


Chapter 2

A Sustainable Future for the Digitalised World: New Age of Technology Revolution

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ABSTRACT

Due to substantial advancements in communications technology and broad internet availability, the “digital age,” which is defined by vast volumes of different data created at ever-increasing speeds, has come into being. This is causing internal organisational procedures and supply and demand to shift, creating digital imperatives for change. The new way of conducting business in this age of technological upheaval is called “digital transformation,” and it makes use of advancements in the cloud, big data, portable computing, online communities, and analytics. The operational efficacy and client experiences have significantly improved as a consequence. The aim of the empirical research is to assess how sustainability and digital transformation fit into the current business environment, which is shaped by commercial exigencies.

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INTRODUCTION

The digital age, also known as the information age, has fundamentally reshaped how we access, process, and communicate information. It's a world dominated by digital technologies, from the constant presence of personal computers and smartphones in our pockets to the vast interconnected network of the internet at our fingertips. This era, which began in the mid-20th century with the invention of the transistor and continues to evolve at an unprecedented pace, has revolutionized nearly every aspect of our lives.

From the way we work, learn, and shop to how we connect with loved ones and access entertainment, the digital age has woven itself into the very fabric of our society. The internet, in particular, has emerged as a powerful force for communication and collaboration, allowing us to connect with people across the globe in real-time. Social media platforms like Facebook and Twitter have transformed how we share information and ideas, while e-commerce giants like Amazon have revolutionized the way we shop.

The digital age has also brought about significant changes in the workplace. The rise of automation and artificial intelligence has transformed many industries, and remote work has become increasingly common. Educational institutions are also embracing digital technologies, with online learning platforms offering new opportunities for students to learn at their own pace. However, the digital age is not without its challenges. Issues such as privacy concerns, digital divide, and the spread of misinformation require careful consideration. As we continue to navigate this ever-evolving landscape, it's important to be aware of both the opportunities and challenges that the digital age presents.

Both policymakers and practitioners are currently interested in “hot” themes such as Digitalization and Sustainability. However, researchers who are studying their relationship have been cautiously optimistic. Not every digitalization results in the long-term value being created. Certain types of digitalization aggravate growth trends that further push the boundaries of the earth by accelerating inequality and consumption. The Club of Rome (2019) recommended in an open letter to the EU President that we need to make sure that exponential technologies, artificial intelligence (AI), and digitalization are optimised for people, planet, and prosperity through the delivery of a low-carbon, sustainable, socially just, wellbeing-oriented circular society. The German Advisory Council on Global Change, for instance, warns of the dangers in its report *Towards Our Common Digital Future* (WBGU, 2019).

The triple bottom line environmental, social, and economic sustainability—has historically been used to define sustainability. In the digital age, sustainability goes beyond sustainable value and blurs the lines between the triple bottom line. A more comprehensive approach is needed to determine whether digital technology pro-

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