The National Business Awards for Scotland

White Paper

INNOVATION –

EVOLUTION OR REVOLUTION?

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The aim of this paper

The three underlying tenets of all categories featured in The National Business Awards are: Business Success; Innovation; and, Business Ethics. One of the characteristics of The National Business Awards is its commitment to good practice being widely disseminated to bring as much benefit as possible to the UK business community. The sharing of the intelligence gathered is therefore the primary purpose of this paper.

The secondary purpose is to explore the role, current effect and future outlook of Innovation in business. It is a widely used term, freely employed in terms of necessity and encouragement, by all those who observe and comment upon the businesses in UK plc whether they are academics, politicians, journalists, industry bodies or those that themselves lead the UK’s successful organisations.

“So economies like ours have no choice but to out-innovate and out-perform competitors by the excellence of our science and education, the quality of infrastructure and environment, and by our flexibility and our levels of creativity and entrepreneurship.”

The Rt. Hon Gordon Brown MP, Prime Minister
Foreword

The National Business Awards bring together a diverse range of companies of all shapes and sizes, from across all sectors. One thing that all these organisations have in common is that they have transformed their business practices through innovation and creativity. In the current economic climate, creativity and innovation are fast becoming the most important ingredients for successful business. I believe it is those organisations that demonstrate these characteristics that set themselves apart from the rest. This paper explores the value of innovation in UK business and whether it is an evolutionary or revolutionary process.

We all know the reality of running a business means that a balance needs to be struck between operational excellence and creativity & innovation. The truth is that in the management of creativity and innovation, your size is often your enemy. Organisations believe, not without reason, that they require well-oiled cogs to run smoothly and efficiently. It is process that reigns supreme. However these processes, developed on the path to operational excellence, are often diametrically opposed to creativity itself. Creativity can be disruptive and is not always compatible with the smooth running of an efficient commercial machine.

Without creativity, companies will find it difficult to innovate.
Without innovation, organisations will find it hard to get ahead, and stay ahead.

A process-driven and bean-counting attitude to business will quickly wreck even the most vibrant breakthrough culture. So perhaps the best way to foster and nurture innovation is to set it apart – culturally, if not physically – from Corporate HQ.

A prime example of this way of working is the “skunk works” idea pioneered by the Lockheed aircraft company in the US in the late 1940s. Engineers working inside this secret laboratory, out-of-bounds to all but the most senior Lockheed managers, were encouraged to break company rules wherever necessary. Above all, they were expected to ignore the official procedures demanded by the Pentagon. The result was a squadron of secret spy-planes and supersonic bombers that set new standards for performance, ahead of schedule and below budget.

At Orange, we believe strongly in innovation and Orange Labs are rated in the world’s top 5 R&D labs, with 8,500 patents filed last year.

Whether evolutionary or revolutionary, it is important that UK businesses nurture innovation within their organisations. I hope this paper will provide insight that could encourage you to look at ways in which you can increase innovation, and set your organisation apart.

Graeme Good
Head of Business Direct Channels
Orange Business Services
Executive Summary

The definition of ‘Innovation’ has two extremes. On one end of the scale it appears to be concerned with an evolutionary process that gradually progresses things from one stage to another:

‘The introduction of changes to things established’

This can be likened to the quill pen > to fountain pen > to ball point > to fibre point – a process that incrementally changes methods or improves effectiveness.

The other end of the scale appears to be concerned with a process that could better be described as invention:

‘The introduction of something not established’

which better describes the development of such innovations as the internet and the web which have had a more revolutionary effect.

In the sample reviewed almost all the cases were at the former, more evolutionary end of the scale. This form of ‘Innovation’ is still effective, difficult in some cases to implement, but relatively easily replicated and unable to be protected from competitors. The National Business Awards regularly receives entries from companies representing over one third of the UK GDP, therefore the trends uncovered in this sample could be inferred as a commentary on the state of the commercial creativity of UK plc. It indicates that the UK’s innovative activity is more to do with following others rather than leading the way. It raises the question about whether the decline of the UK’s traditional value-added industries was really inevitable or could have been avoided.

As stated, the study identified two extremes of innovation: Evolution versus Revolution. The former is a more passive form of innovation that could actually be damaging UK plc’s competitiveness on a wider scale, the latter, an active form, largely missing from the UK business community. Whilst it is always possible to cite individual cases of revolutionary innovation, the paper uncovered a higher preference for low risk evolutionary actions.

Innovations with easily identifiable, and to some extent measurable, outcomes against which financial offsetting is possible, were generally preferred to meet the need for immediate ROI over more inventive solutions which could have carried greater long term benefit.

This raises the question of whether this trend in passive innovation is in fact damaging the competitiveness of UK plc in the longer term. Most innovations discovered by the study either involve process changes or behavioural changes, neither of which can be patented or trade marked. So when overseas companies invest in UK businesses all these innovations are being absorbed and perhaps used against other UK competitors. Alternatively, if the first mover advantage created by the innovation has not been fully exploited could this amount to, in effect, a blunting of UK plc’s own long-term competitive edge?

It is true to say that Innovation is largely an iterative process where the steps may be larger or smaller or more or less numerous in any given innovation and its impact either evolutionary, revolutionary or somewhere in between ultimately depends upon the size and frequency of the steps.
Overall UK plc is more of a following nation than a leading one in the field of innovation.

In general terms:

1. The key insight is that innovation has come to mean the adoption and adaption of information technology solutions to improve organisational effectiveness on an evolutionary basis.

   In this, innovation is being most widely applied at the end of the spectrum away from invention. There are some breakthrough initiatives as the case histories illustrate but it appears generally true to say that information is both the driver and the solution to the majority of what is referred to as organisational innovation. The motivation from within organisations comes from the need for greater operational effectiveness and process improvement and the stimulation from either a desire to gain competitive advantage (to lead) or respond to competitive pressure (to follow).

   There is a view that it is harder to innovate in the service sector and as the UK becomes more and more a service led economy it is natural that innovation will slow. The impact of the internet on many service industries would not support that hypothesis, and the continuing convergence of technologies suggests that those that do not embrace the opportunities these changes bring will not prosper well in tomorrow's world.

2. The government is broadly supportive of innovation, has a number of initiatives and policies at work and has reorganised some of its departments to attempt to deliver a range of supporting services. There is however some evidence that the traditional difficulties of the complexity of accessing support services from government have still to be resolved.

3. Foreign-owned companies are leading the field in terms of R&D spend and this may be as much to do with ownership culture and its views on longer term growth and the ease with which tax breaks are accessible from their governments, as it is to do with the competitive demands of the sectors in which they operate.

4. The R&D investment situation is patchy and is not yet part of the DNA of UK plc. The evidence shows that big companies get the picture but that many smaller companies place less emphasis on R&D.

5. Cooperation is more widespread among companies, their customers and suppliers than it is between Government and Academia. The links between Industry and Academia are improving and while they may share a common goal (the acquisition of revenue) the processes and timescales are still not as compatible as they could be.

6. In what is becoming a largely technology driven world it is as important to keep up as it is to lead. Against this background it appears that there is less published work on Innovation now than there was four or five years ago, so is it losing focus at a time when its vision should be ever sharper?

7. Most innovations discovered by the study either involve process changes or behavioural changes, neither of which can be patented or trade marked. So when overseas companies invest in UK businesses all these innovations are being absorbed and perhaps used against other UK competitors. If the first mover advantage created by the innovation has not been fully exploited and realised in the sale value, could this amount to, in effect a blunting of UK plc’s own long-term competitive edge?

8. The evidence from The National Business Awards sample shows that innovations are:
   a. Focused around Services and Systems
   b. Largely to do with the adoption of IT
   c. Dealing with small incremental progression

Overall UK plc is more of a following nation than a leading one in the field of innovation. There are shining examples of organisations that are leaders but across the study, the evidence seems to paint a picture wherein UK plc is the adopter of the ideas of others rather than being the provider of innovative ideas to others.

UK plc needs to review its approach to R&D to ensure it retains its competitive advantage. There is no doubt there is currently pressure on cost management as the burgeoning economies of the East gain a stronger foothold in Western economies and that
evolutionary innovation may be a short term solution to relieve this pressure. In the longer term the danger is that unless new, more revolutionary ways with dealing with the competition are found history may judge this period of innovation as merely tinkering at the edges.

“So economies like ours have no choice but to out-innovate and out-perform competitors by the excellence of our science and education, the quality of infrastructure and environment, and by our flexibility and our levels of creativity and entrepreneurship.”

THE RT. HON GORDON BROWN MP, PRIME MINISTER

Given the above entreaty of Gordon Brown and the aims of the Government for the performance of the economy, it appears that if innovation is seen as a key driver of future success, then the current situation – in which innovation is mainly about small step incremental progression, R&D investment dominated by foreign owned companies and where innovative thinking and R&D are not truly widespread business activities – is unlikely to deliver the anticipated benefits.

**INNOVATION IN UK PLC**

This document has been prepared from a review of the applications of a wide sample of the finalists across a range of categories in

- The National Business Awards,
- The National Business Awards – Regional Programmes and
- The National Business Awards for Scotland.

The make up of the sample consisted of over 200 organisations the regional profile of which is shown in Fig 1 below

![Sample by Source](image)

This paper is set within the context of the current UK economic climate (2007/08) and focuses on businesses set up to provide goods and/or services in order to create wealth for their stakeholders or in the case of public sector organisations to provide services to the general population.

Innovation is stated as a key Government priority. The new Department of Innovation Universities and Skills (DIUS http://www.dius.gov.uk ) has the stated purpose of bringing together functions from two former departments: science and innovation responsibilities from the Department of Trade and Industry; skills, further and higher education from the Department for Education and Skills. And part of its role is to maximise the exploitation of the research base to support innovation across all sectors of the economy. Within its mission and objectives it commits to aim to accelerate the commercial exploitation of creativity and knowledge, through innovation and research, to create wealth, grow the economy, build successful businesses and improve quality of life.

Evidence suggests that in the UK, businesses are not taking full advantage of the mechanisms already in place to encourage the R&D activity that such an economy thrives upon.
It has even challenged itself to be innovative; ‘to enable DIUS to deliver these objectives, the Department will strive to add value across the delivery chain, be innovative in the way it works internally and with others, and be mindful of the intrinsic value of the pursuit and application of knowledge as a worthwhile activity’.

In addition to DIUS The Government has also created tax concessions for R&D but the degree to which the benefits available are being claimed still has some way to go. PricewaterhouseCoopers state:

“The business world has long talked about the benefits of an ‘enterprise economy’, where innovation, and research and development are at the core of corporate strategy. However, evidence suggests that in the UK, businesses are not taking full advantage of the mechanisms already in place to encourage the R&D activity that such an economy thrives upon. R&D tax credits were established to help drive innovation in the UK. They offer companies that carry out R&D activities the opportunity to reduce their tax bill.

“The type of activity that qualifies for R&D tax relief is wide-ranging and sometimes challenging to apply in practice. However, these activities would normally meet one of the following criteria:

- Constitute an advance in the field
- Resolve scientific or technological uncertainty

“The Government has made a number of changes to the R&D tax regime since its introduction in 2000. As a result, awareness of the potential range of application of incentives is limited and companies are struggling to grasp the increasing numbers of opportunities available to them.

“About 33 per cent of small-to-medium-sized enterprises for whom R&D tax credits are relevant did not claim them largely because the application process is perceived to be complex.”

So the government appears to be making a positive contribution to the creation of a climate which encourages and supports those in UK plc to recognise the importance of innovation. It could however do more to make the mechanism of claiming such support clearer to those that would use it.

CASE STUDY
Pall-Ex

Pall-Ex specialises in the distribution of small consignments of palletised freight throughout the UK and Europe. Its very existence was a major innovation in industry structure. Founded by Hilary Devey, whose view of the structure of small load distribution was that it was inefficient and could be done a great deal better. Her challenge was to persuade dozens of independent truckers that it was better to deliver to and collect from a central hub than it was to drive all over the UK hoping that a return load could be found. The fact that this seemingly impossible task was achieved and turned into a major commercial success is a credit to Devey’s dedication and determination to make the idea work. The central hub means that consolidation is not as important as before, customers have a better, faster service and truckers are able to operate more effectively and profitably.

However the structural innovation did not stop there, the business has moved premises from a disused airfield to larger and larger premises until the business was restructured in a major £12m warehouse complex which revolutionised the way such operations were managed. No trucks enter the warehouse, all pallets are unloaded, moved to storage and reloaded using CNG (compressed natural gas) forklifts. The whole operation is green, very clean and fully computerised, a system that now includes hand-held computers to deliver proof of delivery signatures to customers, hub staff and member depots. The capacity is now up to 10,000 pallets per night.

Plans are already well advanced to extend the Pall-Ex innovation across Europe to continue its history of healthy turnover and profit growth even further.

www.pallex.com
Innovation across the whole economic spectrum is a difficult thing to measure precisely. In a small enterprise an inspired idea may bring huge local benefits but go entirely unrecorded in the great book of commerce. In the same way the adoption of some of the major developments of internet technology into the business-as-usual processes of an organisation (e.g. online banking) may similarly fly under the recorder’s radar.

However in terms of the measurement of innovative activity the principal method appears to be the amount of funding organisations gives to Research and Development (R&D) activities. The following table shows the top R&D investing companies in the world and includes only one UK based organisation. Of the Top 25 five have reduced their R&D spend.

The combined R&D spend of the UK’s Top 25 organisations is less than the top four on the global scale, however the DIUS goes on to report that across a broader sample, the UK850 in sales terms, UK listed companies outstripped their foreign-owned peers over the recent short- and medium-term. Over the last year, the UK listed companies have performed comparatively better than their foreign-owned counterparts:
• They increased their investment in R&D by over 12 per cent whereas the foreign-owned firms increased their R&D investment by only one per cent
• They achieved levels of profitability almost three times higher
• Their operating profits were almost 16 per cent of their sales
• Sales growth was slightly faster.

DIUS continues: “Foreign-owned companies in the UK, however, spent a larger proportion of their operating profits on R&D (more than 48 per cent) than UK-listed companies, which spent just under 11 per cent of their operating profit on R&D. However, about two thirds of foreign-owned companies spent less than 4 per cent of their sales revenue on R&D whilst among UK-owned companies, 60 per cent invested more than 4 per cent of their sales revenue in R&D”.

The difficulty with this data is understanding the degree to which spend – in real terms rather than spend as a percentage of Sales or Profits – is affecting business performance. However if the implicit assumption that R&D spend is a key driver of innovation then this data appears to support that view.

**Why Innovate?**

It is a fact that it is impossible to manage a business to stand still. The natural forces of commercial erosion mean that every business has to seek some new revenue to replace that which is lost by natural (unpreventable) and unnatural (preventable) wastage before growth is able to enter the equation. So can Innovation assist this maintenance process? What are the outcomes?

It would be imagined that innovation by the very nature of the word should be about creating some kind of exciting first-mover advantage however the DTI’s report – *The DTI Occasional Paper No6 – Innovation in the UK – Indicators & Insights* – shows a fairly dull list of effects. Fig 4 below shows the percentage of respondents reporting each effect and the change over a five-year period.

**THE RELEVANT EFFECTS OF INNOVATION**

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<thead>
<tr>
<th>Effect</th>
<th>Year 1</th>
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<tr>
<td>Improved quality</td>
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<td>Entered new markets</td>
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<td>Reduced costs</td>
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<td>Met regulatory requirements</td>
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<td>Reduced environmental impacts</td>
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Fig 4. Source: *The DTI Occasional Paper No6 – Innovation in the UK – Indicators & Insights – Constraints*
Factors showing the biggest change

The factors showing the biggest change are
1. Reduced Costs
2. Meeting Regulatory Requirements

While the reported effects are undoubtedly beneficial to a greater or lesser degree it raises the question whether the same picture is reflected in the burgeoning economies of the East?

The UK Government report ‘The Growing Competitive Threat to the UK’ states that innovation designed to lead them away from simply being a low cost provider is very high on their strategic agenda.

The report states that the fast-growing economies of the Far East are building up impressive capabilities. What is impressive – and worrying – about the emerging economies is not where they stand today but how they are positioning themselves for the future.

Alongside the enterprise and vigour that characterise their economic growth, they are building up new technology-based industries and impressive capabilities in scientific research, and investing massively in education, technical skills and creative capabilities. As a consequence, it is now the high-skilled jobs in the hitherto leading economies that are coming under threat. The growth of the Indian software industry is a dramatic illustration of this advance. In the early 1990s, companies in North America and Europe started commissioning software from Indian sources, mainly for routine applications, on the grounds of cost; today, it is for advanced applications on the grounds of capability. In the first half of 2005, Indian exports of software and IT-related services are estimated to be worth over £5.5 billion. India is also fast becoming an international centre for research. Intel now has 800 hardware and software designers based there and GE has 1,000 scientists. Microsoft has opened a research laboratory in Bangalore – the third outside the US.

It is now the high-skilled jobs in the hitherto leading economies that are coming under threat

Case Study

Bovis Lend Lease

Bovis Lend Lease is one of the UK’s leading construction and project management companies.

It recognised that over three million tons of plastic waste is produced in the UK with very little going into recycling in general and almost none being used by the building industry which prompted an investigation into the situation. Part of the reason for this lack of environmental activity is that there are technical difficulties with recycling certain types of plastic. There is also the question as to the kind of applications that recycled plastic could be used for within the construction industry.

Bovis Lend Lease recognised that hundreds of kilometres of site hoardings are erected on construction sites every year using over five million sheets of timber board, which is usually subsequently painted and often disposed of in landfill. Despite the fact that the construction industry makes every effort to ensure that all timber products are sourced from sustainable forests under the stewardship of the Forest Stewardship Council, the use of timber hoardings is still a waste of valuable world resources.

Bovis discovered a process of Powder Impression Moulding (PIM) set up by 3DM which allows up to 500 per cent more polymer waste to be recycled than existing methods. This process produces a product which is 80 per cent co-mingled waste and this was considered ideal to replace 19mm plywood to produce a reusable hoarding system subsequently named RePlas Boards.

The board is now produced using three moulds with an output of 50 boards per shift per day. Subsequent development of the mix has incorporated Waste Electrical and Electronic Equipment (WEEE), normally, very difficult to recycle, but which has high flame retardant properties which in turn is inherited by RePlas boards.

The board has a very smooth anti-graffiti surface and can be produced in a wide range of colours. There are a wide range of benefits flowing from this innovation:
1. For contractors – an easy to handle, attractive, re-usable hoarding system costing less than timber alternatives
2. It can be produced in colours reflecting brand values
3. For the community less plastic waste going to landfill
4. For Bovis Lend Lease – a reduction in their carbon footprint
5. For the producer – local employment in a business with a long term future
6. For the worker – ease of use with less risk of injury
7. General
   a. The board itself is recyclable and a 10 per cent rebate will be available for boards returned for such re-use
   b. There are a very wide range of other applications for the product which have yet to be exploited

This represents a non-mainstream engineering activity by a major corporation which demonstrates that making a commitment to innovation, even in what could be seen as a fringe activity of the business, can produce very beneficial results.

www.bovislendlease.com
following on from Cambridge and Beijing. Indeed, the build-up of research facilities is one of the most significant developments in the shifting balance of world capabilities. Over the last two years, China has had the fastest global rate of increase in R&D, and is now estimated to have reached 1.5 per cent of GDP. The capability that is being built up is one of high investment, high-level skills and a low cost base. It can lead in only one direction.

The DTI paper also reports that the more innovative the organisation, the greater the perceived barriers to innovation. This could be as a result of experience over time. Those organisations which do not seek innovation will not be aware of the effort/outcome equations necessary for its achievement. Those who understand the process understand the impact and inter-relationship of the factors which drive innovation and are therefore more likely to understand the quality, scarcity and value of such resources. It goes on to state:

‘Therefore, it is of no surprise that creative enterprises rate most barriers higher than other industries. It’s interesting that although on average a higher proportion of the workforce within a creative enterprise possesses a degree, the industry ranks ‘lack of qualified personnel’ higher than other industries’.

Fig 5 below shows how the factors are perceived differently in the creative industries.

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**Fig 5.** Source: The DTI Occasional Paper No6 – Innovation in the UK – Indicators & Insights
Innovation Drivers

The European Community Research and Development Information Service (CORDIS) Information Development Organisation produced a study on the key drivers of innovation. The main conclusion is that changes in customers’ perceived needs are the key drivers in both the improvement and the acceptance of new products, services and processes. Some of the improvements may be externally driven by R&D (e.g. Convergence of telecommunications technology) and some driven by the rejection of new products and services (e.g. automated Call Answering systems). The drivers of innovation identified by The National Business Awards almost mirrored those of the earlier DTI study:

1. Changes in customer needs
2. Changes in technology
3. Opening new geographic markets
4. Changes in Government regulation

Fig 6 below shows the relative differences in importance identified.

Creating Market Opportunities: Important Drivers

The kinds of activities that successful business have identified as being within the remit of the role of the customer, and of use to engage their customers in the innovation process are:

1. Involve customers in the process of evaluating and refining ideas
2. Use customers as a source for new ideas
3. Test prototypes with customers
4. Involve customers in the design of new products and services.

While in some industries the customer may be easily able to fulfil this role as a source of new ideas while in others – particularly those engaged in the development of very specialised technologies – it is unlikely that customers will produce new technological innovations. It is likely that they may be a resource for the identification of application needs that drive such innovation.

Role of the Customer in the Innovation Process

Changes in customers’ perceived needs are the key drivers in both the improvement of and the acceptance of new products, services and processes
Innovation – Evolution or Revolution?

Given that customers are the only source of revenue for any commercial organisation it is both obvious and wise to involve them at some stage in the innovation process. However, not all organisations take heed and several fail to establish focus groups or product clinics to assist in the process. Some recognise the real or potential limitations of the abilities of customers as Fig 8 below shows.

More than two-thirds of the companies in the CORDIS study identified the most important customer-related obstacles to innovation as:

- Customer uncertainties about safety and quality
- Low customer awareness about new products or services

However, on balance less than 15 per cent of UK plc engages in cooperation with customers although more recognise it is a sensible strategy.

**CASE STUDY**

**Just Lamps**

Just Lamps develop and manufacture replacement projector lamps using bulbs identical to those originally supplied with the projector: a proposition that does not seem particularly innovative. However, a look behind the scenes shows that innovation has been a driving force in this business since its inception in 2002 when two friends with a modest investment set up a business to supply replacement lamps to schools and universities. Initially their innovation was to build a database of the knowledge they were acquiring about which lamp for which projector and to build a stocking plan which delivered the best customer service/profitability pay off. Their initial target audience was rapidly overtaken by the burgeoning number of dealers of audiovisual equipment who used them as a trade supply source. This formed the basis of a new business model that was rolled out to companies in Holland, Germany and Australia with profitable turnover exceeding £1m by the end of its third year.

The next innovation was driven by the recognition that the fast growing UK business had global potential if the stock holding/order turnaround equation could be resolved. Various reasons to do with geography, transportation, import regulations and cost were barriers that had to be overcome. The solution was a hub distribution system whereby each of the target continents USA, Asia and Europe would have its own distribution hub with local purchasing and stock control authority to support regional sales offices but with centrally managed ordering, invoicing and tracking systems delivered via a single multi-language website.

This contained the most comprehensive product application database in the world and moved the website from being an online store into a powerful customer service resource.

Another innovation was developed to address the growing threat of competition arising from non authorised copy products keen to take advantage of a market of over three million units a year and growing at 20 per cent per annum. Concerns over the quality and safety of these units made Just Lamps decide initially to stay with the authorised international OEM suppliers for which they were now authorised distributors. However prompted by the ability to be able to access an even larger share of the market a process of thorough R&D enabled the company to develop a system of housings that exactly matched the lamp housing of the original equipment manufacturer (OEM). By working with initially Philips and others with the cross referencing data from their database they were able to produce a range of lower cost alternative lamp and housing combinations that it calls ‘Diamond Lamps’. These meet OEM standards of quality and performance and are now available for over 1000 models and growing. This has had the effect of producing a sales growth approaching 300 per cent for the models in question and of sustaining its position as the largest replacement lamp supplier in the world. Strategically-led innovation in product supply distribution and web based systems, has enabled this business to move from being a Berkshire based bulb supplier to being the global player in its field.

www.justlamps.net

**Fig 8. Source: CORDIS Report – The Power of Customers to Drive Innovation**
Cooperation

Cooperation with customers has its place but there are others who can be engaged in the process of innovation. Whilst less than 15 per cent of organisations engage in such cooperative activities with customers, it is difficult to estimate the level of engagement with other stakeholders within the remit of this study.

Fig 9 above identifies the importance and acceptance of the customer’s role in innovation. It identifies a range of other bodies who contribute to the process. It seems that proximity is an important factor for The National business Awards study group leading to the assumption that:

1. If organisations are engaging with both suppliers and customers (i.e. those closest to them) at almost equal levels then there is likely to be an iterative interactivity at work which moves up and down the supply chain and therefore the potential for innovation to create benefit for all in that chain becomes available

2. Those capable of creating the leading edge thinking, research, resource and creation of a supportive climate for innovation are least used and furthest away from the centre of activity

The gaps between government, academia, consultancies and commercial organisations appears to be an impediment to UK plc being even more innovative and it is a stated government aim to close those gaps. In practice the cultural differences and imperatives can still be very wide.
The equipment hire industry is very competitive, Speedy Hire is the country’s leading supplier with over 360 depots supplying contractors, builders, industry and the public sector. The sector is very competitive, many smaller local suppliers offer spot hire to both local and national organisations and brand differentiation can be difficult in such a very fragmented market. The impact of this was that price was becoming the key differentiator which not only eroded margins but also had more deep-seated implications for the company in that lower margins could encourage some to keep equipment on hire beyond a safe working life or to compromise on maintenance.

Due to the nature of Speedy Hire’s operations a higher than average Health and Safety risk exists in almost all sectors to which it supplies. Health and Safety rightfully continues to increase as an on- and off-site management priority. An innovative approach was required to differentiate Speedy Hire from its competitors. Differentiation would mean taking the high ground in the market, protecting margins and stimulate sales growth in both the existing market and in new sectors.

The innovation was to position Speedy Hire as the experts in Health and Safety in all the markets in which they chose to operate. This innovation required a very substantial high risk investment. Health and Safety was not initially seen to be the most alluring value added proposition in the market and failure could have had a damaging effect on the perception of the brand.

Research, however, showed an interesting picture. Companies and their Directors and Health and Safety teams took the issue very seriously. Perhaps regulation, legislation and litigation may have influenced the market but it was a live and sensitive issue. One key element was the need to communicate existing and new regulations to on-site staff and to obtain the tools to do that effectively. Speedy Hire was seen – as most of its major competitors – to be a provider of fit-for-purpose equipment. On one very critical point customers had little idea of the base level of knowledge of Health and Safety extant in their industry, a position consistent with equipment manufacturers, The HSE and The University databases who were asked. Speedy Hire commissioned the research and discovered 67 per cent of onsite personnel were unaware of new regulation on tools and equipment.

The innovation had its mission, a mission that Speedy Hire developed with three key strategic strands:

1. To raise regulation awareness in the customer database
2. Provide the training and training tools to communicate the message effectively on site
3. To look to the next generation by having all tools supplied independently appraised by Loughborough University’s OPERC facility to ensure that where equipment could be made safer the manufacturer would know. Any equipment failing or any manufacturer not agreeing to the OPERC appraisal would be de-listed

A strategic plan for the topics to be covered was developed which included a £2m investment in new equipment to meet forecast demand. Communication packs, Tool Box Talks, Posters and Road Shows were created in cooperation with suppliers. Speedy Hire launched the innovative strategy using appealing and interesting graphics under the banner of ‘Safety from the Ground Up’ with the two initial topics being ‘Working At Height’ and ‘Hand Arm Vibration’.

What may have appeared as a high risk innovation has paid off. Sales and profit growth are up over five per cent year-on-year and are forecast to do the same next year as Speedy Hire drives towards a turnover of £450m with five more safety topics already in the market. Speedy were the first national hire organisation to be awarded the prestigious Safe-Hire Award by the Hire Association of Europe.

www.speedyhire.co.uk/safety

**CASE STUDY**

**Speedy Hire**

**COMMERCIAL EXPECTATIONS**

Industry, particularly large industry, has the resources to invest in processes of innovation whether that is for product or service development, the resolution of design or functional issues uncovered since the product introduction or simply in pursuit of improvement as a part of the competitive process of their sector. They may or may not, depending on the nature of the product or the industry, require external assistance from specialist commercial suppliers of knowledge or technology or from academic institutions. In such activities and processes, the timescale and cost realities are of the essence and culturally accepted and implicitly understood by the industry and the commercial partner and of the compromises that are sometimes reached to accommodate the imperatives of return on investment, speed to market and other results orientated criteria.

The National Business Awards White Paper

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INNOVATION – EVOLUTION OR REVOLUTION?
**Academic Expectations**

To academia the interest may lie as much in the intellectual challenge surrounding an understanding of the effect of factors that influence the design and development of the solution as it does in producing the solution itself. Exploration of options can also be of great interest to the pure researcher. There can also be great emphasis placed on the quest for the perfect solution without due recognition of the commercial needs of time, cost and speed to market. ‘Thoroughness’ and ‘Publication of Results’ are also important to research academics and there is no doubt that the field of pure research which has no specific outcome or timeframe can be very alluring, very engaging and has produced many good things for mankind. In this respect industry is useful to academia in that in can be a source of funding for such work.

So both have common needs, the commercial organisation wants money from its customers to fund its growth, the academic institution wants money from industry to fund its research. Both want money. The key cultural difference is that academia does not always recognise commercial organisations as customers. Neither party is right or wrong but the aims and processes of both are fundamentally different and it is in that difference that the core of incompatibility lies. It is possible to quote examples of good industry / academia cooperation but their relationship appears a long way from being an instinctive first choice step in the innovation process so perhaps some innovation could be useful in helping to move things along.

**Government Encouragement**

The UK Government has set ambitious goals in the 10-year Science and Innovation Investment Framework.

More than doubling the science budget, the Government has ensured that the UK remains a leader in scientific excellence.

In 2007/8 the science budget is £3.3 billion compared to £1.3 billion in 1997/98. This includes increasing DTI and DfES funding for research at an average annual rate of 5.8 per cent in real terms over the current spending review period.

The Government’s long-term objective is to raise knowledge intensity in the UK by increasing overall R&D spend to 2.5 per cent of GDP by 2014 from its current level of around 1.9 per cent.

This picture is however not representative of the whole of UK plc.

Across the UK850, the ratio of investment in R&D to sales averaged 1.8 per cent in 2006. This average figure, however, masked considerable variations across the sectors: in two sectors – pharmaceuticals & technology and aerospace & defence – the ratio of R&D to sales exceeded 8 per cent, but the large volume of sales generated by the banking, telecommunications and oil & gas sectors diluted the overall ratio across the UK.
Innovation – Evolution or Revolution?

The National Business Awards

Brigade

Cleveland Fire

White Paper

P

arts of the area in which this brigade operate had become ‘no-go’ areas. Any of the emergency services were seen by some segments of the population as different parts of a mistrusted uniformed force. Emergency service vehicles and personnel could be attacked and the incidence of car fires and associated criminal activities were rising.

An innovative strategy was required to change what was a potentially dangerous situation for both the fire brigade and the residents. If a fire could not be properly attended because of disruption by elements of the population then lives could be endangered. This was a real risk as the districts most involved were among the most vulnerable to fire in the area.

The strategic plan flowed from Cleveland Fire Brigade’s vision to be ‘The Best Fire and Rescue Service at Protecting Local Communities’ and was based around two central ideas which were:

a. Raising the physical profile and presence of the fire brigade
b. Giving something to an underprivileged and vulnerable community

The central and most innovative plank of the strategy was the ‘Whatever it Takes’ philosophy which actually meant in practice exactly what it said in theory.

The first part of the strategy was delivered by driving the brigade’s vehicles through the targeted area at every opportunity when on the way back from an emergency call out or on any routine journey to get the residents used to the fact that the presence of a vehicle was not a harbinger of trouble for them.

The second part was to use a group of volunteers to visit every house in a given geographic area as many time as was necessary (Whatever it Takes) to offer the residents a free safety check and to fit free smoke alarms and exchange chip pans for deep fat fryers. To this activity was added a programme of attracting private funding for the safety equipment and sponsorship to clear up the area and the fly tipping that was a potential source for nuisance fires. Initially there was a great deal of suspicion and resistance but persistence and persuasion won through.

Within the initially targeted area, one of the most socially deprived in the region, the effects have been dramatic. There are many non-measurable benefits like the untroubled access the brigade has to the district, and the trust the community now has in them. On the measurable front there have been no attacks on fire officers, a reduction of 59 per cent in deliberate vehicle fires and almost 9 per cent in nuisance fires. Coincidentally the increased presence of the brigade personnel and the engagement of the community has resulted in a 33 per cent reduction in dwelling burglary, a 25 per cent reduction in criminal damage, 67 per cent reduction in vehicle related crimes and an overall reduction in other crimes. Because there are fewer call outs to the district the brigade has also made a substantial saving on its diesel costs. The initiative has been extended to ensure it is also available to non English speaking residents.

The ‘Whatever It Takes’ strategy is being extended, it now has a parallel road safety programme ‘Learn and Live’ aimed at schools and youth organisations with the aim of reducing traffic accidents in the very vulnerable 16 -23 year old group.

With four of their wards in the Top 10 nationally of the most deprived, the type of strategic approach developed by the Cleveland Fire Brigade is not perhaps the most obvious. Prevention has always been an aim of fire brigades but the level of understanding of the issues that went into the strategic design, the sensitivity, persistence and courage it took to see it through and the results achieved make this an outstanding innovation in both human and operational terms. This innovation is fully scalable and capable of roll-out on a national basis, many other brigades are now interested in adopting these ideas.

www.clevelandfire.gov.uk
The National Business Awards Results

The following are finding of what the National Business Awards sample from the 2007 entry contributed to the debate.

The sample of over 200 companies was analysed by the nature of the innovation created against constructs of the following model

1. **Strategy** – was the innovation to do with a fundamental redirection of some kind?
2. **Structure** – was the innovation concerned with the way the business was organised?
3. **Services** – was the innovation about the introduction or improvement of the services or products?
4. **Systems** – was the innovation dealing with enhancement of the effectiveness of the processes of the organisation?
5. **Staff** – was the innovation primarily making the human resource more skilful or more secure?

The two dominant areas of innovation within the sample are Services and Systems as Fig. 10 below shows. These two areas accounted for over 80 per cent of the innovations. Staff innovations, at nine per cent was ranked third and Strategy and Structure shared five per cent each.

Of all the innovations over 85 per cent included the application of information technology to a greater or lesser degree. This raises the issue of whether real innovative thinking is being substituted by a desire to keep up with the pace of change that IT is delivering, rather than the discovery of new ways of organisational improvement. Does doing the same thing more quickly/effectively with a new piece of technology constitute genuine innovation or is there a danger that historical ineffectiveness could be enshrined in new technology and that real improvement opportunity missed? Innovation must surely be about improvement.
There is some evidence that technology-for-technology’s-sake may not be an improvement. The automated call centre technologies or voice recognition systems are one example of how technology can be frustrating for the end user. It can also have a negative effect on the prospects of the business. Those that recognise the correct innovation opportunity have shown that they understand their customers’ needs. It is perhaps evidence that as the internet (itself a technology phenomenon) matures as a distribution channel there is already evidence that in some sectors there is a move away from price-driven towards value-driven services and this as time goes on may be seen to be innovative.

The least inspirational sector was to do with Staff innovation: though that does not imply that companies were not behaving as excellent employers. It is difficult to be a really successful business without being a very good employer, but it was equally difficult to highlight any areas of real innovation. It is likely that the degree of staff regulation and legislation that organisations have to digest is acting as an inhibition on creativity.

The overall impression gained is that UK plc does not present itself as a sparkling showcase of innovation. The number of instances where the innovation reported could be seen as a normal business-as-usual progression far outweighs those that were breathtakingly innovative. Perhaps that is the nature of innovation today; perhaps it is more about small incremental progressions that move things along gently rather than large sweeping changes that influence the path of the organisation or the paradigm in which it works.
There were many exceptions within The National Business Awards sample, and some of the more notable exceptions have been highlighted in this paper. Whilst The National Business Awards serves to recognise excellence in various disciplines, it is committed to heralding organisations that are at the forefront of innovation, business ethics and success.

CASE HISTORIES BY CATEGORY
**Innovation in Structure**

The Royal Bank of Scotland – Retail Services Operations

The Royal Bank of Scotland operated a 24/7 X 365 retail services operation out of three centres in Edinburgh and Glasgow. The centres operated independently dealing with enquiries from customers via any channel they select – telephone, email, post or fax. In Jan 2007 the centres were merged operationally but not physically to create a ‘virtual’ centre. The Royal Bank of Scotland has already developed a continuous improvement (CI) culture and this change created the opportunity to review the whole structure, the systems and processes employed. This moved the role of the staff from a mono-skilled role to a multi-skilled role. The staff are engaged in the CI through their WorkOut programme which equips them with the space, skills, tools and encouragement to develop their improvement ideas from the point of conception through to practical implementation.

The effect of the innovation has been to provide customers with a single point of contact, staffed with multi-skilled personnel with the key benefit that peak workload can be distributed across the three centres to ensure a consistent level of response to all customers. Role flexibility not only allows staff to move from customer contact to processing roles within and across the ‘virtual’ centre it also provides them with a more varied and interesting working experience.

The move was not without its challenges, one of which was maintaining a ‘business as usual’ standard while implementing the changeover programme. A special Resource and Planning team was tasked to ensure that the right people with the right skills became available at the right time.

The effect of the change has been to deliver a higher standard of service to customers and to make another step along the road of the RBS journey to becoming, and remaining, a world class bank. In 2007 the engagement of staff in the continuous improvement process resulted in over 200 ideas generating over £650k of operational cost savings. The number is set to rise resultant from the 150 ideas still in the pipeline.

From the customers’ point of view response services which used to take five days are now dealt with on a same-day basis and over 85 per cent of telephone customers being satisfactorily dealt with at the first point of contact. A good example of innovation demonstrating that service and quality performance improvement can cost less.

www.rbs.co.uk

**Innovation in Services**

Home Harvest Salads

Potted living herbs from the supermarket or farm shop is not a new idea, the growing technology required to produce a single plant is well established. The idea applied to a whole leaf salad where the components grow at different rates at different times of the year requires a fresh approach and the resolution of a very complex set of issues. In addition to the complex production equation there also existed issues surrounding market acceptance and distribution.

In terms of competition from the existing bagged salad products the key benefit that living salads bring in addition to taste and texture is the nutritional benefit. When plants are cut nutritional benefits like vitamin C begin to ebb away. A bagged salad produced in the UK winter when many of the components are flown in will have lost much of its nutritional value by the time it is eaten.

The proposition to consumers and chefs was to offer living salad which could be kept alive simply and harvested as completely fresh at the time of use.

The technical difficulties of production were overcome using greenhouse production with different mixes for different seasons which not only ensures continuous supply but also gives the customer variety.

The product is now available through an ever-widening range of top brand supermarkets. It provides the customer with a competitively priced, easy to use product which with a little simple watering can provide fresh leaves for up to ten days. In addition the products are pesticide free, have no chlorine washes, reduce consumer waste as they are only used as needed, and because they are UK produced have some effect in reducing food miles.

The growing technology is the key to the success of this innovation. The time and financial investment has been worthwhile as the company has already had to expand its production facilities three times to achieve sales and profit increases of over 200 per cent in the last two years. Growth is set to continue as major retailers recognise the demand for the product and allocate specialist facilities to its sale.

www.livingsalads.co.uk
Black Horse Motor Finance

Black Horse Motor Finance is in the traditional business of providing point of sale finance for the purchase of motor vehicles. It is the largest provider of such services with about 20 per cent of that market segment.

It also operates in a largely traditional sector which has only seen incremental evolution in its products and services. The market is very competitive with all lenders from banks, building societies and joint venture manufacturer/financial services all competing for the available business.

A series of customer focus groups identified that the market was looking for a fast and efficient process, the ability to self serve and a much greater degree of simplicity surrounding the initial proposal, commissions and the transfer of funds. Armed with this information and supported by parallel views from its staff Black Horse Finance decided, as market leader, it was important to take the initiative in embracing new technology. After a period of serious research and development the LetsUConnect (LUC) product was launched. LUC in essence gives the dealer complete control of the whole of the finance delivery process.

The key innovations which make this service unique are:

1. **e-sigs** – Electronic signatures are made by customers on line via an e-pad which enables authorisation of applications in real time and eliminates both a large part of the paper process and of the associated errors.

2. **Dealer Control of the Process** – having signed up a deal online the dealer gets instant notification of authorisation and payouts on deals and commissions, thereby improving service to the end customer, quicker deal closure and improved cash flow to the dealer.

3. **Management Information** – the system provides both dealers and Black Horse Finance with a rolling 12 month instant view of all the dimensions of their transaction on either a group or one-site basis.

Innovation in Systems

**BT**

BT is one of the world’s leading providers of communications solutions and services operating in 170 countries. Principal activities include networked IT services, local, national and international telecommunication services, broadband and internet services.

BT had been through a very difficult period wherein the prevailing business strategy had threatened the future of the company. In looking to the future BT recognised that sole dependence on both the fixed assets of the business and the provision of technical equipment would not be successful in the fast-moving world of converging technologies.

What was required was a completely innovative approach which repositioned the business and the services it provides to its customers. The solution was the 21st Century Network (21CN): described as a five-year, multi-billion pound network transformation programme designed to help customers take full advantage of the myriad opportunities that internet protocol (IP) has ushered in. One of the basic infrastructure needs was to upgrade 30 million lines across the UK.

The imperative of the central role that BT people – from the boardroom to the every day work of each manager and member of staff – would play in delivering the vision right across the organisation was recognised. In addition to the expected communication processes the on-going infrastructure now includes a New Ideas Scheme, BT Innovation Awards, Innovation Master Classes and Innovation Showcases.

The strategy introduced a number of new strands some of which were alien to the traditional culture but key to the future success of the business, among these were:

1. **Open Innovation** – looking beyond the boundaries of the organisation to find the smartest ideas in the world to fuse with the best ideas from BT. BT has long had excellent R&D employing very talented people and this strand was designed to ensure the widest possible dimension was added to that facility.

2. **Academic Collaboration** – searching for new ideas by working with over 30 leading technology universities around the world.

3. **Venturing** – BT has partnered to launch a number of start-up companies to bring new technologies to the global market.

4. **Release of the time Black Horse in-house experts from processing tasks to the provision of the highest levels of customer service.**

Introducing such a service required time and financial commitment to the design and development of the programme by Black Horse Finance. In addition it required moving a fairly traditionally focused distribution network onto a new technology and using new hardware and software. An extensive skill development programme and an initial investment in providing the hardware was used to launch the programme.

To date over 1600 dealers are using LetsUConnect and over 35 per cent of Black Horse Finance business goes through the system.

Looking to the future there are now 40 senior managers across the business with the responsibility to continue its development. The demand for the system is such that new dealers now have to contribute to the cost of the hardware.

www.blackhorse.co.uk
Barclays – Business Banking Customer Servicing

Barclays – Business Banking Customer Servicing is not a typical call centre. Its purpose is to provide service support for Barclays’ one million business banking customers. Not an unusual organisation on the face of it, but thereafter it is very different from the type of call centre envisaged by most and is atypical in the staff statistics achieved. Its success is based on a set of core values, namely:

1. We share our ideas
2. We keep our promises
3. We make our customers feel special

The organisation has developed an approach to people, recruitment, management and development which is innovative, flexible and delivers outstandingly high levels of satisfaction to both customers and staff.

The process includes Performance Development – a structured cornerstone programme for every employee that enables them to pursue their potential to the level they desire to achieve. A Reward and Recognition programme that includes a range of dimensions: from on-the-spot recognition, through to bonus schemes and The Golden Globes – its own in-house recognition and celebration of excellence in a number of activities. This has provided the road map for all of the Barclays customer service estate.

The Equality and Diversity policy not only celebrates the differences in the staff it also includes a range of support services for male and female employees, religious requirements, disability, age and sexual orientation. The flexible working opportunities are taken up by almost 40 per cent of the staff.

These and other initiatives are included in an innovative Support and Wellbeing programme with 7 dimensions:

1. Personal Development
2. Financial Wellbeing
3. Reward and Recognition
4. Charity and Community
5. Team Development
6. Personal Wellbeing
7. Equality, Diversity and Environment

Within these areas specialist services are brought on site to assist employees in areas such as: Stress and Breast Cancer Awareness; No Smoking Campaigns; Exercise Classes; Physiotherapy; Fresh Fruit and Holistic Therapy.

Add to this a commitment to ensuring employees have a good work-life balance supported by a Concierge Service to run personal errands during the day and an image of a very good place to work comes into focus. The average number of training days delivered is 13 compared with a more typical average for the sector of around three. Against this background it is also true that the facility is operated on a very commercial basis with the kind of high performance standards that has earned them the accolade of European Call Centre of the Year.

Any one of these factors is not in itself innovative – what is innovative is the way the combination has been structured, professionally set up and funded within a high performance environment that is mutually beneficial to the organisation, the employees and the customers.

The results speak for themselves: Staff turnover in call centres can typically run between 30 per cent and 50 per cent or higher, here it is 2.4 per cent. Because of high labour churn recruitment is difficult for call centres, here there is a waiting list partly filled by a staff recommendation programme and over 40 per cent of the staff have worked for Barclay’s for over five years.

However the leaders of the business are not complacent about their achievements and recognise that they can never take the position for granted and are constantly seeking new ways to innovate and improve what is already a world-class place of employment.

www.barclays.com
National Business Awards and Study Sample Background

The National Business Awards receives over 2000 written nominations for its 16 Award categories (an average entry is around 2500-4000 words). The programme includes a Regional Programme in five regions and these generated over 500 applications in their 10 award categories, plus the hundreds of entries in the 15 categories for The National Business Awards for Scotland. Through a rigorous short-listing process the initial entry is reduced to the finalists for each award category. All finalists are invited to present their case to, and answer questions from, a judging panel of experts with knowledge and experience of each award category specialism.

The whole process generates a wealth of intelligence about the way successful companies operate. In 2007 the arrival of many very large public sector organisations means that the finalist companies represent £100bn turnover, generate £95bn profit and provide employment for 2.5m people in the UK and over 250,000 people in the rest of the world.

From this intelligence an annual White Paper is produced.

2004 In 2004 the data was analysed and published in the white paper ‘The Observed Characteristics of Successful Businesses’.

2005 In 2005 a sector of the data was reviewed in the white paper ‘The Barriers To Success And How They Are Overcome’.

2006 In 2006 two white papers were produced ‘The Observed Characteristics of Entrepreneurs and How They Succeed.’ ‘Health and Safety – More Than Compliance’.

2007 In 2007 – the relevant data was used to produce ‘The Observed Characteristics of Outstanding Women in Business.’

The text of all White Papers including this paper is available on The National Business Awards website, www.nationalbusinessawards.co.uk

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Appendix

Potentially helpful web/email addresses

• DTI  
  http://www.dti.gov.uk/innovation/sbri/index.html

• DIUS  
  http://www.innovation.gov.uk/rd_scoreboard/

• DTI Occasional Paper  

• Cordis  

• UK Government  
  http://www.hm-treasury.gov.uk/media/C/D/coxreview-chapsgrowingcompetetive.pdf