# Chapter 15 Knowledge Worker Performance in a CrossIndustrial Perspective

Rainer Erne Leeds Metropolitan University, UK

#### **ABSTRACT**

Knowledge workers in specific professional domains form the fastest increasing workforce in OECD countries. Since this fact has been realised by management researchers, they have focussed on the question of how to measure and enhance the productivity of said workforce. According to the author's cross-industrial research undertaken in five different knowledge-intensive organisations, it is, however, not productivity in the traditional meaning of the term which is to be regarded as the crucial performance indicator in knowledge work. There rather exist multiple performance indicators, each of which is, moreover, differently graded as to its importance by different stakeholders. These findings, firstly, indicate the need for an alternative definition of productivity when the term is applied to knowledge work. Secondly, they indicate the need for alternative definitions of the specific challenges that might be involved in making knowledge workers productive. Thirdly, they imply different consequences for the management of knowledge workers. This chapter closes abovementioned research gaps by summarising the indicators employed in five knowledge-intensive organisations from different business sectors for the assessment of knowledge workers' performance, by subsequently deducing the specific challenges involved in the management of knowledge workers – consequences affecting various knowledge-intensive industries.

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## 1 THE CHALLENGE OF KNOWLEDGE WORKER'S PRODUCTIVITY

One of Peter F. Drucker's great achievements is said to have been his ability to anticipate key management challenges decades in advance (Byrne & Gerdes, 2005). In 1969, he defined one such challenge as follows: "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" (Drucker, 1969, p.290).

In one respect, Drucker was unquestionably right: Nearly all surveys of past decades point to a fundamental structural change in the labour markets of the OECD countries:

- There has been, from 1985 onwards, a 10 percentage-points increase in so-called 'derivative services', e.g. consulting, coaching, teaching, researching, development and management work (Weidig et al., 1999; Dostal & Reinberg, 1999; Dostal, 2001; Reinberg & Hummel, 2002).
- The number of occupations of the categories 'manager', 'professional occupation' as well as 'associate professional' and 'technical occupation' has increased by 10 percentage-points over the last two decades (UK National Statistics, 2000; Baldwin & Beckstead, 2003; Beckstead & Gellatly, 2004; UK National Statistics, 2006; Davenport, 2005; US Department of Labor, 2006; Brinkley, 2006).
- The demand for employees with an academic education has increased by 190 percentage-points between 1975 and 2004, whereas the demand for employees with a lower educational background is continually decreasing (Weidig et al., 1999; Kleinert et al., 2000; Dostal, 2001; Reinberg &

- Hummel, 2002; Reinberg & Hummel, 2005; OECD, 2006a; OECD, 2006b).
- Levy & Murnane (2006) noted a disproportional increase in the demand for two skill requirements within the US labour force between 1979 and 1999: 'expert thinking' and 'complex communication'. In contrast to this development, they observed that the demand for manual and routine cognitive skills has been continually decreasing within the same time frame (Figure 1).

In regard to Drucker's other thesis, i.e. that the productivity of knowledge workers will be the crucial challenge for 21st century management, it can be stated that he initiated an abundance of research in the description, measurement and enhancement of knowledge workers' productivity (Ray & Sahu, 1989; Sumanth, Omachonu & Beruvides, 1990; Drucker, 1991; Sveiby, 1998; Drucker, 1999; Horibe, 1999; Pfiffner & Stadelmann, 1999; Amar, 2002; Davenport et al., 2002; Hauber, 2002; Newell et al., 2002; Paradi et al., 2002; Ahn & Chang, 2004; Balazova, 2004; Herman, 2004; Ramirez & Nembhard, 2004; Davenport, 2005; Hube, 2005; Suff & Reilly, 2005; Malik, 2006; Stam, 2007; North & Gueldenberg, 2008; Dörhöfer, 2010) – a stream of research that does not seem to come to an end, neither in the near nor in the remote future.

This chapter aims at corroborating three theses:

- 1. Up to now, there is no such thing as a concept of what knowledge workers' productivity implicates, relating to the business practices of knowledge-intensive companies. Different concepts of knowledge worker productivity have been rather developed from certain academic viewpoints than with a view to daily business practices.
- Consequently, the challenges involved in making knowledge workers productive have not been stated with a view to the business

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