

Chapter 14

Digital Media: Future Research Directions

Anthony Hendrickson
Creighton University, USA

Trent Wachner
Creighton University, USA

Brook Mathews
Creighton University, USA

ABSTRACT

Few would argue that digital technology has impacted nearly every industry, especially media and related firms. Media's initial reaction to digital technology was reactive in nature: How can we convert traditional processes to fit digital technologies, mostly in the form of distribution (e.g., traditional newspapers making content available online)? In this chapter the authors argue that digital technologies have now permeated virtually every aspect of the value chain and are forcing traditional firms to rethink long held business models. The authors identify five areas of potential inquiry: (1) What is a resource in the digital age and why does this matter? (2) Where does value creation fit in today's horizontal business models? (3) What is the demarcation between consuming content and creating content (e.g., user-generated content)? (4) What mechanisms can be used to assess quality in a world where anyone can publish? (5) What is the role of regulation and changing business models in the world of digital technology? They do not claim to have the answers, but they hope to at least create dialogue that encourages future research.

INTRODUCTION

Today's ongoing advancement of technology continues to verify the relevance of Gordon Moore's (1965) comments that led to the now famous Moore's Law. Computer and Electrical Engineering Science have proven amazingly robust in its delivery of astonishing productivity

gains for nearly five decades. However, somewhat overlooked aspects of this continued technological eruption are the challenges involved in utilizing some of the technologies and in creating business models that allow us to monetize these burgeoning technologies.

In this chapter, we explore how technology challenges our current business models and processes. From this brief reflection, we pose a number

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of themes that warrant further examination of the implications technological innovations have on the global workplace.

NEW RESEARCH DIRECTIONS FOR DIGITAL PRODUCT MANAGEMENT

First, it is necessary to consider what we mean by *digital*. Digital data is distinguished from analog data in that the datum is represented in discrete, discontinuous values, rather than the continuous, wavelike values of analog (Tocci, Windmer & Moss, 2006). Thus, the *digitization* of data refers to the conversion of information into binary code, allowing for more efficient transmission and storage of data. A key differentiator of our current age from prior human history is that, as of the last decade, we not only *convert* data to a digital format, but we also *create* data in a digital format. Thus, we now have the digital product, a concept defined by Scupola (2005) as “a product whose complete value chain can be implemented with the use of electronic networks. It can be produced and distributed electronically, and paid for electronically” (p. 2563).

Since its inception, the Internet has continued to change the game for IT (Feller et al., 2008; Ghose, 2009; Moon & Sproull, 2008; Smith & Telang, 2009) and allows business to meet today’s “qualitative and quantitative diversification of demand” (Theodorou, 2006, p. 70). Once hidden behind corporate walls and offering immense competitive advantages that could be leveraged into profitability, technology is now openly accessible on the Internet (Majchrzak, 2009; Raghu et al., 2009). Competitors—even small start-ups—can adopt it and level the playing field. As a result, technology itself no longer offers competitive advantage and higher profit. Instead, the way it is applied to or combined with new information or technologies (i.e., the *network effect*) creates advantage and profitability (Liebowitz & Margolis, 1994).

Not surprisingly, the same evolution has occurred with digital products, as they are the result of the application of technology. The Internet now makes the production and distribution of digital products available to a wide audience, whether regulated or not. “We have all become potential publishers” (Guadamuz, 2009, p. 3). The material we publish may be our original work, a copy of someone else’s work, or a combination of the two with virtually no formal quality control.

In the following sections, we highlight these themes that lend themselves to further study of digital products:

1. Digital products from a Resource Perspective
2. Value Creation in Production and Distribution
3. Integrating User-generated Content (UGC)
4. Quality Assessment and User Perceptions
5. Regulation and Monetization

Digital Products from a Resource Perspective

Vargo and Lusch (2004) discussed service-dominant logic to bridge the gap between goods and services. Their main argument was that service, not goods, is the basis of exchange. They defined service as “the application of specialized competences (knowledge and skills), through deeds, processes, and performances for the benefit of another entity or the entity itself” (p.283). This approach represents a significant change in the understanding of value and exchange that dates as far back as the 1800s. Vargo and Lusch assert that value and exchange are about people, not products: goods are simply empty shells until acted upon to produce a service.

Vargo and Lusch (2004) refer to knowledge and skills as operant resources, meaning they are used to operate on another resource to produce an effect. Operant resources are infinite, whereas operand resources are finite and usually take the form of production inputs.

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