# Chapter 1 Qualitative and Digital

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### **ABSTRACT**

The disruptive effect of digital technologies is felt across almost all aspects of human endeavour. Research is no exception. The disruptive potential of digital technologies is realised through either doing existing activities differently or through the creation of entirely new activities. In research, digital disruption manifests as an expansion of possibilities for research, and as innovation in the tools and methodologies used to carry out research. In the present chapter, qualitative research is discussed with the aim of providing an overview of the influence of digital technologies on qualitative research for the purposes of stimulating further exploration and discussion.

#### INTRODUCTION

Big data, connectivity and social interaction characterise the digital landscape. Close to 60% of the human population are connected to the internet (DataPortal, 2021). The volume of data generated is staggering. It is estimated that more than 2.5 quintillion bytes of data is generated each day (www.techjury.net), the vast portion of which is generated by social media. All of this made possible by the plethora of digital technologies spawned by the advent of the internet back in the 1990's. The digital landscape provides fertile ground for the evolution of new models of knowledge production. It has been long-recognised digital technologies create a trend towards

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increasing diversity of research activity locations, greater focus on interdisciplinary, multidisciplinary and trans-disciplinary research, and towards greater emphasis on collaboration and informal communication (Houghten, Steele, & Henty, 2003). The global and convenient connectivity enabled by technologies such as cloud computing enable collaboration in research. The image of the lonely researcher working alone dissipated long ago. The ability to collaborate easily regardless of time and place and the array of new and emerging technologies is disrupting the nature of research.

In the present chapter, the changing landscape of research and in particular qualitative research is discussed with the aim of providing a foundation for further exploration and discussion.

#### THE CHANGING LANDSCAPE OF RESEARCH

A large number of applications has materialised to support research through collaboration: e-Science, e-Social Science, computational social science, e-humanities, e-Research and 'Digital scholarship' to name a few (Dutton, 2013). A move towards increased research accessibility is also evident (Pilaar Birch, 2013). The trend towards collaboration in research is so important that the term 'social shaping' has been applied to digital research as a way of capturing the increasingly collaborative nature of research endeavours. Originating in the social sciences, the term 'social shaping' is used by authors such as Dutton (2013), bringing it to bear on digital research. Dutton acknowledges that 'social shaping' encompasses a great diversity of perspectives, and needs to be better refined if it is to be used as a framework for digital research, it does bring to the fore that research in the digital age has an increasingly social dimension to which social scientists can contribute to the "co-production of the technologies, policies and practices of digital research" (Dutton, 2013, p. 191). Moreover, Dutton (2013) predicted that connectivity of digital technologies, digital research is leaving the realms of purely academic endeavours and into the digital economy. Though now almost a decade ago, Dutton realised that the effect of the digital age on research is greater interaction "between academic communities, business and industry" (Dutton, 2013, p. 191). The connectivity enabled by digital technologies is having the effect of moving research towards global contexts and the exploitation of big data and the creation of new resources for research is rapidly taking hold (Dutton, 2013). Evidently, the traditional image of research as a "solitary endeavour" (Renaud, 2001, p. 59) is under challenge. Collaboration and interaction are one defining feature of research in the digital age. Furthermore, the paper based information resources in research have given way to electronic resources including the web, database and e-journals (Ge, 2010).

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