Globalisation and the Knowledge Worker

by Sue Brelade and Chris Harman

In the management of human resources, knowledge workers have traditionally been viewed as ‘high value added’, as well-paid and the ‘elite’ of a workforce. However, the development of a knowledge based economy means that knowledge based jobs exist at all levels within organisations, from the data entry clerk to the highly paid games designer. Knowledge based jobs are no longer the preserve of an ‘elite’ and the advantages, and disadvantages, of being a knowledge worker can be found at all levels within organisations and within the wider economy.¹

With globalisation and the gradual equalisation of access to technology, these knowledge based jobs can as easily be located in the rapidly developing economies of nations such as India and China as they can be in the economies of the USA or UK. We are familiar with the ‘off-shoring’ of call centres to India but, increasingly, higher level work is moving ‘off-shore’ - taking advantage of the increasing number of graduates in fields such as engineering and information technology being produced in China and India. In researching the ‘off-shoring’ of engineering work, Wadhwa, Gereffi, Rissing and Ong make the observation that “what could be outsourced next is research and design and that the United States stands to lose its ability to “invent” the next big technologies.”² Globalization and ‘off-shoring’ in science, technology and innovation has been rapid. For example in the 2004 more than 16% of business R&D in the OECD nations was being performed in foreign affiliates, up from 12% in 1993.³

In other fields, companies have ‘off-shored’ parts of their business as diverse as accounting, legal services, order processing and personnel - in many cases utilising web based technologies to provide seamless integration across continents.

Just as globalisation drives the equalisation of prices for goods and services, so globalisation potentially leads to an equalisation, a convergence, in wages and rates of pay for knowledge workers. There is evidence that this convergence is based on an upward movement of wages and living standards in the recipients of ‘off-shoring’.⁴ is

Equally there is the fear that convergence will result in reductions in wages and living standards in those countries losing work and jobs to ‘off-shoring’. 
Where ‘off-shoring’ is being carried out by corporations based in the established economies, then the issues presented are primarily social, for example:

- loss of jobs
- reductions in wages
- loss of community cohesion when employment re-locates

These are matters for governments. However, ‘off-shoring’ also involves the transfer of knowledge and skills to the recipient countries. As those countries continue to develop the infrastructure that supports ‘off-shoring’ – higher educational standards, better technological and social infra-structures, greater affluence - then the change from recipient of ‘off-shoring’ to the development of competitive indigenous industries is inevitable. In such a situation, for the current architects of ‘off-shoring’ to maintain a competitive advantage within the knowledge economy becomes a significant challenge.

For both governments and organisations, part of meeting that challenge involves the effective management of key ‘value-drivers’ in the knowledge economy – the people element of the equation.

**Impact on Knowledge Workers**

The ability, skills and commitment of knowledge workers are one of the key ‘off balance sheet’ resources for an organisation in the knowledge economy. In areas such as R&D, the supply side of Human Resources is seen as increasingly a matter of urgency internationally. However, meeting supply side requirements is not in itself sufficient for success – it is the management of those human resources that will determine their effectiveness.

When knowledge workers are considered as ‘higher level’ workers, the tendency is to base models of management on the relative power relationships between the knowledge worker and the organisation – power derived from solving the critical contingencies facing the organisation. This model provides important insights into the transition in Human Resources Management (HRM) in the knowledge economy.

As the new economy grows however, a more sophisticated model is needed to understand the changes in people management. This needs to recognise that knowledge workers are not an homogenous group, there are different levels with different requirements. There may be a common element in the emphasis on management achieving the willing participation and cooperation of the managed, but there are also differences in the degree and nature of control and direction and in the ‘value added’, in a global economy, by the different levels of knowledge worker.

In this context, to talk simply of knowledge workers without differentiation is likely to become less helpful and less informative over time and less reliable as a guide to people management strategy and the development of human resources.

The model below (figure 1) illustrates the different levels.
Figure 1: Levels of knowledge worker

From Knowledge Managers to Knowledge Handlers

At the level of knowledge handler/user roles involve inputting information, generating routine outputs from knowledge based systems and similar. The knowledge handler/user encompasses those roles involved in utilising knowledge and information to deliver services – for example in a call centre environment where the customer services advisor is both feeding the CRM system as well as using the outputs from the CRM system to respond to the customer enquiry.

The knowledge expert will more often than not be a qualified individual in a traditional professional role, such as an architect, engineer or similar. Whilst this is placed below the knowledge manager level in the hierarchy, the two roles are often combined.

Equally, the level in the model does not determine remuneration and the knowledge expert may well be paid more that the knowledge manager. The knowledge manager role in this model, is an organisational role unlike the knowledge expert who may be a consultant or contractor. The function of the knowledge manager role is to ensure that knowledge and resource inputs are co-ordinated and required outputs are delivered. A knowledge manager may manage a combination of people, systems and technology to deliver results.

Knowledge Creators and Knowledge Capitalisers

These roles will be familiar, albeit with different titles in different organisations. However, the model presented includes two further roles, the knowledge creators and the knowledge capitalisers. The knowledge creators develop new ideas and innovations. In the commercial sector they will be involved in creating and
developing new products and services. In the public and ‘not for profit’ sectors they will be developing innovative approaches to social issues and new directions in social policy.

The top level in this model is given to knowledge capitalisers. These roles involve using knowledge and converting it to financial and (in the public and not for profit sectors) social ‘wealth’. Examples of knowledge capitalisers might include, in the commercial sphere, entrepreneurs. In the public and not for profit sector, innovative local and national politicians and ‘social entrepreneurs’ may be classified as knowledge capitalisers.

As with knowledge experts and knowledge managers, the roles of knowledge generators and knowledge capitalisers may merge – for example in the case of inventors bringing products to market or financiers developing and utilising new financial products and services.

In the knowledge economy, we would argue that it is the knowledge creators and knowledge capitalisers that are at the heart of competitive advantage – both for nations and organisations. It is from developing, and retaining these individuals that both societies and organisations benefit.

**Implications for Management**

The human nature of knowledge – that it is more than just information, that it arises from the interaction between people and information – has fuelled the development of new paradigms of management. These paradigms are based on creating a culture in which knowledge workers willingly share and utilise their knowledge for the benefit of the organisation. This in turns emphasises managing knowledge workers in ways that are deemed acceptable to those workers – introducing social and ethical considerations into the management mix - not for altruistic reasons but out of necessity. This approach is apparent within HRM in the UK with the increasingly employee-centred approach to industrial relations and the emphasis on aligning organisational and individual values – reflected in areas such as recruitment practices, induction and development activity.

Working in such a way involves fostering innovation and creativity towards a common end. For management in organisations this commonly involves:

- Encouraging collaboration
- Making ideas accessible
- Exploring (and resolving) conflicts
- Encouraging dialogue
- Encouraging a sense of community, common interest and trust.

The extent to which these new paradigms are being adopted in the UK is affected by the level of the knowledge worker being managed.

From the hierarchy in figure 1, the lower levels of knowledge worker, those whose roles require less expertise and are predominantly concerned with the inputting of data
or scripted use of knowledge based systems, are still likely to find themselves operating in a command and control management framework. However, even at that level, change is evident. UK call centres, to give one example, are increasingly investing in sophisticated recruitment and training, developing staff to act on their own initiative and utilise their knowledge to deliver enhanced customer satisfaction. The ‘value added’ in such situations cannot be obtained through coercive management models.

The higher up the hierarchy the more pronounced the change and the more likely the management role will be defined in terms of ‘coaching’ and ‘facilitating’ rather than ‘controlling’ and ‘directing’ as seen in figure 2 (below).

![Manager as controller, Manager as coach and co-Worker, Manager as servant and facilitator]

*Figure 2 The changing role of the manager in the knowledge economy*

For example, the management of virtual teams forces a less controlling approach to the management task. It emphasises skills such as project management, prioritising and planning, setting objectives, monitoring outcomes.

This paradigm was illustrated in the research arm of a UK public sector body regulatory body. The organisation employed four managers who, between them, were running projects involving some 400 people. These teams were composed of people from a number of different organisations – university research departments, private sector companies and other public bodies across national boundaries. The managers had clear targets and deliverables, but no direct control over the people engaged on the project. The use of web based technology meant that the teams worked as virtual teams. The managers had to deliver results without the traditional tools of ‘command
and control’. Motivation was based on the intrinsic motivation in the work and the role of the managers was to facilitate, not direct.

This example also points to another feature of HRM in the knowledge environment, which is the fluidity of organisational boundaries. Working together towards an outcome does not mean working for the same organisation. Within local government, in the UK, this is recognised in the creation of local strategic partnerships. These partnerships bring together different agencies and groups to develop an integrated approach to delivering outcomes for local communities. They share information, knowledge and resources across organisational boundaries.

Understanding Cultural Divides

Whether these paradigms, which are evident in developed economies, will transpose themselves to other cultures, is a matter for some debate. Whilst knowledge work can and is being relocated overseas, it is less easy to export an approach to management which may conflict with the cultural values of the receiving nation. This is likely to be more of an issue in authoritarian regimes or cultures that ascribe a low status to women – who traditionally occupy many of the lower level knowledge worker roles in, for example, call centres. However, there is evidence that globalisation in HRM is leading to the adoption of the dominant people management models perceived to deliver economic success as opposed to localisation or simply exporting head-office practices.

Implications for Government

At the highest levels in the hierarchy of knowledge workers, the creators of knowledge and those who capitalise knowledge, the management equation is far more complex and involves both governments and organisations. For these individuals geographic location is of minimal importance – web based approaches mean that they can ply their trade free from such restrictions. Similarly there is less drive towards traditional employment status - the permanent, full-time, ‘corporate’ job. At this level in the knowledge worker hierarchy, the onus is on both governments and organisations to incentivise these individuals. For governments, this means creating a social environment – measured in terms of tax policy, political stability and ‘quality of life’ factors – that is attractive. For organisations it means attracting and retaining with heavily individualised and employee centred solutions - accepting that these knowledge workers will not become employees and becoming adept at managing across organisational boundaries.

The interesting feature of this transition is the convergence of interest between government and organisations in attracting and retaining these knowledge workers whether within a country, an organisation or a partnership arrangement across organisational boundaries.

Governments cannot depend, in the global economy, on the accident of geographical birthplace to retain high level knowledge workers. Governments are in the market to
attract and retain these individuals, as much as the organisations that seek to employ and work with them. Undoubtedly this will present issues of social cohesion – for example the favourable tax regime for venture capitalist in the UK is seen as socially divisive and ‘unjust’ and is a current ‘political’ issue. However, without incentives, without an attractive ‘national brand’, there is little reason for high level knowledge workers to choose any particular geographical location in which to base themselves. Nations that are unsuccessful in this ‘competition’ will lose out on the wealth generation capabilities of these individuals in the globalised knowledge economy, just as much as an organisations that fails to modernise its approach to people management. In the knowledge economy, the wealth creation driver is a tripartite relationship between government, employers/ corporations and individuals.

**Key Drivers in Off-Shoring Decisions**

This integration between factors under the control of governments and factors under the control of organisation is apparent in the drivers behind decisions on location for ‘off-shoring’ operations. These are identified by the World Trade Organisation¹¹ as

- labour costs;
- trade costs;
- the quality of institutions – particularly the legal framework;
- the tax and investment regime;
- the quality of infrastructure – particularly telecommunications;
- skills – particularly language and computer skills.

Driving the attractiveness Ireland and India as leading offshore locations in the IT sector, the WTO¹² identifies factors, which are all government related:

- improvement in the regulatory environment, such as trade liberalization for imported inputs
- lifting of foreign investment restrictions
- favourable taxation
- low-interest export credits

Within this is a difficult message, both to societies steeped in liberal notions of equality and in more traditionalist societies based on hierarchical – and often patriarchal – models. The message is that not all knowledge workers generate the same level of ‘value’, not all have the same impact on wealth creation. For the more liberal societies, it suggests uncomfortable hierarchies and unequal treatment.

For the traditionalist societies, the problem is less with the hierarchy than with who is in that hierarchy. The knowledge worker hierarchy is far more about ability than it is about gender or nationality, caste, class or race. Within such a framework, it is not surprising to see governments adopt the techniques and approaches of large corporations – who are used to a real politic of ascribing different monetary values (measured in earnings) to different individuals based on contribution and ‘value added’.

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For governments to retain the trust of their citizens in such circumstances will involve considerable effort in communicating the realities of the globalised knowledge economy – as it is far easier for individuals to accept different levels of pay in an organisation than it is to accept, for example, differential tax treatment.

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1 “Managing Human Resources in the Knowledge Economy’ paper presented by Chris Harman at the UN 7th Global Forum on Reinventing Government, Vienna, June 2007,
2 “Where the Engineers Are”, Vivek Wadhwa, Gary Gereffi, Ben Rissing, Ryan Ong in “Issues in Science and Technology” published by The University of Texas at Dallas; Apr 9, 2007
3 OECD “Science, Technology and Industry Outlook” 2006
5 “Conventional accounting performs poorly with internally generated intangibles such as R&D, brands, and employee talent—the very items considered the engines of modern economic growth.” Baruch Lev, ”The Old Rules No Longer Apply,” Forbes ASAP (April 7, 1997).
6 OECD “Science, Technology and Industry Outlook” 2006
7 The work of Argyris, C., Schon, D in developing this model of power is acknowledged
8 “Knowledge Management and The Role of HR”, Harman & Brelade, Financial Times Prentice Hall
10 Ibid
12 Ibid