The Relation of Knowledge Intensity to Productivity Assessment Preferences and Cultural Differences

David Nembhard, Oregon State University, Corvallis, OR, USA
Min Xiao, Shanghai Dianji University, Shanghai, China

ABSTRACT

The authors investigate commonalities and differences in productivity assessment preferences among managers from two different cultural settings, one in the US and the other in China. They also investigate these differences for two knowledge intensity levels to inform how the type of work being assessed affects these preferences. The results illustrate significant differences among the two organizations, among the knowledge intensity levels, and that these results are generally dependent on the specific measures of performance being evaluated. The US organization’s managers tended to view quality as the most important metric for the high knowledge intensity work, and customer satisfaction as the most important metric for the low knowledge intensity work. The Chinese managers viewed innovation as the most important metric for the high knowledge intensity level jobs, and quality as the most important metric for the low knowledge intensity level jobs. These results indicate that utility-based work productivity model can be used as an evaluation tool to measure knowledge work productivity.

KEYWORDS

Empirical Analysis, Knowledge Intensity, Knowledge Work, Productivity Assessment, Productivity Metrics, Risk Attitude

1. INTRODUCTION

With the ubiquity of information technology, advances in education, and global economic development, Knowledge Work (KW) has become a leading driver of economic growth. Drucker (1991) posed a 21st-century challenge: that the single greatest issue facing managers in the developed world is to raise the productivity of knowledge and service workers. Krugman (1997) asserts that productivity is not the only important metric, but when considering the long-term it may be the largest indicator
of an organization’s success. Käpylä et al. (2010) discuss future productivity challenges, identify KW productivity research questions, definitions, measurement methods, management, design and development work, and suggest future directions for productivity research including quantity, quality and effectiveness. The potential effects of culture on productivity can provide key insights into ways to increase the efficiency and effectiveness of workers. Organizational cultures can vary dramatically, yet some key cultural components have been shown to increase performance and productivity.

Dasgupta (2014) notes a total of 164 diverse meanings for the term culture; thus, there is naturally little agreement on the precise definition of organizational culture (e.g., Scott et al., 2003). However, an organization’s customary language, behavior, beliefs, values, assumptions, symbols of status and authority, myths, ceremonies and rituals are often cited aspects organizational culture (Scott et al., 2003). For example, one useful definition of culture includes shared values and beliefs of a group that become visible via actions and decisions (Kotter & Heskett, 1992; Schein 2004; vom Brocke & Sinnl, 2011). We remark that assessment choices are key decisions that organizational managers regularly make.

Culture is a set of learned behaviors and symbolic systems transmitted through socialization, including material artifacts and systems used by a social group. Organizational culture more specifically looks at patterns of shared values and beliefs over time, which produces behavioral norms that are used to solve problems (Marcoulides & Heck 1993). Organizational values are not directly observable, but comprise the majority culture as manifested by actions. (Schmiedel et al., 2015). Organizational culture is frequently given a type, which falls into one of the four categories using the Organizational Culture Assessment Instrument (OCAI): clan, adhocracy, hierarchy, and market (Cameron & Quinn 2006). These types have been shown to have an effect on productivity based on their cultural fit (Schmiedel et al., 2015; Newman, Nollen 1996). For example, a clan type organization is considered to be collaborative in focus, participatory, and interested in developing its human capital. Adhocracy is focused on creativity and agility, hierarchy is a control focus, and market organizations seek first to be competitive and gain market share.

Increasing productivity through effective performance appraisal has been described as a critical approach for the success of enterprises. (Delery & Doty 1996; Takeuchi et al., 2007). KW assessment can serve to not only increase productivity, but also to improve employee trust, commitment, and job satisfaction (Ghorpade, Chen, & Caggiano 1995; Gurthie 2001; Mayer & Davis, 1999). However, there exists a general consensus in the literature that evaluation techniques which are effective in the USA may not be as effective in other countries since performance appraisal is regarded as heavily dependent upon the cultural norms, values, and beliefs of a society. Thus, due to increased globalization and the widespread industrial use of appraisals, research in this area has focused on investigating the impact of culture (i.e., national culture of the organization) on performance evaluation methods and techniques in order to develop practices that are culturally appropriate and effective.

A large portion of the research that investigates the effects of culture on performance assessment relies on the approach proposed by Hofstede (1980) to describe cultural differences using six key dimensions: Power Distance (PD), Individualism (I), Masculinity (M), Uncertainty Avoidance (UA), Long Term Orientation (LTO), and Indulgence (Ind) (Hofstede et al., 2010). These dimensions describe differences between national cultures by assigning a set of scores for each culture. This approach was developed based on the results of the extensive Values Survey Module sent to 117,000 IBM employees in various countries (Hofstede, 1980). More broadly, the performance evaluation literature, has identified Assertiveness, Uncertainty Avoidance (UA), Individualism, and Power Distance (PD) dimensions as being the most relevant measures for studying performance evaluation (House et al., 2004) and have been used by prior research on performance appraisal to quantify and study differences between cultures (Milliman et al., 1995; Milliman et al., 2002; Ramamoorthy & Carroll 1998; Snape et al., 1988).

Research investigating appraisal practices in different organizations has begun to uncover the impact of culture on appraisal preferences and practices. For instance, Chiang and Birtch (2010)
A Study on the Contribution of 12 Key-Factors to the Growth Rates of the Region of the East Macedonia-Thrace (EMTH) by Using a Neural Network Model
[www.igi-global.com/article/study-contribution-key-factors-growth/69511?camid=4v1a](www.igi-global.com/article/study-contribution-key-factors-growth/69511?camid=4v1a)

The KPIs of Productivity Growth for Enterprises of Different Value Creation Types: A Conceptual Framework and Proposition Development
[www.igi-global.com/article/the-kpis-of-productivity-growth-for-enterprises-of-different-value-creation-types/128816?camid=4v1a](www.igi-global.com/article/the-kpis-of-productivity-growth-for-enterprises-of-different-value-creation-types/128816?camid=4v1a)