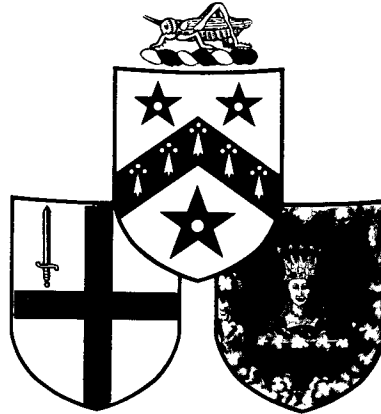


G R E S H A M
COLLEGE



YESTERDAY'S EDUCATION
FOR TOMORROW'S BUSINESS

Lecture 4

ROW, ROW THE BOAT

by

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Gresham College was established in 1597 under the Will of the Elizabethan financier Sir Thomas Gresham, who nominated the Corporation of the City of London and the Worshipful Company of Mercers to be his Trustees. They manage the Estate through the Joint Grand Gresham Committee. The College has been maintained in various forms since the foundation. The one continuing activity (excepting the period 1939-45) has been the annual appointment of seven distinguished academics "sufficiently learned to reade the lectures of divyntyte, astronomy, musicke, and geometry" (appointed by the Corporation), "meete to reade the lectures of lawe, phissicke, and rethoricke", (appointed by the Mercers' Company). From the 16th century the Gresham Professors have given free public lectures in the City. A Mercers' School Memorial Chair of Commerce has been added to the seven 'ancient' Chairs.

The College was formally reconstituted as an independent foundation in 1984. The Governing Body, with nominations from the City Corporation, the Mercers' Company, the Gresham Professors and the City University, reports to the Joint Grand Gresham Committee. Its objectives are to sponsor innovative research and to supplement and complement existing facilities in higher education. It does not award degrees and diplomas, rather it is an active collaborator with institutions of higher education, learned societies and professional bodies.

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Gresham College

Row, Row, Row the Boat

Tom Cannon, Mercers' School Professor of Commerce at Gresham College

Through The Looking Glass

In *Through The Looking Glass*, Alice and the Cheshire Cat have a conversation that could probably be repeated in many organisations. Their conversation addresses the question of right way forward in the face of uncertainty. Alice is lost and starts by asking the Cheshire Cat:

"Would you tell me, please, which way I ought to go from here?"

"That depends a good deal on where you want to get to," said the Cat

"I don't much care where," said Alice, "So long as I get somewhere."

"The it doesn't matter much which way you go," said the Cat

I had a strong sense of this conversation last week when I attended the launch of the report of the *Commission on Public Policy and British Business*, sponsored by the Institute of Public Policy Research.

The Commission sought to frame a "public policy agenda for a more prosperous Britain." Almost inevitably, their recommendations placed considerable emphasis on education and skill development. Education for business, in various guises, cropped up throughout the report. The Report, however, was deeply flawed by the problem Alice faced - it seemed to have no idea of where it wanted "to get to." Major forces, which are shaping the contemporary and emerging business environment, were largely ignored. These included globalisation, environmental change, workplace and market diversity and technological change (except for information technology). Those hoping to frame policies that address the challenge of education for business cannot ignore these powerful, tectonic shifts in the business environment.

Divided we?

In tackling questions about the direction of business education, organisations and communities depend not only on a sense of direction but on their capability to achieve their goals. Managers, in turn, often face the problem identified by the countryman's answer when the visitors asked him the way to his destination. He replied that "he would not have started from here."

For the UK, this issue is vividly illustrated by the problems created by the structure of business education and education for business. The dominant feature of both aspects of business education is the separation of education

for business as a largely, distinct area of study. This largely reflects the US model in contrast to the European, more integrated approach. In the Anglo-American world, business education was separated from other areas of education in Business Schools or dedicated faculties of business or commerce. These, in turn, became pre-occupied with increased internal specialisation.

On certain levels this was very successful. In the UK 156,143 people were enrolled at undergraduate level for business and management related courses in 1995/96. A further 59,000 were enrolled in business and management related programmes at postgraduate level. There are now more students studying for business and management related courses than any other subject. In school, demand has grown for GCSE and "A" level programmes. The separation that has produced clarity of vision and commitment to the subject(s) poses major problems during a period of rapid technological change. During this time, awareness of technology and its capabilities is often the key to competitive success. More generally, those communities that understand and embrace technologies are more likely to absorb the associated changes than those that do not understand or reject technology.

This separated approach to business education is predominantly an Anglo-US phenomenon. In Northern Europe and East Asia, education for business is more closely integrated with science and engineering. This partly explains why engineering retains a leadership role in German corporation. This is vividly illustrated by the high technical standards of German firms and their continuing investment in technical development. Siemens, for example, can claim to be the most innovative large company in the world. It currently holds about 40,000 patents across a workforce of 400,000. Germany holds a powerful position in world rankings of patents held per capita with 264 per capita versus 117 for the USA and 140 for the UK. The Holistic view of the enterprise is well expressed by Klaus Grohmann, founder-CEO of Grohman Engineering¹, a leading supplier of electrical components. "We consciously employ no salespeople. Our managers have total responsibility for their projects: they sell, make the offer, develop the solution and execute the project ... everyone takes a holistic view of the project." Japanese firms take this holistic approach even further with widely distributed power, cross employment with unions and extensive networks beyond the enterprise into suppliers and clients.

Science and technology affects every aspect of business. Technological change, for example, make it much easier to reach markets. In the factory, the returns from integrating technology were equally marked. Japanese workers could produce equivalent or superior products for far less than their US and European rivals. General Motors, CEO, Roger Smith found this out when he asked Isuzu, a Japanese producer in which GM held a major stake,

¹ Quoted in Simon. H. *Hidden Champions* Cambridge, Mass., Harvard Business School Press, 1996

how much it would cost to produce a small car that GM was developing. He found that Isuzu could produce the car for \$2,857. This was less than half the \$5,731, it cost GM to make. This was not because of greater investment in robots or other advanced equipment. The competitive edge lay in the integration of people, technology, manufacturing systems, logistics and marketing. Education for business that does not match this integration does not equip either the individual or the community for the future.

The Dream Team

The integrated and integrating approach to management that works in high technology industries and markets also works in more traditional product fields. Whole Foods is the largest natural-foods retailer in the USA. Cofounder and Chief Executive, John Mackey makes clear that "The team, not the hierarchy, is the defining unit of activity. Referenda among team members extend to crucial decisions like recruitment. It takes, for example, a two thirds vote of the team for a candidate to get a permanent job. Openness extends to areas like salaries. "Every Whole Foods store has a book that lists the previous year's salary for all 6,500 employees by name²." The consistent message from these and other successes is that major changes are occurring in the optimum organisational form and the best way to manage. Consistent success requires a shift in approach to adapt to change and build new management approaches and systems.

This emphasis on the team or group challenges another principle of traditional business education - the emphasis on the individual. The task of building entrepreneurial teams is the biggest single shift in behaviour between sound, past practice and essential future needs. The entrepreneurial team might sound like a paradox but it is the answer to many of today's management challenges.

Despite the implicit paradox, entrepreneurial teams can be created and, once created, they provide a powerful spur to business development. The success of 3M symbolises the benefits that emerge when individualism and team work combine. 3M has created a culture in which individual enterprise is married to a cohesive organisational structure in which team working provides an edge over isolated enterprise. 3M prides itself that it is a company made up of 90,000 entrepreneurs working in team. It is a time based organisation in which teams can be stable over long periods of time but new teams can be constructed quickly to handle specific tasks. The company works hard to keep its main operating units small.

The ability to change the rules to the organisation's advantage is one of the great strengths of entrepreneurial teams but does not sit well with the pre-occupation with rule definition that shapes much education for business. Rule changing places a premium on the ability of the leadership group to articulate the vision in ways that compel the support of team members. A compelling

² Fishman, C. "Whole Foods Teams" Fast Company, April May 1996

vision is designed to win their support, energise the members and give them the confidence that they can deliver the desired outcomes. Leadership involvement at this stage adds extra value as it endorses the shift in behaviour. Effective behaviour change is reinforced when examples and models are set and achievements are recognised and celebrated.

Time scales and reward systems alter in the new environment. Managerial bureaucracies place a premium on long term rewards in areas like pay, promotion and pensions. In contrast, Ed. Crutchfield, CEO of First Union Corporation argues that for entrepreneurial teams "recognition and reward has to be done on a very short interval basis ... given immediately after the service was rendered. (Its) not something that you get in your pension 35 years from now, but its something you can buy with on Monday."

Immediate rewards add three important dimensions to the entrepreneurial team. First, it forces senior managers to become involved. The only way quick rewards can be given, is if the manager is a full team member - able to spot and recognise achievement. Second, immediate rewards are immediate feedback. Research on entrepreneurs indicates that they work to shorter action - reward cycle times than others. That is why they sometimes seem impatient or in a hurry. Quick rewards respond to that need in "natural" entrepreneurs. These rewards condition those with less clear, entrepreneurial traits to think in that way. Third, quick rewards bond teams together by breaking down barriers between levels and responding to endeavour and achievement not position.

Entrepreneurial teams play a part in tackling the most pervasive of modern paradoxes. This is the pressure and desire for more for less in-tight time scales. The "lean, mean" organisation is expected to operate with fewer layers of support systems, fewer back-ups but move down new avenues, be more entrepreneurial and innovate. The old notion that widening the range and scale of activities means more resources is disappearing under resource constraints and new assumptions.

Closer analysis highlights the strong links within the labour force - managerial and operational. Many managers have engineering and technical backgrounds and serve long periods in the heartland of the business in operations or production. This establishes their credibility and provides a platform for trust building. Trust is reinforced by open lines of communication, greater sharing of benefits and more secure employment. The confidence goes both ways. Lindahl asserts that "people want to learn and are greatly motivated and satisfied when they do. Top management's challenge is not only to help people develop but to ensure that they do so in ways that support and reinforce the company's objectives."

Kaizan

A virtuous circle of interlocking elements can be identified which shaped modern, Japanese integrated, value focussed management. Initially, lack of

capital, skills and other resources precluded the type of resource intensive, machine driven systems adopted in Britain and North America. Cultural and social imperatives encouraged firms to link a people orientated approach to management with the search for continuous improvement, Kaizan. These shortages allied to government leadership encouraged collaborative relationships and partnerships across the supplier, customer chain.

The initial gains from these approaches encouraged further, shop floor experiments like quality circles. Lack of indigenous local resources and expertise prompted Japanese firms to welcome external inputs. Before World War Two, Japanese leaders frequently visited British and US industrial centres. Even the Emperor's sons went on "fact finding tours." After World War Two, the work of the US military mission reinforced this pattern of search and adoption. The relatively high cost of market entry faced by Japanese firms, their reputation for low quality and weak distribution systems forced them to look for ways to cut costs (Just-In-Time Production), add value (Lean Production) and improve quality (Total Quality Management)

This emphasis on integrating people or knowledge has wider implications for education for business than is generally assumed. It is not enough for old style bureaucratic managers to add a little mentoring, counselling or walking about to their portfolio of skills. They will need to regain the trust of the workforce. This might involve a greater involvement in the negative as well as the positive features of corporate life. It is hard to establish trust and credibility on the back of low levels of loyalty, limited technical skills and disproportionate reward systems.

Knowledge is not a passive or a neutral factor in business. McKinsey & Company emphasises the importance for corporations to see knowledge as a strategic asset. Knowledge strategies as fundamentally people based. This is important not only to the search and distribution of knowledge. It provides the key integration elements between knowledge and more general aspects of business development. People and the networks they build, manage and engage in provide the key source of leverage for knowledge assets. This pushes power out from the centre, headquarters or top of the enterprise across the enterprise to the users of knowledge. The combination of these forces shifts the centre of gravity from the top of the enterprise to all its members and throughout the operations of the organisation.

The management structures can now reflect more fully a more natural 'organic' structure freed from the limitations of established mechanistic structures. Dr Yoshito Maruta of Japan's successful Kao Group has his own version of this when he talks of building the business around a system of "biological self-control." Multiple layers of management become redundant as improved information flows reduce the need for personal scrutiny and supervision. New technologies can flow on a 'need to know' basis further limiting the need for successive levels of the managerial hierarchy to act as filters or funnels. Shifts in the capabilities of and relationships between suppliers, employees, operating systems and customers mean that the locus

of authority moves closer to the point of action. None of these groups expects to battle through layers of bureaucracy for either decisions or delivery.

Untapped Resources

The chief executive on one successful German company quoted by Herman Simon highlights this approach. He comments that "if people are not challenged by hard world, they resort to unproductive activities like writing memos, holding meetings, occupying themselves. Most of the intrigue and bureaucratic hassle that plagues large companies is avoidable..." Percy Barnevik of ABB takes this approach further by asserting the importance of using the total capability of people. "We have to be able to recognise and employ that untapped ability that each individual brings to work every day." For most of the successful, new generation of business leaders the cutting edge of this approach is improved customer satisfaction and competitive advantage. Josef Kratz, the CEO of JK Ergoline links the twin issues of commitment and customer satisfaction in his views. "Wherever the opportunities lie, we will be fact enough and flexible enough to grasp them. And we will strive for market leadership, there's no question about that. We have proven our flexibility ... (we were) determined to become number one in the world. That was our goal, and here we are." Komatsu's "Growth, Global, Groupwide" strategy is based on the same determination to growth through people and customer satisfaction, to win global leadership and extend this across all the firm's activities. These approaches are especially important in knowledge based industries and companies because "unlike capital, knowledge is most valuable when those on the front line control and use it³."

The integration of work, expertise (Fachkompetenz) and technical competence is a priority in Germany companies. This is part of an industrial tradition that means that shop floor staff in engineering and production were able to interact with customers, understand their needs and deliver against their specifications. Studies of industrial innovations that compared the approaches of Anglo-US and North European companies found a marked difference in the policies adopted. Anglo-US companies developing new products and services adopted an intensive, separated marketing approach. They preferred to involve customers late in the product development process, preferable when "a finished product was available." Links between suppliers and customers were usually funneled along a fairly narrow path through sales and purchasing departments.

German firms and other North European companies with shared traditions adopted an extensive, integrated marketing approach. They involved customers at very early stages in the development of new products and services. Idea development, business analysis and early development were often undertaken jointly. Perhaps inevitably, this required the creation of extensive networks of links between people in the supplier and customer firms. Design teams talked to design team, production people talked to each

³ Bartlett, C. *Ibid*

other as did engineering, research and development, sales as well as those formally involved in the transaction. The result was that industrial innovation in German companies was less costly. Customers shared many of the costs. Failure rates were far lower, in part because problems and likely difficulties were identified early. There was little evidence that, fear among Anglo-US firms - that good ideas would be leaked or stolen.

The value of these intimate links between customers and suppliers is increasingly recognised. Dell Computers eradicated the agents between the producer and the customer to improve quality links (and reduce costs). The US retail giant Home Depot "spend whatever time is required with a customer to figure out which product will solve his or her home-repair problem. The company's store personnel are not in a hurry. Their first priority is to make sure that the customer get the right product, whether its retail price comes to \$59 or 59 cents ... Clerks do not spend time with customers just to be nice. They do so because the company's business strategy is built no just around selling home repair and improvement items but around the customer's needs for information and service⁴."

The same principles of openness and involvement are applied by the growing number of entrepreneurs and chief executives who give their employees a direct line - to them - to raise problems or concerns. Some even give every employee their home telephone. These actions add a further feature to the value structure of the enterprise - trust. Organisations in which there is a high degree of trust are more capable of successfully initiating change and responding to imposed change.

Trust

The success of trust based organisations contrasts sharply with the problems of corporations in which a blame based culture has evolved. In blame based organisations the priority is to find someone to blame - note to solve the problem. The clearest condemnation of the old management is the old "truism" - you know why the manager is smiling, its because he has found someone to blame. At its nadir a few years ago, IBM epitomised a blame culture. Top management were too busy blaming others for the problems to take any action. The rest of the managerial labour pool was too busy blaming top management to respond to pressures for change.

Trust based organisations recognised the multi-dimensional nature of the Trust relationship. It operates within the enterprise and defines the nature of the relationships between senior, middle and operations management as well as their links with other colleagues in the enterprise. Trust has a public, formal aspect in the mission or value statement of the organisation. This has real value when it is reinforced by the actions and policies adopted in the organisation. It is easier to build trust on the basis of shared experiences and

⁴ Treacy, M and Wierseme, F. "Customer Intimacy and Other Value Disciplines" Harvard Business Review, Jan-Feb 1993

values. In Germany, for example, the shared educational experiences of technicians and engineers who have attended Fachschulen (technical universities) or other universities plus the unified system of qualifications supports trust building.

Trust based relationships extend beyond the enterprise to its suppliers and customers. The approach adopted by Home Depot works because customers trust the firm to give them the best solution - not the most expensive solution. In Britain, Marks and Spencer established a trust based relationship with its customers by pioneering no quibble product refunds. These external programmes of trust build cannot be separated from internal policies. Alienated and hostile employees will not implement successful external efforts to build trust with customers. It is hard to get people to treat customers well, if they are treated badly. The converse, treat your staff well and they treat your external partners well is formalised by innovative companies like Body Shop but recurs across the business environment in successful organisations.

The ethics, corporate and environmental attitudes adopted by the firm underpin the environment of trust created within the enterprise and with its partners. The leadership group's role in building a trust based organisation often starts with the adoption of a clear and sustainable ethical code and responsible attitudes to the organisation's role in the community and towards the environment. These issues are at the heart of the business agenda but remain at the periphery of the business education agenda.

The earliest successes of empowerment in manufacturing were linked with the efforts to improve quality. Deming and his followers in Japan adopted a fundamentally integrative approach to work and quality improvement. Deming's fourteen points focus on "breaking down barriers", "remove barriers" while "instilling pride in workmanship", "driving out fear." Supervision exists "to help." Firms should "cease (their) dependence on inspection" and shift the emphasis to "education and re-training" as part a "new philosophy" founded on "constancy of purpose towards improvement of product."

It was, however, the delivery of this approach in the workplace that highlighted the nature and extent of the change. The Massachusetts Institute of Technology⁵ study that explored in the depth the revolution in car production produced by the Japanese describes the difference in practice. "the work pace was clearly harder at Takaoko (the Toyota Factory), and yet there was a sense of purposefulness, not simply of workers going through motions with their minds elsewhere under the eye of the foreman. The emphasis at all levels was in "adding value." Notions like "Total Quality", "Zero Defects" etc. cannot be achieved through supervision or inspection. They come from a unified approach to improvement with managers and workers co-operating over the long term. Authority, responsibility and action

⁵ Womack, J.P., Jones, D.T. and Roos, D. *The Machine That Changed The World*, New York, Rawson Associates, 1990

work in harmony. Without this sense of integration and harmony it is impossible to have a system in which "each worker along the line can pull a cord just above the work station to stop the line if a problem is found⁶."

Brainpower

The two central lessons of this shift are emerging. First that access to knowledge and the emerging technologies is essential to the long term success of ambitious firms and managers. Second that it is not enough to be a master of the technological universe. Long term success lies in integrating that knowledge with understanding about what makes people tick. Peter Drucker summarises the essential feature of this process of integration with his comment that "knowledge flows through technology but resides in people⁷." The paradox at the heart of the new industrial revolution is that technological miracles highlight the ability of people to respond but existing structures mean that this is seldom reflected in education for business.

Future competition will call for different skills and competences. These skills cannot be created overnight nor can firms build up the enabling, engaging or exploiting competences quickly or easily. Some of the most successful organisations in Asia, Europe and North America have learned to think and plan ten, twenty even fifty years ahead. They do not assume that they will build up a perfect or exact picture of the future but the process forces them to explore the fit between their current capabilities and those they will need in the future. Derek Wanless of NatWest Bank identified the most striking feature of the banks long term future as their tendency to overestimate how long it would take for developments to occur.

The link between action and reflection relies on creating an environment in which high performance thinking occurs. This type of thinking is characterised by the mnemonic OFTEN. Thinking OFTEN means first and foremost having an open minded view of the issues and the environment in which the organisation is operating. There is the old rule that "the human mind is like a parachute - functions best when it is open. Failure to appreciate the implications of this message is probably the single most important reason for the failures of large and well resourced organisations to identify or respond to change or threat - until it is too late.

Conclusion

The agenda outlined by the Commission on Public Policy and British Business is a useful input to a debate on public policy in the run up to a General Election. Unfortunately, there is a sense that it was a better input to the 1987 General Election campaign than the 1997 campaign. The transformation in the business environment needs a skills, capabilities and competences revolution. This revolution needs to redirect education for

⁶ Womack, J.P. et al *ibid*

⁷ Drucker, P. *Towards The New Economics* London, Heineman, 1994

business away from separation towards integration. Some progress has already been made.

The recent NCVQ Report on highlighted the extent to which management Vocational Qualifications are integrated into other Vocational Qualifications. The Standards produced by the Management Charter Initiative are the most widely used in the NCVQ framework and are incorporated into 180 individual Vocational Qualifications. There remains, however, the massive challenge to education for business of extending this pattern much further by widening the integration to include the sciences and technologies and challenging the pre-occupation with the individual. In 1707, an early account of *the Rise, Foundation and Progress of Gresham College* highlighted the "mighty advantages to the world (that) ... spring from the promoting of learning" a maxim that remains true, today.