

Teaming with bright ideas

Better ways of working together

COMPANIES are eager these days to emphasise that they are organised around teams. A recent series of advertisements for Microsoft featured teams of employees from the giant software company getting excited about the various projects on which they were working together.

Headhunters are increasingly being asked to assemble teams of top executives, not merely to find a single high-performing CEO. And the bosses themselves are expected to be good at putting together teams. David Nadler, the founder and head of Mercer Delta, has recently published a book called "Building Better Boards" arguing that it is time for the corporate board to reinvent itself "and become a high-performing team offering real value to the company".

The speed and efficiency with which effective teams can be brought together to resolve problems is crucial to success in the modern organisation. In a recent *Harvard Business Review*, Philip Evans and Bob Wolf, who work for the Boston Consulting Group, explained how teamwork within Linux, the open-source software "community", managed to build a barrage to protect the system against a virus that had breached a vulnerable spot: "Despite the

need for the highest security, a group of some 20 people, scarcely any of whom had ever met, employed by a dozen different companies, living in as many time zones and straying far from their job descriptions, accomplished in about 29 hours what might have taken colleagues in adjacent cubicles weeks or months."

The authors argue that Linux was more successful at resolving the problem than its more conventionally structured rival Microsoft would have been. The article holds up the Linux crowd as the "virtuoso practitioners of new work principles that produce energised teams and lower costs."

But it is not just geeks in the software industry who have learnt to work in this way. Messrs Evans and Wolf say that the management methods of Toyota, the company that invented "lean manufacturing" (the remorseless elimination of waste) resemble, "in a number of their fundamentals, the workings of the Linux community". One stroke of genius of the so-called Toyota Production System was to apply the principles of lean manufacturing to inventory. What could be more wasteful than having shelves piled high with supplies that were not going to be used for weeks or months?

This gave rise to the famous "just-in-time" method of stock control. Toyota realised that the best way to make this system work was to allow the workers on the factory floor to control the flow of supplies, because they had the information that would keep stocks at their lowest. This forced Toyota to decentralise decision-making and, unlike most Japanese companies, empower its shop-floor workers.

In recent years Japanese companies have swung from being undisputed stars of management practice to being mere organisational mortals. The controls and formal hierarchies that made them such formidable production machines in the 1980s are no longer seen as a big competitive advantage; indeed rather the opposite.

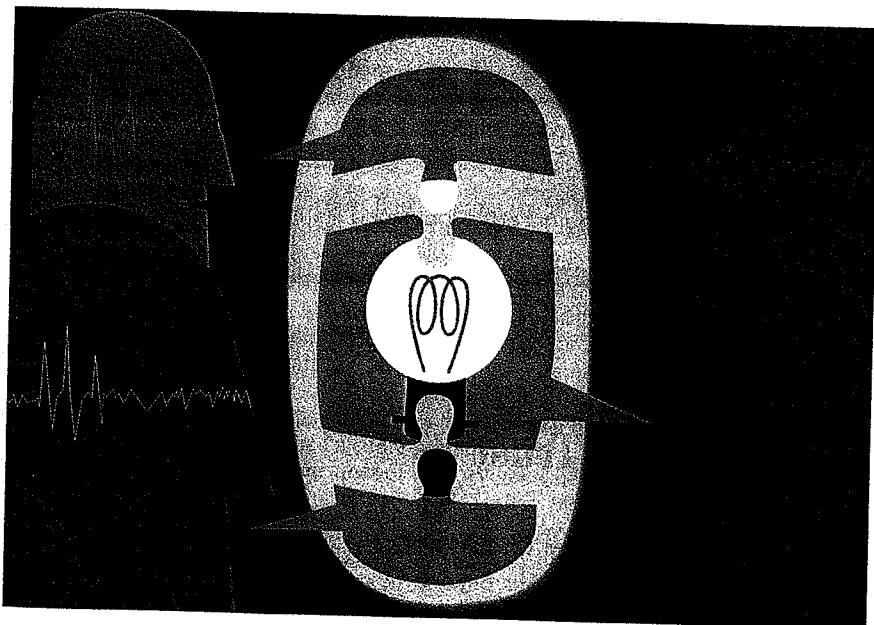
However, Messrs Evans and Wolf argue that Toyota has now moved beyond lean. "In the Linux and Toyota communities," they say, "leading is not treated as a discipline distinct from doing. Rather, the authority of leaders derives from their proficiency as practitioners."

In its latest annual report, Toyota describes a significant new feature of its management system: "Senior managing directors do not focus exclusively on management. They also serve as the highest authorities in the specific operational functions." In other words, specialists have become leaders. This system, says the company, "helps closely co-ordinate decision-making with actual operations". It is no coincidence that Toyota's new president was previously the head of its supply-chain management.

Clusters, mules and brokers

To see how they might make teams work better, companies have begun to look at the informal networks that employees create outside their organisation's formal structure. Mapping of such networks shows that most people stick together in clusters of eight to ten like-minded souls, a group with whom they undertake the vast majority of their communications and with whom they feel "safe".

There is, however, a certain sort of individual who moves across different clusters. He or she is likely to take part in lots of activities and associate with people ▶



► from other departments. He is not necessarily the most charismatic person in a group, but by acting as a “knowledge mule”—someone who carries ideas from one corporate silo to another and thereby sparks off new ideas—he is a key figure.

Brian Uzzi, a sociologist at Kellogg business school, part of Northwestern University just outside Chicago, has looked at ways in which companies can make use of such mules, whom he calls “brokers”. Some law firms, for example, try to identify them and reward them differently, because their value lies in bringing ideas together within the firm, not in bagging new clients, which in the legal profession is the more usual yardstick for rewards. Mr Uzzi thinks that companies should try to identify brokers and make it their business to recruit them.

The more that workers interact with each other, the more likely they are to solve the problems of complexity that are a feature of modern organisations. “The value of interactions is rising”, says the Boston Consulting Group’s Mr Morieux, “because their generative function [meaning their ability to generate new ideas] has become the solution to increasingly challenging organisational problems.”

MBWA—Management by Walking Around, a style championed by Bill Hewlett and David Packard in the 1960s and 1970s as they built up their company, had the boss leaving the rarefied atmosphere of his executive suite and wandering around to see what the troops were up to. The modern-day version of this is MBTA—Management by Talking Around.

It also matters how you talk. Face-to-face or over the phone? By voicemail or by texting? The rapid development of telecommunications has opened up all sorts of new options, yet little research has been done into the relative effectiveness of new ways of communicating.

It seems to make a difference whether a communication is synchronous (eg, the telephone, where you get an immediate answer to your question) or asynchronous (eg, e-mail, where you send a message and then wait for the answer). Research indicates that a complicated sales pitch is less likely to succeed using asynchronous methods. If you want to escape from a predatory salesman, ask him to make his pitch in an e-mail.

The Boston Consulting Group’s Mr Evans says that face-to-face contact is valuable for establishing trust between people,

but once that has been done, it does not need to be repeated very often. People will happily deal at a distance with parties they have come to trust. Mr Evans also points to the growing sophistication of virtual environments (as seen in electronic games such as “Second Life”, in which players interact online with as many as 70,000 other players around the world). He believes these will cause people to rethink what they can do together without actually getting together physically.

The minutiae of meetings

For the moment, despite the growth of virtual alternatives, the most efficient way to get decisions made is often to sit people round a table for a discussion. Indeed, the virtual alternatives to such meetings are becoming increasingly good at recreating that environment. The latest videoconferencing equipment gives participants the impression that they are facing a bunch of people sitting round a table.

Businessmen still go to great trouble and expense to get together with other businessmen and talk. Meetings may stick more closely to the agenda than they used to, and waste a little less time, but the formal business meeting is far from extinct. ►►

Big and no longer blue

IBM has been an early adopter of many of the features of the new organisation. As Linda Sanford, a senior vice-president and one of the highest-ranking women in the company, puts it, “you have to have an organisation that senses change and by itself identifies a working team that can go after the opportunities.” To help create such an environment, the chairman and chief executive, Sam Palmisano, in mid-2003 decided that the company needed to rethink and restate its values. When employees are released from central control, the strongest glue holding them together is the set of values embraced by the organisation they work for.

Following a 72-hour online real-time chat session with its employees, IBM came up with its three values for the 21st century: “dedication to every client’s success”; “innovation that matters, for our company and for the world”; and “trust

and personal responsibility in all relationships”. It may seem banal, but there is common ground here with many other modern firms. IBM has also opened an online suggestions box called “Think Place” where ideas are logged for all to see and to improve upon. Of the first 4,500 to appear, 300 have already been adopted.

The company has devoted considerable resources to redesigning its intranet, its internal online data and its communications system. Like others, it is trying to change the system from being a mere means of distributing messages to becoming a lure that brings together seekers of knowledge and collaborators. Identifying employees with particular expertise within the company has become easier.

“We have to let go of the old command-and-control structure if we’re going to grow,” says Ms Sanford. In a book published last month, “Let Go to Grow”,

A totally new, improved IBM

she argues that instead “businesses must adopt a culture of collaboration—both within their four walls and outside them.” The good news is that the technology to do that is now available.

An internal account of how the company resolved a technical problem in the wake of Hurricane Katrina shows how such collaboration can work: “Using our Blue Pages Plus expertise locator on the corporate intranet, we found the right people within the space of an hour or two, and had a wiki [a web page that can be edited by anyone with access] up and running. Using the wiki as a virtual meeting room, a team of IBMers from the US, Germany and the UK were able to offer a solution to the problem in the space of just a few days.” It all sounds very 21st century. But it will work only if the right incentives are in place to persuade people to work in unconventional ways.

Indeed, as decision-making has been spread more widely within business organisations, and as more people have become involved in it, the number of business meetings has probably increased.

Some companies are attempting to get more value out of this plethora of meetings. Victoria Medvec at Kellogg business school says that when people sit down together, there is a tendency to seek confirmation of what everyone already knows. To avoid this, she suggests, participants should do two things before they even start opening their mouths. They should write down what they think about particular items on the agenda, and they should rate the strength of their views on a scale of, say, one to ten. That way, she says, participants will remember what they

thought before their views were influenced by others.

The emerging "new organisation" pays more attention than did its predecessors to the environment in which people work. Physical space matters, if only to the quality of communication. Some companies are reinventing the "skunkworks", groups of people who work on a project outside the company's normal rules (and outside its normal places of work) to help them come up with extraordinary results. IBM famously used this method in 1980 to invent its personal computer.

The skunkworks concept fell into disrepute when it was seen as just another cost centre, and one with attitude at that. Now it is being revived, but in a different guise. Much of Motorola's Razr mobile phone,

currently a big market hit, was developed in a new laboratory that the company has set up in downtown Chicago, 50 miles (80km) from its main R&D facility in suburban Illinois. The building and the design of the workspace are very different from Motorola's main offices, with lots of bright colours and no dividing walls.

In this type of skunkworks, geniuses are not just left to breathe pure intellectual air, as they often were in previous incarnations; they are also constantly brought into contact with designers, marketing people, production managers and accountants. The idea is not that they emerge at the end of the day with something that makes their competitors say "wow". It is that they come out with something that makes their competitors' customers say "wow". ■

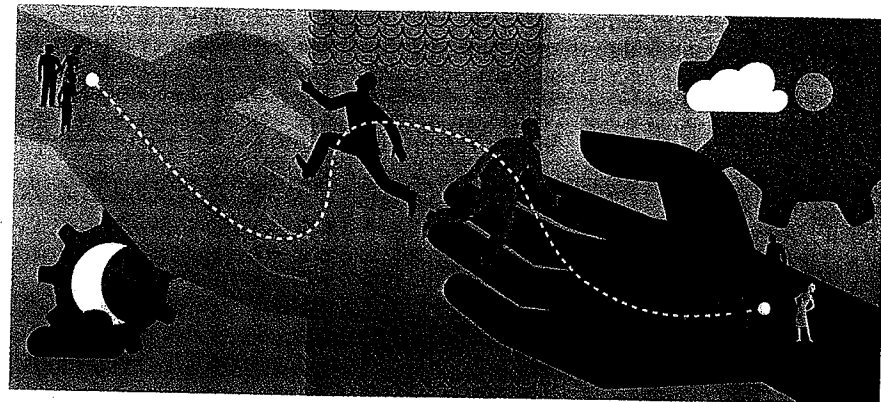
Partners in wealth

The ins and outs of collaboration

THE new organisation contains a mass of contradictions. Charles Knight, Emerson's long-time boss, boasts that his company combines consistency with fundamental change. Parts of Motorola are centralised and parts are not, and those parts change over time. The company's skunkworks, for example, are decentralised to encourage innovation, but its accountants are centralised. "We don't want highly innovative accountants," says Motorola's Mr Canavan.

In a paper entitled "The Strategic Enterprise: Rethinking the Design of Complex Organisations", Mercer Delta describes its vision of the organisational architecture of the future, made up of a number of strategically aligned businesses "linked closely where there are opportunities to create value by leveraging shared capabilities, but only loosely where the greater value lies in differentiated focus". In other words, close and loose relationships will coexist within the same organisation.

In the traditional organisational structure, units were either within the organisation and, as Mercer Delta's David Nadler puts it, "densely connected", or they were outside the organisation and not connected at all. Transactions with external suppliers were at arm's length. By contrast, companies today cohabit with a vast number of joint-ventures and strategic alliances, some more and some less con-



nected. The line between what is inside and what outside the corporation, once so clear, has become blurred.

One of the most contentious of these new relationships is outsourcing—the handing over to others of what were once considered to be core functions of the company. First to be transferred to more efficient providers were companies' manufacturing operations. Firms such as Nike have stretched this idea to such an extent that some of them now make nothing: all Nike's shoes, for instance, are manufactured by subcontractors. Nike employs few people directly. Such companies have become the orchestrators of a brand. Their baton has only limited control over the musicians who play for them, but that

does not prevent them from producing great music (or shoes).

Even such a quintessential manufacturer as Procter & Gamble has joined this bandwagon. "Our core capability is to develop and commercialise," its chief executive, A.G. Lafley, has said. "We concluded in a lot of areas that manufacturing isn't [a core capability]. Therefore I let the businesses go do more outsourcing."

The enthusiasm for outsourcing has recently spread to service jobs such as accounts and IT. One of the fastest-growing areas now is human resources (HR). Kennedy Information, a firm of analysts, estimates that the global HR outsourcing market will grow by 25% a year for the next few years. In November 2005, DuPont, a multi- ▶

national chemicals company, outsourced its HR services, such as workforce planning and deployment, labour relations and performance management, to Convergys Corporation, a firm based in Cincinnati. The 13-year contract covers 60,000 employees and 100,000 pensioners in 70 countries and is worth \$1.1 billion.

But outsourcing is a fluid business. Work that has been handed over to others is sometimes "insourced" back, and not necessarily because it was being done badly outside. Some banks, for example, are bringing the processing of payments back in-house because they have realised that the data they have been handing over to others can become a platform for new business. Software programs that mine data in novel ways can throw up ideas for new products and markets. Over the next few years companies may well come to reassess the value of their HR operations and decide that workforce planning and performance management have become sources of competitive advantage over which they wish to retain control.

The relationships within the new organisation, with their varying degrees of connectedness, can be tricky. Along with greater dependency among businesses, they create new areas of uncertainty. How does a bank protect itself from the risk that employees of a company to which it outsources might steal its customers' PIN numbers? And what happens if the partner in a joint-venture goes bankrupt?

Howard Kunreuther, a business professor at the Wharton School in Philadelphia, argues that this interdependency "is probably the most important issue to start thinking about with regard to risk". Ravi

Aron, another Wharton professor, says that companies need "an extended organisation form", with one shape for the outsourced "market" operations, and another for the in-house "hierarchy". The focal point of this extended organisation is a "programme office" where the company and its outsourcers collaborate on matters of mutual interest, such as quality control and performance. According to Jon Watts, a consultant with Booz Allen Hamilton, "it's got to the point where the outsourcing provider and the client company may form alliances and take financial stakes in one another to make sure their interests are aligned."

Up in the air

A good example of how corporate relationships have changed in recent years is Boeing. The process for developing and manufacturing the aircraft-maker's current 787 model has been totally different from the one used for earlier models. Before the 787, Boeing did all the engineering design work itself. The main reason to change, says Mike Bair, head of the 787 development team, was that the company realised it had to trawl the world and find the best suppliers in order to compete with its main rival in the market for commercial aircraft, the increasingly successful Airbus.

Airbus, a joint European venture involving French, German, British and Spanish partners, started from scratch. Almost by accident it stumbled on an organisational architecture that, along with generous subsidies, helped it overtake the giant of the business in less than two decades.

These days, Boeing is organising itself more like Airbus. It scoured the globe for

new partners and found some in Europe, some in Japan and some not far from its home base in the United States. Whereas with the 777 aircraft the company worked with 500-700 suppliers, for the 787 it has chosen just under 100 "partners".

The difference is not just in the numbers, but in the relationship. Suppliers provide what they are asked for; partners share responsibility for a project. For over six months in 2005, teams of people from the various 787 partners met at Boeing's base in Everett, north of Seattle, to work together on the configuration of the plane—something that until then Boeing had always done by itself. Now the partners are back at their own bases, responsible for all aspects of their piece of the puzzle. The partners are building their own production facilities for their bits of the aircraft. The first flight is scheduled for 2007, and the 787 is due to come into service in 2008. As Mr Bair says, "it puts a high premium on the choice of partners in the first place."

It also puts a high premium on the management of that network of partners. Boeing holds a partners' "council meeting" every six weeks, and has set up a network to facilitate global collaboration which makes it possible for designers all over the world to work on the same up-to-the-minute database.

The company is also putting great faith in videoconferencing and has set up high-bandwidth facilities that are in constant use. People come into their offices in the middle of the night to have virtual meetings with colleagues in different time zones. Technically, the 787 will be an American plane; but in reality it will be a global one. ■

The X and Y factors

What goes around, comes around

ALMOST since the day it began, the dominant academic discipline behind the "science" of management has been engineering. When Oxford University first allowed management to be taught as an undergraduate subject (as recently as the late 1970s), it was introduced as a combined "engineering and management" degree.

Some of the most famous management gurus, notably Michael Porter, Michael Hammer and Tom Peters, trained as engineers first. Many of the most influential

business leaders were also engineers, including Alfred Sloan, who built General Motors, and Jack Welch of GE. Their training taught them to divide things up into small pieces, make each piece better and then put them all together again. It was a bit like Legoland.

Management science's founding father was yet another engineer: Frederick Winslow Taylor, who wandered round factories with a stopwatch and a clipboard to measure workers' productivity. It was the job

of the managers, he told them, to improve that productivity by refining the processes the workers had to perform. In Taylor's world, improvement was defined by time and motion.

Just occasionally, different academic disciplines would raise their heads and suggest that they, too, might have something to add to the thinking on organisational improvement. The economist Ronald Coase, for instance, argued in the 1930s that firms existed to reduce the transaction ▶▶

costs involved in doing things—in particular, the cost of finding business partners, making contracts with them and monitoring the contracts thereafter.

Faster, cheaper telecommunications and the emergence of the internet have dramatically reduced such transaction costs. The advantages of a firm over a marketplace full of independent contractors have been eroded. In consequence, firms have outsourced many of their operations into marketplaces, or are trying to foster internal, in-house marketplaces.

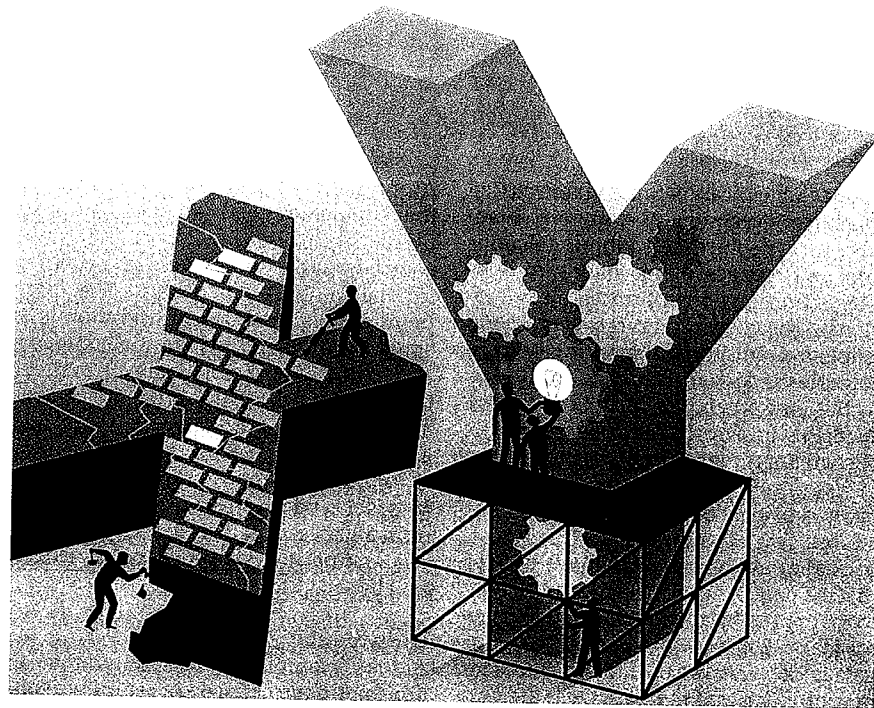
Psychology too has had its moments. Elton Mayo's experiments at the Western Electric Company's Hawthorne plant near Chicago in the late 1920s became a landmark, demonstrating that there was an aspect to productivity that transcended time and motion. When the lights in the factory being monitored were made brighter, productivity improved, as you might expect. But when the lights were made dimmer, productivity unexpectedly improved further. As it turned out, it was not the dimming or brightening of the lights that had an effect, but the attention that the workers were getting.

Beyond engineering

In the 1990s engineering enjoyed a renaissance, in the guise of Business Process Re-engineering (BPR), the dominant management idea of that decade. BPR involved re-organising the company around processes such as purchasing, marketing and distribution, which cut across the traditional corporate silos based on products and geography. This involved using different building blocks, but it still treated the company as a series of pieces to be taken apart, improved and put together again like Lego.

The "new organisation" breaks free of this engineering heritage. In "Results", a recent book by two Booz Allen Hamilton consultants, Gary Neilson and Bruce Pasternak, the authors talk about "the DNA of living organisations". Corporate DNA, they suggest, consists of "four basic building blocks: decision rights; information; motivators; and structure". These combine in different ways to make more than the sum of their parts, expressing distinct identities or personalities. McKinsey's Lowell Bryan also talks about "the personality of the firm".

This switch, from Lego to DNA, echoes one of the best-known classifications of corporate culture ever made. In "The Human Side of Enterprise", originally published in 1960, Douglas McGregor, a Harvard academic, divided management



styles into Theory X and Theory Y. Theory X was the classic command-and-control type of management, the authoritarian style which (McGregor wrote) "reflects an underlying belief that management must counteract an inherent human tendency to avoid work." This is the world that Frederick Taylor observed, and the world that organisation man was designed for.

Theory Y is the antithesis of X. It "assumes that people will exercise self-direction and self-control in the achievement of organisational objectives to the degree that they are committed to those objectives". Theory X is bent on devising the right sticks with which to prod work-shy labour; Theory Y looks for the carrots that will induce them to stay.

McGregor's dichotomy has been hugely influential in management think-

ing ever since his death in 1964. The new organisation lies firmly at the Theory Y end of his spectrum. It challenges employees, in his words, "to innovate, to discover new ways of organising and directing human effort, even though we recognise that the perfect organisation, like the perfect vacuum, is practically out of reach."

McGregor himself came to believe that neither management style in its pure form could work successfully. Firms would find a balance between the two that would shift over time to fit new circumstances. But the new organisation is beginning to prove him wrong. Companies are coming to realise that knowledge workers, who have been identified as the creators of future wealth, thrive only under Theory Y. Theory X is becoming extinct—just like organisation man himself. ■

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