Chapter 10
Management Skills and Capabilities in an Era of Technology Disruption

Yvette Blount
Macquarie University, Australia

ABSTRACT
This chapter examines the literature relating to information and communications technology (ICT) and management skills and capabilities relating to anywhere working. The workforce is becoming more global, and workers can work from anywhere and still be connected with colleagues and collaborators. Although ICT is an enabler of anywhere working, sustainable anywhere working requires specific management skills and capabilities. Globalization of work requires organizations to manage workers ranging from full-time employees through to freelancers working in different locations including a central office, co-working center, from home and other flexible options. The chapter concludes by proposing a research agenda and conceptual framework to identify the management skills and capabilities required to successfully manage anywhere working (other terms include telework and telecommuting). The proposed conceptual framework will inform researchers and managers on best practice for adopting sustainable anywhere working to achieve strategic business objectives.

INTRODUCTION
There are some demographic and socio-economic drivers that are changing how work is done and where work is done. A major driver is the changing work environment and flexible working arrangements (World Economic Forum, 2016). At the same time, workers in emerging economies have similar skills to those residing in developed countries; women are more highly educated, and older workers are staying in work longer (The Economist Intelligence Unit, 2015). As the physical location for many jobs becomes less important, organizations can locate talent anywhere in the world.
A second important driver is information and communications technology (ICT). ICT has removed the requirement for low skilled and many middle-skilled jobs by replacing jobs with technology (for example automation) (Vilhelmson & Thulin, 2016). Middle-skilled jobs are defined as jobs that require a high school diploma but not a four-year college degree. Specific examples of middle-skilled jobs include production workers in manufacturing, network administrators, customer service representatives, retail sales assistants and nursing assistants (Burrowes et al., 2014).

A skills gap in middle-skilled jobs has potentially limited organizations ability to compete. The skills gap has arisen from the preference of business leaders in the US to invest in technology instead of hiring full-time workers (Porter and Rivkin, 2014, Burrowes et al., 2014). Organizations rely on skilled workers in countries such as China, India, and Brazil, who can work remotely to fill middle-skill gaps in developed countries (The Economist Intelligence Unit, 2014).

As a response to these trends, organizations are likely to employ a small number of core full-time employees supplemented by colleagues contracting or consulting (freelancing) for specific projects wherever they may reside around the globe (World Economic Forum, 2016). The flexibility of using remote and temporary workers introduces management complexity in two ways. The first is how knowledge can be transferred from temporary workers to the organization. The second is how to develop a corporate culture that keeps workers engaged and productive (The Economist Intelligence Unit, 2015). The management challenge is to be able to exploit cultural differences to gain competitive advantage while managing conflicts and problems (The Economist Intelligence Unit, 2014). An unresolved problem is the skills required for managing the diversity of workers, particularly those working remotely (Blount, 2015).

The objectives of this chapter are twofold. The first objective is to examine the literature on the implications of ICT for anywhere working relating to management skills and capabilities. The second objective is to propose a conceptual framework derived from the literature to guide practitioners and researchers on balancing ICT disruption and human resource management practices.

Background

The academic and practitioner literature has been examining anywhere working (other terms include telework, telecommuting, remote working) since the 1970s (Nilles, 1975, Hunton, 2010, Blount, 2015). The earlier literature in the 1970s and 1980s are also used terms such as working from home, homework, the electronic cottage, Telecottage and telecenter (Nilles, 1975, Bibby, 1995, Toffler, 1980). More recent literature used terms such as virtual worker, virtual teams (Westfall, 2004), home-anchored worker (Wilks and Billsberry, 2007) and flexible work (Papalexandris & Kramar, 1997).

The many terms used in the literature signal the difficulty defining anywhere working usually referred to as telework or telecommuting in the literature. One criticism is that definitions are too broad (Huws, 1991). In Nilles’s early work telecommuting was defined as local work centers or decentralized places of work (Nilles, 1975) because the cost of ICT was prohibitive for individuals. The emphasis was the substitution of telecommunications for transportation. As telework evolved, the definitions included information and communications technology (ICT) and moving the work to the workers usually located in a home office (Welz & Wolf, 2010). Today, anywhere working refers to regular work done during the worker’s usual work time at a location other than a fixed location (Vilhelmson & Thulin, 2016) facilitated by ICT.

A related challenge is determining who qualifies as a teleworker (Bailey & Kurland, 2002). The diversity of work arrangements and employment status may be difficult to determine. For example, should