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Thinking for a Living

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Knowledge workers need a new kind of organisation

CENTRAL to much thinking about how organisations should be restructured for the 21st century is the idea that innovation and growth will depend more and more on so-called knowledge workers, the sort of people who, to quote the title of a recent book by Thomas Davenport of Babson College, Massachusetts, find themselves "Thinking for a Living".

Lowell Bryan and Claudia Joyce at McKinsey reckon that knowledge workers (whom they prefer to call "professionals") "represent a large and growing percentage of the employees of the world's biggest corporations". In some industries, such as financial services, media and pharmaceuticals, they think the share may already be as high as 25%.

Others would put it much higher. One of the secrets of Toyota's success, says Takis Athanasopoulos, the chief executive of the Japanese carmaker's European operations, is that the company encourages every worker, no matter how far down the production line, to consider himself a knowledge worker and to think creatively about improving his particular corner of the organisation (of which more later).

In one sense, the organisation in which every member is a knowledge worker already exists: it is the professional-service firm, the organisational structure favoured by lawyers, accountants and consultants. Most such firms are organised as partnerships or quasi-partnerships, where strategic decisions are made democratically at regular get-togethers of the partners.

That is not a practical way to run a multinational company with hundreds of thousands of employees in dozens of countries. But in small ways, technology is already helping big firms to treat their employees more like partners. IBM recently held a 72-hour online chat session (which it called a "jam") among employees from 75 different countries to discuss the company's values, and plans to hold more. "Jams enable a kind of mass collaboration and problem-solving that has simply never before been possible on a global scale," says Irving Wladawsky-Berger, the company's vice-president of technical strategy and innovation.

McKinsey's Mr Bryan soberly points out that we are not all knowledge workers yet. "Fifty per cent of workers are still modern versions of old-style factory workers," he says. They still live off their brawn rather than their brain, and they may be able to live happily with organisational structures that are, as Mr Bryan puts it, "retrofitted with ad hoc and matrix overlays", and that are ill-suited for knowledge workers. Today's complex firm may need a new matrix, with one structure for its knowledge workers and another for its more traditional workforce.

However defined, the knowledge worker is not exactly a new invention. In one of his more prescient moments, Peter Drucker, the great management thinker who died last

November, wrote: “To make knowledge-work productive will be the great management task of this century, just as to make manual work productive was the great management task of the last century.” The date was 1969, and by “this century” he meant the 20th.

Taylor-made

The task he referred to had been begun by Frederick Winslow Taylor, an American Quaker who had devised what he called “a piece-rate system” while working for the Bethlehem Iron Company in the late 19th century. Drucker said that Taylor was the first man who “did not take work for granted, but looked at it and studied it.” Through his study, he “sparked the revolution that allowed industrial workers to earn middle-class wages and achieve middle-class status despite their lack of skill and education”.

Drucker was calling for another revolution, one that would make knowledge workers more productive, but he was still waiting for it when he died. Mr Davenport puts his finger on one of the key problems: measuring the output of knowledge workers. How, for instance, do you measure the value of a string of ideas coming out of a marketing department?

If knowledge worker A works for ten hours and knowledge worker B for eight hours, most people will assume that B has the easier job, not that he is more efficient at it. “Alas,” writes Mr Davenport, “there is no Frederick Taylor equivalent for knowledge work. As a result we lack measures, methods and rules of thumb for improvement. Exactly how to improve knowledge-work productivity...is one of the most important economic issues of our time.”

One way, he suggests, might be to examine how different workers use knowledge; to see which technologies best gather and disseminate the information that knowledge workers need; and to find the workspace that is best suited to people who are highly mobile and need to concentrate a lot.

The sort of technologies he has in mind are the sophisticated online directories that companies have developed to help employees identify expertise and knowledge held by others within the organisation. Examples include Hewlett-Packard's Connex, Motorola's Compass and IBM's Blue Pages Plus. To some extent the effectiveness of these systems can be measured in a Taylor-like way. How many human connections did they enable to take place during a certain period? How valuable do users find them, on a scale of one to ten?

Companies now are investing huge sums in such systems of “knowledge management”, which include their intranets and their internal databases. One company describes its intranet as “a vibrating current of what is going on in the business”. The challenge is to ensure that employees can plug into this vibrating current as and when they need it.

There are three broad approaches to knowledge management. One is to create a system where all information goes to everybody, which is hugely inefficient; the second tells people what others think they need to know, which may not match their real needs; and the third enables them to find for themselves whatever they want to know. Companies like to say that they aim for the third approach, but they do not always find it easy.

In the end, though, do knowledge workers not always contribute something that is unmeasurable? Yves Morieux, a consultant in the Paris office of the Boston Consulting Group, certainly thinks so. "The most valuable human mechanisms are not measurable," he maintains. As an example, he points to the fact that Olympic relay races are often won by teams whose members do not have the fastest aggregate times. When Mr Morieux talked to members of a French Olympic medal-winning women's relay team, he was told that at some point you have to decide whether to run your guts out and literally not be able to see straight when you pass the baton; or whether to hold something back to make a better baton-change and enable your team-mate to run a faster time. The value of this sort of decision-making —each individual's contribution to the team—is, he says, beyond measure.

Mr Morieux concludes that companies should concentrate on designing the processes that knowledge workers carry out, rather than measuring their performance. The key to the success of Ryanair and other low-cost airlines, he says, lies in the way they think about combining processes. Ryanair's cabin crews also do the cleaning inside the aircraft, so if they make a bad job of it they have to face complaints from passengers. In more traditional airlines the cleaners never see the passengers.

Business, says Mr Morieux, is about the sort of trade-offs that Ryanair stewards are making all the time—between punctuality and cleanliness, between service and speed. In the organisation of the future, he says, the main tasks of managers will be to judge what are the most important trade-offs for their particular business; then to decide who is best placed to make decisions about those trade-offs; and finally to delegate responsibilities accordingly.

So what is required to build and maintain the kind of "new organisation" in which knowledge workers will thrive? The three words that most commonly crop up in answers to this question are leadership, talent and culture. To look at the shelves of business books on leadership, the visitor from Mars might imagine this was something that the business community on Earth had only just discovered. But current interest in the subject has been greatly stimulated by the spread of the "disaggregated" organisation: with more responsibility handed down to the workforce at large, many more people than before are having to exercise leadership. The market for books on the subject has grown by leaps and bounds.

The leaders who feature as role models for businessmen these days have changed as well. Few people are looking for lessons in modern leadership from Alfred Sloan, the legendary architect of the once-great General Motors, or Thomas Watson, creator of the first great incarnation of IBM, or indeed Bill Gates, founder of Microsoft. Instead, the most popular figures from history are probably Alexander the Great and Ernest Shackleton.

Alexander is a perennial favourite, given a boost in this era of globalisation by his claim to be the first leader with a truly global vision, the first great bridge between East and West (never mind that one contemporary described him as "murderous and melancholy mad", and that he died of alcohol poisoning at 32).

Shackleton failed to achieve the goals of his polar expeditions, but saved all his men by beating a retreat that required great courage. His story strikes a chord with members of the new organisation, where looking after your team is valued more highly than carrying on regardless in search of some big strategic goal.

Which way up?

The flattening of the organisation has had at least one unexpected consequence. With fewer rungs on the ladder, there is now less opportunity to make visible progress to the top: promotion within the company has become rarer. Some people worry that this will leave a dearth of people with enough experience needed to run an organisation. To counter this, GE and Procter & Gamble have developed a cadre of three vice-chairmen with broad areas of responsibility who are the heirs apparent-CEOs in training.

Young managers are frustrated by having fewer opportunities for promotion; in a recent poll of British managers, 38% said that their company's flatter structure was a barrier to their career. The temptation is to move to another company that can offer an intermediate rung on the ladder.

One of the main challenges for leaders of the new organisation is to hold on to the knowledge workers who are essential to its operation. Some companies have been re-examining the way they reward knowledge workers. Booz Allen Hamilton's Gary Neilson says that for talented people in western companies today, financial incentives matter less than non-financial ones-things such as esteem, a challenging and varied job, and the chance to work in teams. Knowledge workers get a lot more out of corporate life than a pay cheque at the end of the month. For many it is an important channel for meeting new people at a time when traditional organisations which served that purpose—such as churches and clubs—are in decline.

According to Jay Lorsch, at Harvard Business School, affluent societies often assume, wrongly, that workers are motivated only by money. Bostonians were astonished late last year when Theo Epstein, manager of the hugely successful Boston Red Sox baseball team, walked away from a multi-million dollar contract at the age of 31, saying that he was looking for a different kind of fulfilment.

Henry Ford is credited with a flash of business genius when he doubled the pay rate of manual workers on his assembly lines in 1914. By putting the cars they were making within their financial reach, the story goes, he sharply increased the market for his Model Ts. But there may have been a more prosaic reason. Work on the assembly line was so boring that Ford had to provide his employees with large financial incentives to stop them moving back to more traditional manufacturers, where they were responsible for a much larger part of each vehicle.

Knowledge workers may not be tempted by such bribes. Money remains important, but it is being used to achieve different objectives. At IBM, the emphasis in the annual bonus schemes has shifted away from the performance of the employee's individual unit and towards that of the company as a whole. Linda Sanford, a senior vice-president at IBM, says it has not made a huge difference to the amounts paid out, but it has sent a signal that the company wants people to work together.

At Toyota, most of a manager's bonus is linked to the performance of the business in the whole of his region, and only a small amount to his individual performance. BP strips out changes in the price of oil and foreign exchange from its profit-sharing scheme because they are outside its employees' control.

Some companies have discovered that one way they can reduce the loss of talent is by keeping their doors open. Traditionally, once employees had left they were not welcomed back. A senior executive leaving a blue-chip investment bank, say, would never return. Today the banks' attitudes are different. McKinsey too has begun to re-recruit former employees. David Thomas, a professor of business administration at Harvard Business School, explains that companies need to accept that they may not be able to excite all the talented people on their payroll all the time. So let them go, he says, and try to entice them back later.

Keeping the doors open will also help women enter the higher echelons of management, where they have been persistently under-represented. They are far more likely than men to leave an employer in mid-career, if only to have children. Yet few end up returning to their former employers, and those that do rarely return on the same terms as they left. One survey in America last year found that women re-entering the workforce after an absence of three years or more suffered an average reduction in salary of 37%.

But re-entry problems are not encountered only by women. On the beaches of California, a lot of male business-school graduates walk around with surfboards under their arms. They have worked for a time, earned some money and decided to do something different. One day they may want to return to work. Companies that are not prepared to welcome such people back will lose out.