### **An interview with Paul Quintas**

Interview by Sarah Powell



### Paul Quintas is Professor of Knowledge Management at the Open University Business School (OUBS) – one of the largest management schools in the world, with some 30,000 students in over 40 countries.

He was founding Director of the Management of Knowledge and Innovation Research Unit and, until 2000, Director of Research. Professor Quintas is the originator and Course Team Chair for the development of the innovative Open University MBA course Managing Knowledge, studied by over 1600 managers worldwide in 2000. This is believed to be the first such course taught in a business school.

The author of over a hundred books and papers, Paul Quintas has gained international recognition for his research into the management of knowledge and innovation, presentations given in many countries and his work as an adviser to the OECD, the European Commission and national governments. He is also a consultant in knowledge management to the Institute of Management.

## Given the confusion surrounding the scope and role of knowledge management, how would you define the concept?

### **Paul Quintas:**

The best definition of knowledge management I've come across is from Xerox which says that knowledge management is about creating a thriving work and learning environment that fosters the continuous creation, aggregation, use and re-use of organizational and personal knowledge.

This definition emphasizes process. Knowledge exists in many different forms and much knowledge is, of course, in the heads of individuals. So really we're talking less about managing the knowledge than about creating an environment in which people can carry out these various functions and, in particular, create new knowledge and share knowledge.

One of the mistakes many people make is to focus solely on the knowledge you already have. They assume knowledge management is all about tapping into knowledge assets. This is an important aspect, but what is equally important is the need to create new knowledge in an ongoing process.

When we think of knowledge assets, we might think about libraries. Librarians certainly have a major role given their sophisticated view of classification, accessing and so on, which are important aspects. But these are important only up to a point, because they are the means for dealing with information. The problem arises when we introduce this awkward word "knowledge". Much knowledge can be found in libraries, but much of the knowledge in organizations is not captured and codified in the form of information.

Put simply, knowledge management means putting knowledge centre stage in all business and organizational processes. The routines and systems of an organization, indeed all processes that deliver value to the business have a knowledge dimension.

### What business trends have led to the current emphasis on knowledge management?

### **Paul Quintas:**

That's a very good question. It's quite clear that over the centuries, right back to the time of the ancient Greeks, many people have recognized the importance and potential of knowledge. I suppose what is more odd is why managers did not think more about it until relatively recently. It was really only in the 1990s that many people started to question how knowledge should be managed.

I see six reasons why knowledge management came to the top of the management agenda only in the 1990s. First of all, the 1980s saw a period when people were not valued greatly by organizations, many of which outsourced, downsized, got rid of layers of middle managers, retired people at a certain age, and so on. They then discovered that they had given away their organizational memory, the knowledge of how to do things. The 1990s has seen a reaction to this and a realization that people are the key knowledge resource of the organization, and that it is people who have knowledge capabilities – for example to create new knowledge.

The second reason is the acceptance that knowledge itself, and intangible assets – as opposed to the traditional assets of labour, land, capital and materials – that create wealth and are the drivers of economic success. The most obvious intangible assets are things like brands that embody the intellectual capital of an organization, the ability to do things or to offer customers value, and standards. Microsoft's wealth, for example, is based on ownership of the de facto standard operating systems MS-DOS and Windows, not on its bricks, mortar or technologies. Its wealth is not based on the quality of its software but on the fact that everyone has its software.

The third reason is that organizations are increasingly interdependent in knowledge terms. If you want to deliver a product or a service to a customer you have to integrate across many, many disciplines and boundaries. We have to do it as a university; publishers have to do it, integrating technology with people, with customer services and marketing. This means organizations increasingly need to collaborate, and create share knowledge across organizational boundaries, and across functional and disciplinary boundaries.

So organizations need to retain what it is that gives them competitive advantage and, at the same time, they must maintain open boundaries so that they can absorb and also share knowledge. That knowledge interdependence has created a whole set of knowledge management challenges around the boundaries of organizations.

The fourth driver is the pace of change which requires organizations to be continually, and ever more rapidly, learning. The concept of organizational learning is based on the idea of a knowledge base that will rapidly become out of date in most fields. This means that the knowledge within an organization must be continually "reinvented"; this involves constant learning and a culture in which people want to learn and upgrade their skills. And learning at the organizational level means continually reinventing processes and routines.

Fifth comes the realization that competitive advantage comes through innovation; in some fields survival depends on it. In order to innovate

we need to create new knowledge, which requires creation of a culture and systems to support this. That also means fostering a culture which is prepared to take a risk, because innovation will sometimes end in failure.

But, if you take a knowledge management perspective, you will not think in terms of failure or "blame". You will look for what has been learned and the benefits, and explore how you can move forward from that. This requires a cultural shift for many inherently risk-averse organizations.

The final driver - one that most people put first but I always put last - is technology. I see the 1990s as something of a watershed; all the factors I have mentioned seemed to come together then. In technology terms, in the late 1980s businesses were beginning to realize that the information systems on which they had spent a fortune did not actually capture the knowledge that was driving the organization. People like Tom Davenport, who was head of IT research at Ernst & Young in the United States, were emphasizing that most of the knowledge, the information that managers use, was not being captured by information systems. This knowledge was in people's heads, in telephone conversations, and in reports and documents, and it was not being captured by the technological systems.

A fundamental point is that current IT systems can only capture knowledge that has been codified, turned into digital form. But at the same time we have seen the enormous potential of new technology to provide an instant, global communication platform. And communication is a fundamental part of knowledge management and knowledge sharing. This means that, while recognizing the limitations of the old information systems paradigm, we are also seeing the dawning of the communications paradigm in the way we use technology.

### So, to what degree has the Internet influenced the development of knowledge management?

### Paul Quintas:

First of all, the huge amount of information out there that's accessible is remarkable. While we all suffer from information overload, systems and search engines are improving, making identification of the information we need easier all the time. But of course the net only deals with knowledge that has been codified as data or information, even though it may be in multimedia format on the web. It can't deal with uncodified or tacit knowledge. Secondly, the rapid spread of interest in knowledge management is fuelled by the use of the Internet. Knowledge management has been one of the beneficiaries of the rapid awareness that is part of the Internet and the Web.

And thirdly, the Internet is also a very sharp reminder to us that our organizational boundaries are actually very open to knowledge flowing in both directions and that they are now, more than ever before, under threat. It is not just that an organization can look "outside" more; it is also that the outside can look in.

## What prompted your interest in the field of knowledge management and how has your research developed?

### **Paul Quintas:**

My interest goes back quite some time. In the early 1980s, I was researching issues such as the process of technology transfer and I can remember saying at a meeting of the Greater London Council during that period: "it's not technology transfer that is the challenge – it is the knowledge transfer that surrounds the technology."

It is all very well transferring technology into a new context, but you have to have the knowledge to know how to use it, how to develop it and configure it to your own requirements.

In the mid-1980s I was in the Technology Faculty of the Open University researching into the relationship between university knowledge and industry. At that time there was considerable pressure on universities from the Thatcher government to become more responsive to the needs of industry. Questions we asked were: what sort of knowledge does industry want? What sort of knowledge is created in universities? And can that gap be easily bridged?

At that time there were many initiatives focused on things like science parks, which were essentially property initiatives. I was interested to discover whether these actually facilitated the very complex process by which university knowledge becomes used in an industrial context. I also explored R&D collaboration. While at the Science Policy Research Unit, I studied government-sponsored collaboration in industry involving universities and government research departments, to see how knowledge was created in a collaborative context. That became a theme in much of my work and it is a major theme in knowledge management.

In research terms I'm still very interested in the processes and the systems that support

knowledge creation, and I am particularly interested in how this happens across disciplinary and organizational boundaries. How, for example, do you innovate across boundaries? How do you share knowledge when you are collaborating with organizations that are separate and have got their own agendas and their own cultures? How do you manage a situation where people work together and create knowledge in a collaborative context, and then bring that knowledge back into their own organization? These are major challenges.

Apart from the obvious common sense aspects of knowledge sharing, for example in the elimination of duplication, there would seem to be an almost ethical aspect in the sharing and development of certain types of information to allow faster progress towards common goals. Are ethical aspects covered in the course?

#### **Paul Quintas:**

Yes, they are. We have always believed that we would be unable to discuss the subject of knowledge without discussing ethics and power and there are many dimensions to that, for example in genetics where there has been and will continue to be considerable debate. There are also major issues around the ownership of knowledge – the public-private debate – and the long history of organizations attempting to "capture" employees' knowledge.

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At another level, there are ethical issues over what actually counts as knowledge, which has tended to be very much controlled by institutions, professions and universities which decide what is or is not in a syllabus. We all know that there are forms of knowledge which haven't fitted the "world view" of institutions, e.g. in the medical sphere there is alternative medicine which in some countries in certain forms was virtually outlawed despite the benefits experienced by many people. That is perhaps the most glaring example but I think that in all fields there has been a kind of institutional control of knowledge. I believe we need to accept that other forms of knowledge may have validity. Knowledge takes many different forms and validity is not restricted to scientific knowledge. There are many other ways of knowing things, as J-C Spender emphasizes. This too is really an ethical issue.

# What was your role in the design and introduction of the Open University's MBA course in managing knowledge?

### **Paul Quintas:**

In 1995, I set up an interest group to explore the potential for a course in managing knowledge. At the time there were no courses anywhere in the world in this subject. Development took some three years and we launched the first course in November 1999.

The absence of any other such course meant we had nothing to build on except our own research so we had to start by discussing what should be in the course and what the emphases should be. How far, for example, should we go into the philosophy of knowledge, given that our students would be management students not philosophy students? Where should technology figure and how important is it? How should we deal with human resources, and what about intellectual capital? And so on.. It took us nine months of discussion before we could even formally decide that we would indeed develop the course. It then took eighteen months to do so, given that we were developing not only printed materials but also multimedia applications such as interactive CD-ROMs, Web-based activities and so on. And everything has to be tested, quality assured and externally validated.

The resulting conceptualization of knowledge management is very broad, which is necessary because many people believe knowledge management to be about either technology or human resources management. It is about far more than that. In the MBA course we've developed, we've had to define it in a way which includes all the different themes I've been talking about – not only the six drivers but the key processes that I've mentioned: communication, knowledge sharing and knowledge creation and so on. My interest has been both in ensuring the concept is broad and rich enough, and in respecting knowledge as a subject.

Knowledge has posed a challenge to thinkers for literally thousands of years and it is still

contentious. How do we "know" things as human beings? Is it through reasoning as Plato emphasized, or do we know things primarily through our senses, as Aristotle proposed? These two positions have been debated by philosophers for centuries and we need to respect the long traditions of thinking about knowledge.

Knowledge is not as easy to think about – or to manage – as data or information. That is a simplification that people often make. Having said that, I've tried to simplify the concept of knowledge management for the MBA course because one of the things the Open University tries to be good at is making complex things seem simple.

### Finally, what do you consider the major challenges for companies wishing to introduce effective knowledge management into their organizations?

#### **Paul Quintas:**

A very important question. The fundamental challenge is to tackle the very nature of knowledge, including the whole idea of tacit knowledge, knowledge that cannot be codified in terms of language or even mathematical formulae. A good analogy is the ability of a concert violinist. You could spend six months with a concert violinist who describes to you in minute detail how he or she plays the violin, but there is no way that you could then stand up and play the violin. You would have to go through an experiential learning process in order to gain that knowledge.

That's an extreme example but all of us in our work have knowledge like that, knowledge that we have learned through experience and that others would find extremely difficult to gain without going through their own experiential learning. We are often even unaware that we have such knowledge.

You cannot treat knowledge like data, or information, or ball bearings.. Knowledge is of a different order. That said, I don't want to give the impression that information doesn't contain knowledge – it does. Knowledge that has been expressed in language is information. But we need the capability to make sense of it and understand it, hence the importance of learning.

Knowledge creation too is a difficult issue. So much of the emphasis in knowledge management is about what we already know, how we capture it.. and so on. This is clearly very important but the real challenge is to foster an organizational culture in which people create new knowledge.

Then there is knowledge sharing which is fundamental to the management processes surrounding knowledge management. There must be a culture in which people are given time and recognition for knowledge sharing, and they feel there is reciprocity – that others too will share their knowledge.

Other issues are the rapid pace of change and increasingly global competition. The knowledge produced in any organization, indeed in any country, is a minute percentage of that produced globally. Organizations need to improve their capacity to continually "re-invent" their knowledge base, developing what is called in the management literature "absorptive capacity", the capacity to absorb new knowledge on an ongoing basis. It comes back to organizational learning.

So a key realization is that managing knowledge is as much about managing capabilities – such as the capabilities to learn and create knowledge – as it is about managing resources.

This implies that it is very dynamic – refocusing on knowledge means continuous change. There are implications for the way we detect and evaluate benefits, or indeed where we might look for them. This needs some radical thinking.  $\Box$ 

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