

Client: Bourton Group Code: BG244d
Title: Manufacturing Engineer – '99 Survey Draft: One
Date: 21 December 1999 Author: GN
Wordage: 1,108

INNOVATION

Start as you mean to go on

As UK industry feels the growing pressure to reduce product costs, Allan Parker looks at the importance of innovation in enhancing competitive performance – and asks whether manufacturers are fully responding to the challenge.

Today, senior industry executives believe that reducing the time to design and market new products is one of the top challenges they face, exceeded only by the twin financial pressures to cut product costs and improve shareholder returns (Fig.1). This was one of the key findings of the 11th and latest annual Bourton survey of industrial trends – “Still in Development” – which looked at the management of innovation across UK manufacturing business.

Yet this has not always been the case. Our parallel tracking study, the Bourton Index, reports for example that as recently as 1992 getting new products designed and into the market came only ninth in a list of priorities for developing major change strategies.

So why is innovation now seen as so important in manufacturing's competitive armoury and how are companies responding? In the face of unparalleled cost pressures, the logic is straightforward and compelling:

- virtually all of product **cost** is determined at the innovation stage,
- excellence in product design is crucial to sales volume and profit and thus **shareholder value**,
and
- speed to market impacts strongly on **product profitability**.

Or, put simply, time *is* money.

Having said this, the Bourton survey found that most companies were either disappointed or unsuccessful in key aspects of their innovation projects, with only 10% achieving 'great success' in meeting such profit-critical criteria as achieving target margin, planned volumes and market plan.

The reasons are not hard to find. There is something very strange when the paramount importance of responding to cost, profit and time pressures is recognised, yet only 12% of the companies surveyed measure the four key deliverables of customer satisfaction, product performance, cost and time in relation to innovation projects. What is even more surprising perhaps is that this seems to apply to the great majority of businesses, irrespective of industry sector, innovation strategy or level of competitive performance overall.

Where's the driver?

One of the principal causes of this would appear to be a lack of real leadership, with a decidedly cautious and narrow approach to decision-making throughout the innovation process.

Initially, most new product ideas are generated by customers and competitive monitoring, with little use made of other external resources - despite for example many programmes to encourage links between industry and academia. Sales and marketing tend to champion innovation and when the Board finally asserts its authority - typically at the 'go or no go' filtering stage - criteria tend to focus on the "reassurance check" of such basic qualifiers as fit within broader business and product strategies rather than product-specific conformance criteria relating to cost, timescales and risk assessment.

Once projects are underway a similar lack of ambition predominates, over 90% of companies utilising some form of internal R&D resource, with little use made of suppliers and outside institutions.

More positively, looking ahead the unanimous intention to include suppliers much more throughout the process (anticipated to treble overall from its currently low level of 14%) would undoubtedly demonstrate a more open approach to external ideas. Yet earlier Bourton surveys and our own experience shows the reality to be that significant progress is proving especially elusive here.

At the heart of why many companies fall short of their innovation goals however would appear to be the generally low usage of what is regarded to be best practice in project management (see Fig.2). Few projects for example are deemed a great success, yet only 40% of respondents always have clear accountability for project deliverables. Similarly, reduced time to develop and market new products is by common consent a major business pressure, yet only 20% always uses milestone control and only 20% timing and resource planning to ensure on-time delivery.

In short, 'lack of vision, orientation in the past' is perceived to be the main barrier to progress, pointing to a strategic lack of drive from top management. At an operational level, there is a high degree of satisfaction with most aspects of the innovation process (a confidence which, our report

found, was often unfounded), with traditional costing systems seen as the only major inhibitor to improved company performance. Such systems, using historic costs and functional overhead allocations, fail to reflect NPI's unique demands and respondents commonly expressed frustration at their inability to identify clearly those costs which they were seeking to control (see Fig.3).

Cost, cost, cost

So why is there this apparent and disturbing complacency, this acceptance of mediocrity, that failure is acceptable? The answer may perhaps lie, at least in part, with one of the key findings of the Bourton Index. The top pressure in UK industry, that of reducing product costs, is so overwhelming - now perceived to be twice as strong as the next greatest - that managing any other issue seems insignificant by comparison. . This extreme pressure is on short term gains so whilst better design clearly has a much larger impact on product cost managers always turn to taking cost out of manufacturing because it has short term payback. Increased globalisation and international competition across all sectors undoubtedly lies behind much of this growing need to cut costs, currently exacerbated for many companies by the strength of sterling leading to a significant fall in order intake

Yet throughout the 1990s there has been a keen appreciation of the need to manage costs and most businesses now have their manufacturing processes fairly well sorted. Many however remain stuck in the "cost-down rut" - the knee jerk reaction to 'beat up manufacturing' whenever cost pressures are on - even though the big cost savings are no longer there to be had. At the same time, shareholders are looking for investment proposals to deliver quick, predictable and provable returns and such a culture makes it hard to justify investment in less quantifiable areas such as innovation and people.

The only way out of this in a high wage economy, as UK businesses are increasingly beginning to recognise, is to use superior engineering and design skills and processes to improve both products and related manufacturing processes. What is also encouragingly clear is that there is a large and growing international market which will pay the necessary premium for such value-added products.

In taking a whole-business and longer term approach to product innovation and development therefore, successful companies are now looking to add value as well as cut product costs in meeting identified market needs. In achieving this, senior management must at the same time recognise that there is a cost attached – though initially much of this lies, not in the area of capital expenditure, but in committing the necessary time and resource to drive organisational change.

Where next?

Unsurprisingly, there is no magic formula for successful product innovation and development. Yet, against a background where senior managers are at least 'talking the talk' - if not yet 'walking the talk' - the Bourton survey found that many of the shortcomings identified are straightforward and can be addressed both quickly and effectively.

As a result, we have derived a practical, six-part action checklist to tackle this "treacle in the works", designed to improve the innovation process, help meet the most pressing business pressures and enhance competitive performance:

- Put NPI processes centre-stage and raise the profile of innovation throughout your business;
- Create the appropriate management structure to deliver these benefits, by recognising that innovation is a business-wide rather than solely an engineering issue;
- Proactively manage cost to deliver sustainable gains;
- Make the most of well-proven tools and techniques;
- Establish the right performance parameters and key project measures;
- For truly ground-breaking innovation, involve more people.

In summary, in an environment so strongly dominated by financial considerations the good news is that improving innovation is moving up the UK industry agenda. Sadly however, any move away from cost and into an innovation culture, to which we all aspire, is still some way off.

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