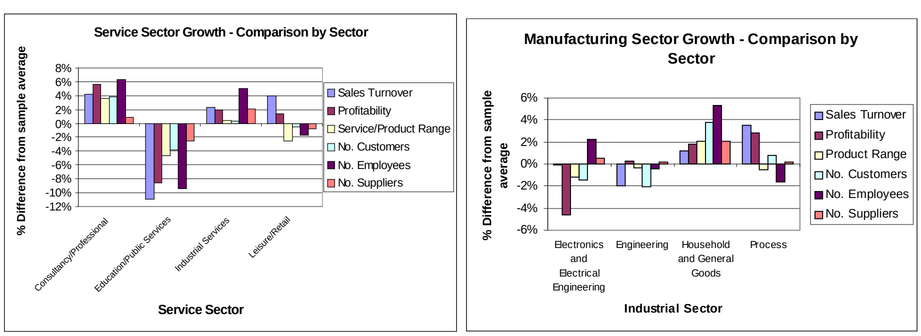

Figure 2 – Growth by Sector

Figure 3 shows the association between World-Class status and growth amongst the service organisations. Those categorised as 'could do better', 'room for improvement' and even 'promising' display below average growth rates on almost all measures. One exception pertains to the 'could do betters' where an above average growth rate in numbers of suppliers can be seen. The RFI, CDB and PROM organisations also show a decrease in profitability, with the latter two also decreasing their number of employees. Vulnerable organisations perform much better than promising ones and their growth rates mirror the sector average. PW/WC organisations clearly lead all other categories in terms of growth. However, their relative growth in terms of numbers of suppliers is only average relative to the sector, indicating their commitment to leaner servicing. The manufacturing sector also shows a clear association between World-Class status and growth. The CDB, RFI and PROM companies exhibit below average growth rates on all measures, the exception being an above average growth rate in product range amongst 'promising' organisations. Vulnerable companies appear to perform much better than promising companies with much higher growth rates on nearly every measure. However, the 'promising' organisations are outperforming them in terms of growth in product range. PW/WC companies are clearly leading all other categories in terms of growth. Even more encouragingly, their growth in numbers of suppliers is very small indicating a move towards leaner manufacturing.

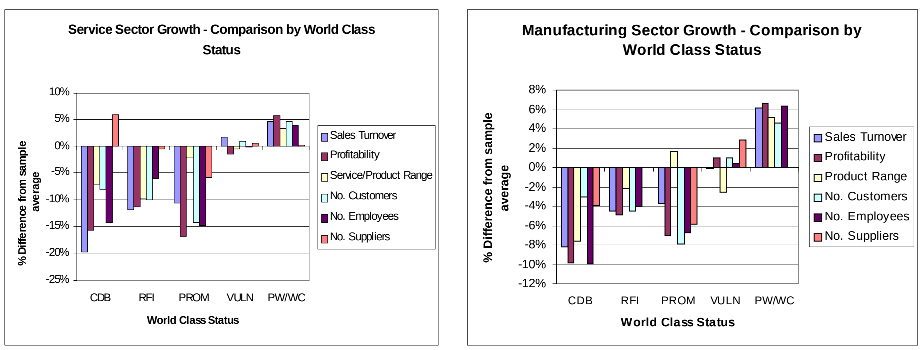

Figure 3 – Growth by World Class Status

Is competitive advantage related to size, sector or world class status?

Figure 4 shows that competitive advantage amongst both manufacturers and services is clearly polarised across the size bands. Micro and small organisations have recorded above

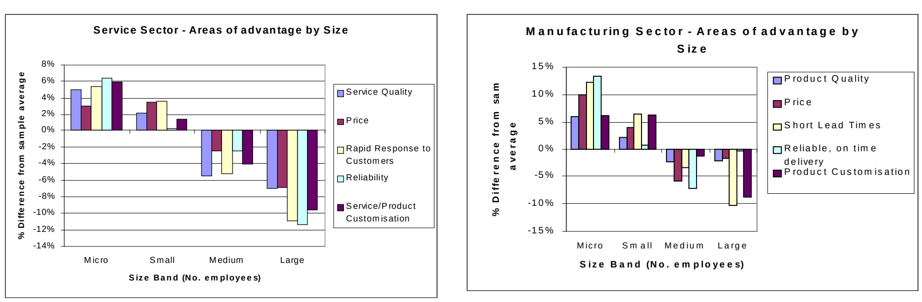

Figure 4 – Competitive advantage by Size

average levels of perceived competitive advantage on all six measures. The opposite results have been recorded in the medium and large groups. Both of the latter groups are on average surprisingly uncompetitive on price and quality.

The Consultancy/Professionals and Industrial Services sector are more competitive on all measures than the other two service sectors, as shown by Figure 5. The former have an advantage on service quality and customisation. The Industrial Services lead the rest of the services in terms of their competitive advantage on rapid response to customers and reliability. In contrast, the Education and Public Services are at a relative disadvantage on all measures apart from price. The Leisure and Retail organisations are typically average for all measures of competitive advantage.

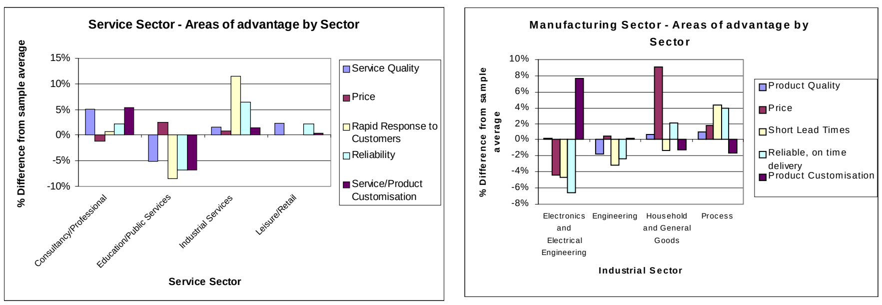

Figure 5 – Competitive advantage by Sector

The Household and General Goods sector along with the Process industries are more competitive on all measures than the other two manufacturing sectors. The Electronics industry has an advantage over other sectors with respect to customised products. However, this sector is well below the overall average on measures such as reliable on-time delivery, lead times, price and product quality. The Engineering sector has more or less average levels of perceived competitive advantage as far as price and product customisation are concerned, but are marginally below average on service quality, lead times and reliable on-time delivery. Apart from the Household Goods sector, all other industrial sectors are either average or below in terms of their competitive advantage with respect to price.

The association between world-class status and perceived competitive advantage for the service sector is shown in Figure 6. PW/WC organisations lead on all measures of competitiveness, whilst CDB then RFI have recorded the worst relative levels of advantage across the range of measures. CDB, RFI and PROM organisations are actually uncompetitive on average with respect to price. The promising organisations have below sector-average levels of competitiveness despite their relatively high level of best practice adoption. The association between world-class status and perceived competitive advantage is equally clear for the manufacturing sector. PW/WC companies are in the lead, with every measure at an above average level of competitiveness compared to the whole of the sector. In contrast, CDB have the poorest levels of relative competitive advantage on every measure. All groups apart from PW/WC are on average at a disadvantage with respect to price. The 'promising' companies have again recorded below industry-average levels of competitiveness despite their relatively high level of best practice adoption.

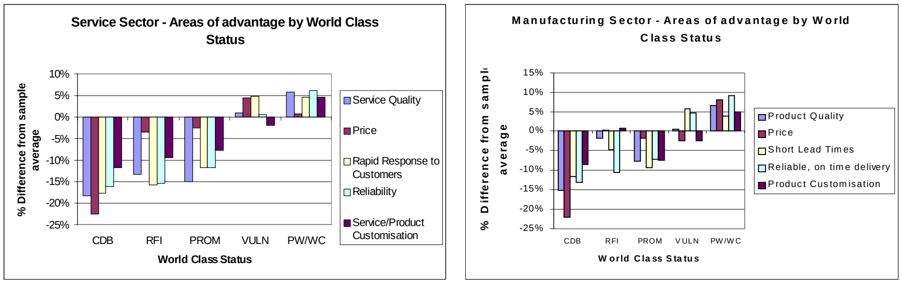

Figure 6 – Competitive advantage by World Class Status

Competitiveness and change perceptions

The respondents in both service and manufacturing sectors also considered the extent to which they could compete successfully with the best of their competitors. An analysis of responses by size, sector and world class status provides a number of interesting results regarding the perceptions of their managers. No statistical association exists between service sector and their perception of being able to compete successfully now. In contrast, size proves to have a significant association (5% level) with perception. A greater than expected number of medium sized organisations don't know if they are in a position to compete now whilst a greater than expected number of micros feel that they can compete successfully now. In addition, a greater than expected number of large and micros feel that they can currently compete partially at best. The most interesting result is the polarisation of perception amongst the micros. Unsurprisingly (given the results discussed above), the greatest association with perception is that involving World Class Status (0.1% level). A greater than expected number of RFIs don't know when they can compete or believe they can only partially compete at best. A greater than expected number of 'promising' organisations feel they can only partially compete at best, whilst a greater than expected number of PW/WC service organisations feel they can compete successfully now. The last result is consistent with the profile of growth and perception of competitiveness.

For the manufacturing sector, there is no statistical association between size and sector with their perception of being able to compete successfully now. However, a significant association exists between perception and world-class status (0.1% level). A greater than expected number of vulnerable companies don't know whether they can compete at the present time. In contrast, a greater than expected number of PROM and PW/WC companies feel that they can compete successfully now, whilst greater than expected numbers of CDB and RFI manufacturers feel that they can compete only partially at best.

Amongst the services, World Class status was significantly related to 'learning' capability (significant at 0.1% level). A greater than expected number of RFI and CDB disagreed that they were good at change, a greater than expected number of 'promising' and 'vulnerable' organisations were neutral, whilst a greater than expected number of PW/WC considered themselves good at change. Size is also a significant factor at the 0.1% level with large service organisations tending to be neutral, whilst a greater than expected number of micro organisations were agreed that they were good at change. Association also exists between status and the organisations that believe they are good at implementing change (0.1% level). A greater than expected number of RFI and CDB disagree, whilst a greater than expected number of PW/WC agree, with the other organisations tending more towards being neutral. There are also sectoral differences at the 5% level. A greater than expected number of organisations in the Leisure and Retail and the Education and Public Services sectors are in disagreement, whilst a greater proportion of Consultancy and Professional organisations consider themselves to be good at change.

For the manufacturers, size and sector showed no statistical association with 'learning' capability. However, world-class status was significantly related to this capability (significant at 0.1% level). CDB and RFI manufacturers tended to disagree that they saw change as an opportunity, whilst a greater than expected number of PW/WC agree. Statistical association, again at the 0.1% level, was also noted with respect to World Class Status when the companies were asked if they were actually good at implementing change. The explanation of this association is exactly the same.

In terms of future changes, a significant association exists at the 5% level between perception of their business environment changing continually and services sector. A greater than expected number Industrial Services organisations disagree that they are continually changing, whilst a greater than expected number of Education and Public Services organisations agreed. With regard to the time scale for competitiveness, statistical association exists between perception and World Class status (at the 5% level) for the service sector. A greater than expected number of PW/WC feel that they can compete with the best either now or in the next three years and a greater than expected number of RFI believe it will take them five to ten years.

With regard to the manufacturing sector, there was surprisingly no statistical association between the likely changes to their business environment and World-Class status, size or sector. In terms of association between size and sector with time scale for competitiveness, again no significant association was detected. A significant association was found with World Class status (at the 1% level) amongst the manufacturers. A greater than expected number of 'vulnerables' don't know when they will be able to compete. In contrast, a greater than expected number of RFI think they will need 5-10 years, whilst a greater than expected number of 'promising' manufacturers say only 1-3 years. In contrast, a greater than expected number of PW/C believe they can compete now, a profile that is very similar to that of the services.

CONCLUSIONS

There are a number of sectoral differences in terms of growth and competitiveness within the North East of England. Within the service sector, Consultancy and Professional and Industrial Services are growing faster and have a higher perception of competitive advantage relative to other services. In contrast, the relative growth and level of relative competitive advantage is the opposite for the Education and Public Sector. With regard to the manufacturing sector, the same positive results can be seen for Household and General

Goods and the Process Industries.

In terms of size band, a clear pattern emerges for the service sector, where the smaller the organisation, the greater the relative growth across a series of measures. Perhaps this is because the smaller organisations have greater capacity for growth. The results by size band in the manufacturing sector are less clear cut. With respect to competitive advantage both sectors display the same clear pattern with respect to size, namely the smaller the organisation, the greater the levels of perceived advantage relative to the whole sector.

In terms of relative growth and relative advantage within both the services and manufacturing, there is clear association with World Class Status. Those organisations labelled as 'potential winner/world class' have the greatest levels of relative growth and advantage, whilst the opposite is true for those labelled as 'could do better' and 'room for improvement'. This suggests organisations that have high levels of practice adoption and correspondingly high levels of operational performance are experiencing similarly high levels of external performance. Even more interesting perhaps is the relative behaviour of the promising and vulnerable organisations. The former have high levels of practice, but are yet to achieve similarly high levels of operational performance, whilst the opposite is true for the latter. In terms of external performance, the vulnerable organisations have above average levels of growth and perception of competitive advantage which is consistent with their operational performance, whilst the opposite is true for the promising organisations. This is the case for service and manufacturing.

In terms of change and ability to compete, firms in both sectors display realism. The weaker cohorts in both sectors have admitted that they are not good at change and are poor at responding to it. These organisations tend to believe they can only partially compete at best and their ability to compete with the best is a long way off. In contrast, the potential winners/world class organisations in both groups view change positively, are good at implementing it and are currently in a position to compete with best. Perhaps a worrying issue here is the number organisations who don't know.

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