



The Impact of Business Excellence on Financial Performance

A BRITISH QUALITY FOUNDATION WHITE PAPER

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1. Introduction

Throughout this White Paper, the term Business Excellence is used to describe the EFQM Excellence Model and other approaches, such as 'TQM', that aim to improve an organisation's performance. All such approaches are based on the Excellence Model premise that *excellent results with respect to Performance, Customers, People and Society are achieved through Leadership driving Policy and Strategy that is delivered through People, Partnerships and Resources, and Processes.*

2. Why is there controversy about whether Business Excellence works?

There are a number of reasons why people, particularly senior executives, question whether the Excellence Model works, but the main one is lack of evidence, and the controversy has undoubtedly been fuelled by the fairly inept case offered by the proponents of Business Excellence, particularly their inability to provide hard facts to show that it works.

Furthermore, while there is no question that there are organisations that have benefited immensely from successful implementations of Business Excellence - examples in the UK include UK Business Excellence Award winners such as Rolls-Royce, Siemens and TNT or Baldrige winners such as Motorola, Federal Express and Solectron in the USA - even here much of the evidence presented is anecdotal and rarely accounts for the fact that performance improvements could also be influenced by other factors such as industry and the economy.

3. Resolving the Controversy

There are two basic issues:

- The controversy is based more on anecdotes, impressions, and opinions, and less on what one would consider to be scientific and objective evidence. The arguments advanced by both the detractors and proponents of Business Excellence do not stand up to the standards of scientific evidence.
- Organisations that have already invested in Business Excellence would like to know whether they have made the right decisions and whether they should continue investing, while others are not investing because of the controversy about its value.

The only way to resolve the controversy is to use objective and verifiable data to examine the strength of the relationship between Business Excellence and financial performance, and this was done in a research project in 1999/2000 by Kevin B Hendricks of the Richard Ivey School of Business at the University of Western Ontario and Vinod R Singhal of the DuPree College of Management at the Georgia Institute of Technology.

Any attempt to establish the link between Business Excellence and financial performance had to focus on firms that had implemented Business Excellence effectively and Hendricks and Singhal decided to use the winning of quality awards as a proxy for effective implementation.

4. Technical points about the research

Choosing when to begin measuring the performance and over what time period the performance should be measured are critical issues when linking improvement initiatives and approaches to financial performance. Hendricks and Singhal examined performance over two five-year periods. The first period - the post-implementation period - started one year before and ended four years after the date a winner won their first quality award, on the basis that winners have a reasonably effective Business Excellence implementation by that time. They assumed that a winner's Business Excellence implementation was effective about a year before the date of winning the first award and that examining performance from this point provided an estimate of the financial impact of Business Excellence implementations once they are effective.

The second period - the implementation period - started six years before and ended one year before the date the winners won their first quality award on the basis that it is during this time period that winners are implementing their improvement programmes.

To avoid biases associated with asking winners to self-judge the impact of Business Excellence, the sample of winners was restricted to include only publicly traded firms. This allowed the use of objective and historic financial data as far back as necessary. The final sample consisted of 600 winners of independent or customer awards. (The Baldrige award in the USA and the BQF's UK Business Excellence Awards are examples of independent awards, while the XYZ company best supplier award is an example of a customer award.)

Benchmarks were required to adjust the performance of companies for the relevant industry and economic influences. Stock market portfolios such as the S&P 500 were used to benchmark the share price performance of award winners. For the other performance variables, a sample of 10 benchmark firms was generated by matching each award winner to a benchmark firm of similar size from the same industry.

The remainder of the White Paper summarises what Hendricks and Singhal found.

5. Results for the implementation period

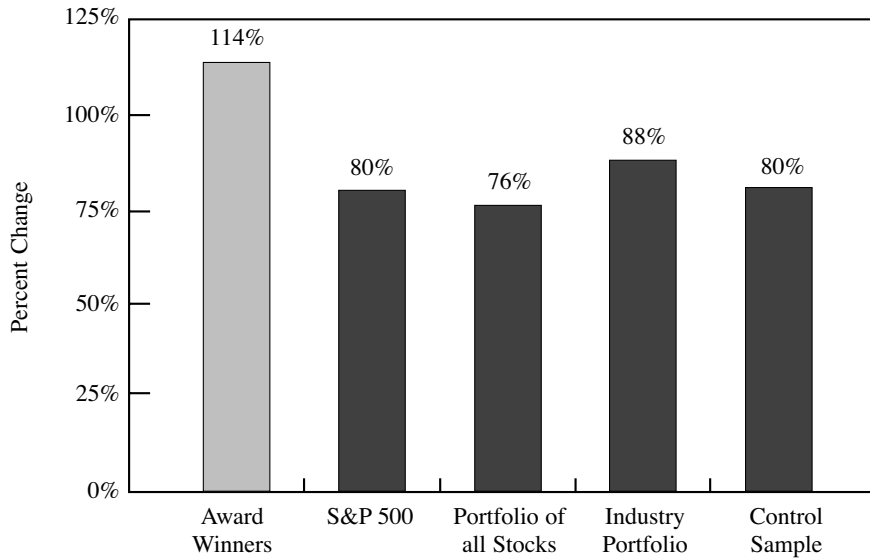
No significant differences between the performance of winners and benchmarks were observed during the implementation period. This is of the utmost importance. We are not talking about firms that were already ahead of the pack. On the contrary, while they were implementing Business Excellence, they were performing no better than their peers.

6. Share price performance of award winners during the post-implementation period

Results for the post-implementation period indicate that quality award winners outperformed the benchmarks on almost every performance measure. Figure 1 compares the share price performance of award winners against the various benchmark portfolios using the following process.

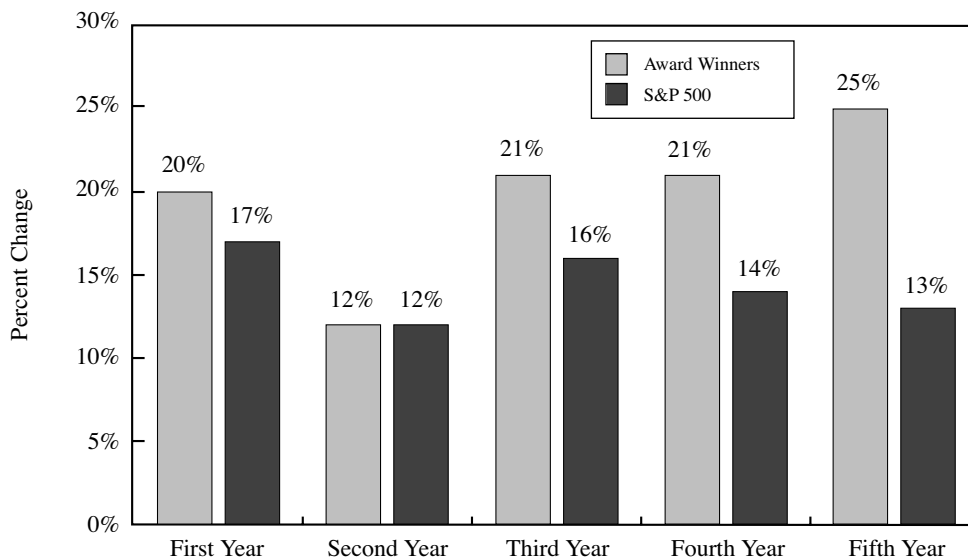
For each award winner, a hypothetical \$100 is invested in the winner's shares one year prior to the date of winning their first quality award. At the same time, an equal amount is also invested in a benchmark portfolio. Both investment strategies are tracked for the next five years. At the end of five years the average share price return from holding the shares of the award winners is compared with the average returns from investing in the benchmark portfolio.

Figure 1
Comparison of the post-implementation period share price performance of award winners and various benchmarks



The share prices of award winners increased by an average of 114% over the five-year period. Over this same time period an alternative strategy of investing a similar amount in the S&P 500 Index and holding it over the same time period would have resulted in an 80% return. The difference of 34% is a statistically and economically significant level of outperformance that translates to an average market value creation of an extra \$669 million. The chance of observing the difference of 34% purely by luck is about 1 in 150. In summary, the overall evidence indicates that firms that have an effective improvement programme do better in terms of share price performance when compared to appropriate benchmarks. Furthermore, as is shown in Figure 2, performance improves over time, confirming that Business Excellence is not a quick fix but a long term investment.

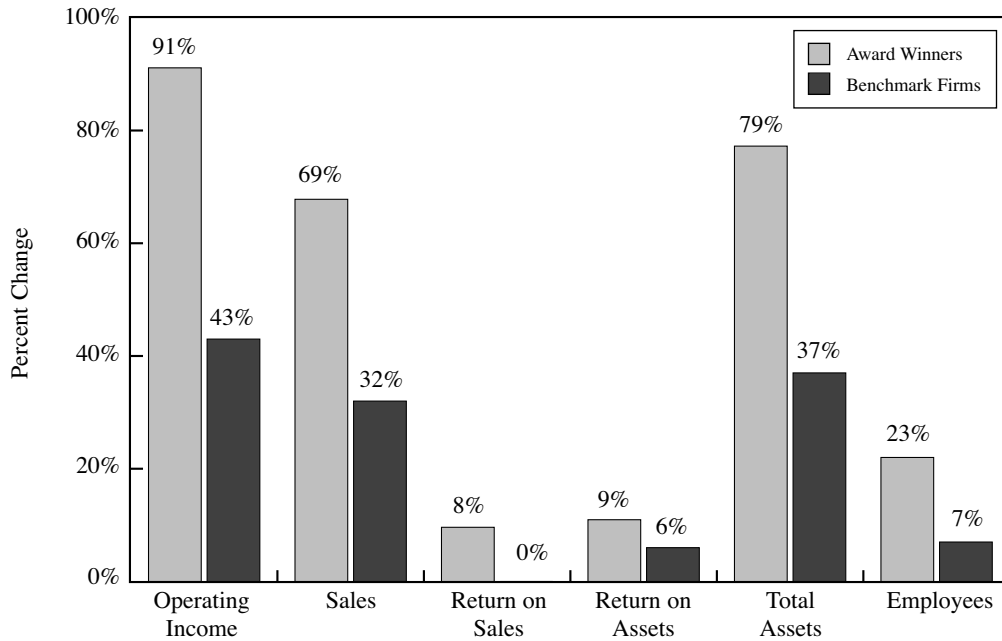
Figure 2
Annual comparison of the post-implementation period's share price performance of award winners against the S&P 500



7. Performance and Productivity

When we look at a range of measures that are typically used to assess the performance and productivity of companies, we find that award winners outperform the average firms by impressive margins.

Figure 3
Performance and productivity of award winning firms in the post-implementation period



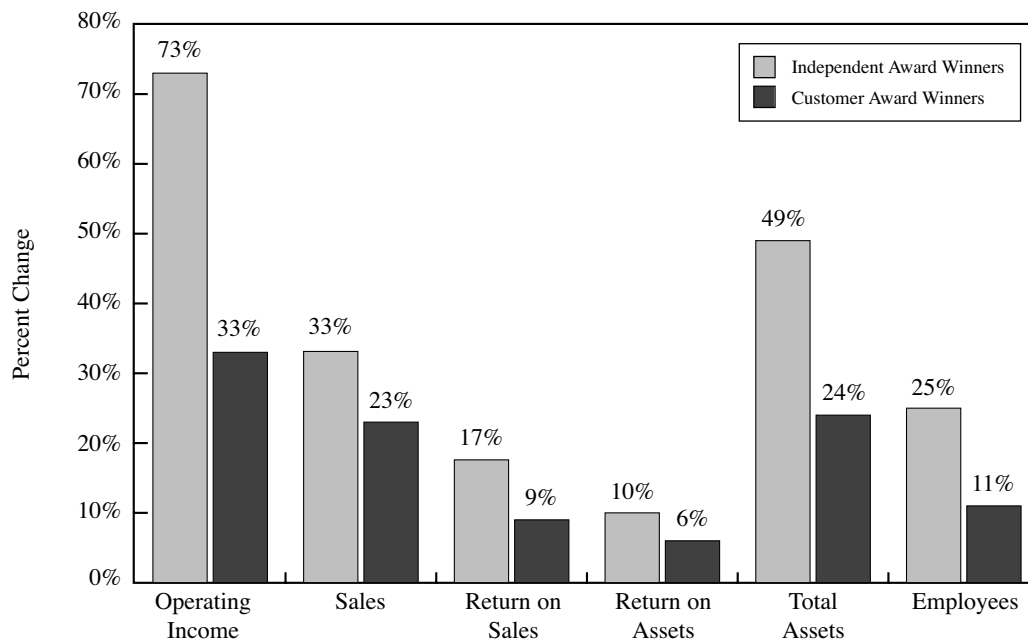
The differences are striking. Operating income for award winners increased by an average of 91% over the post-implementation period. This is in contrast to an average 43% increase over the same time period for the benchmark firms. The difference of 48% is a statistically and economically significant level of outperformance. The chance of observing this difference in operating profit purely by luck is about 1 out of 200.

Award winners also experienced higher growth as compared to the benchmark firms. Winners increased sales by 69% (compared to 32% for the benchmarks), increased total assets by 79% (compared to 37% for the benchmarks), and increased the number of employees by 23% (compared to 7% for the benchmarks). Winners also showed higher improvement in productivity and efficiency measures. The return on sales improved by 8% compared to no improvement for the benchmarks, and the return on assets improved by 9% compared to 6% for the benchmarks.

These results clearly indicate that Business Excellence improves profitability, leads to higher growth, and improves efficiency. Furthermore, they provide additional validity to the winners' share price performance shown in Figures 1 and 2. The improvement in profitability is the reason for the rise in the share prices of award winners.

It is also important to note that the above information is based on a combination of independent and customer awards. The research found that the performance of independent award winners was vastly superior to that of customer award winners, something starkly depicted in Figure 4.

Figure 4
Performance and productivity of independent and customer award winning firms
in the post-implementation period.



The cynic will argue that this is bound to be the case, but is that not the point? The organisations that win the Baldrige Award and the UK Business Excellence Award are excellent companies and one of the primary reasons for that is that they apply Business Excellence to an excellent standard.

8. Conclusion

In contrast to the anecdotal and perceptual evidence that has been used by many experts to pass judgement on whether Business Excellence is valuable or not, the evidence provided by Hendricks and Singhal provides a factual, objective, and statistically valid assessment of its impact on financial performance.

However, as the BQF and many others have said repeatedly, firms that want to implement Business Excellence effectively must have patience. It is widely accepted that Business Excellence takes a long time to implement as it requires major changes in culture and employee mindset. This means that the benefits will only be realised in the long run.

Firms should also be realistic about what to expect from Business Excellence and should not be carried away by the hype. A management system based on Business Excellence can only improve the probability of making the right decisions. It cannot guarantee that all decisions will be right.

Furthermore, organisational characteristics such as size, capital intensity, extent of diversification, and the maturity of implementation, all influence the gains. These and other factors should be considered in setting expectations.

Finally, the gains are likely to be tempered by the behaviour of competitors. As more and more firms in a particular market segment adopt Business Excellence, the extent of the gains is likely to diminish.

Nevertheless, the overall message is clear. When Business Excellence is implemented effectively, financial performance improves dramatically.

The British Quality Foundation wishes to thank Kevin B Hendricks and Vinod R Singhal for their valuable research report.

The British Quality Foundation

The British Quality Foundation (BQF) is Europe's largest corporate membership organisation promoting performance improvement and excellence. Its members range from FTSE 100 companies through to small firms and public sector bodies. The mission of the BQF, an independent, not for profit organisation, is to be a leader in helping organisations to improve their performance and achieve sustainable excellence. This is done by promoting and advising on the Excellence Model, Europe's leading performance improvement methodology, running the annual UK Business Excellence Awards, the most rigorously assessed and judged award programme in the country, and providing a range of best practice and performance improvement services.

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