# Chapter 3 Theories in Information Management: Analysing Development Trajectory

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#### **ABSTRACT**

The growth of the information management (IM) discipline and its importance in different socio-economic platforms cannot be over-emphasized. The current development of heterogeneous technologies shows that IM is the focal point of innovations such as blockchain, data science (big data, predictive analytics, etc.), artificial intelligence, automation, etc. This research was motivated by a desire to contribute towards establishing the intellectual identity of IM as a science and as a discipline. An exploration of the inventory of theories and conceptual frameworks enables us to have an understanding of the different methodologies currently being used and therefore define the level of development of the field as a discipline. This chapter aims to present the patterns and trends in theory conducted by different studies during the last 10 years (2009 – 2019). Using a bibliometric approach anchored on descriptive informetrics, the chapter explores the application of theory within the IM field.

#### INTRODUCTION

The ever-increasing emphasis of multi/inter-disciplinary orientation in different fields of enquiry entail that there are no fields which can purely be defined by their original theoretical or conceptual orientations. Over the years, Information management (IM) has evolved to encompass emerging conceptualisations and thinking discovered in various research and practice. As a result, there is now a higher proportion of

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theories and conceptual underpinnings borrowed from other disciplines further adding to the intellectual richness of the discipline. Although, in general, the increased multi/inter-disciplinary orientation of IM is welcome, it is still important to explore the key theories, conceptual frameworks and methodologies that underpin the discipline. The understanding of the key theories is important to accentuate the intellectual identity and ascertain the degree of maturity of IM both as a discipline and a science before it is pre-consumed by emerging fields.

This chapter intends to explore the key theories that form the pinnacle of IM intellectual base. Specifically, the chapter focusses on research over a 10-year period (2008 – 2018) in order to ascertain the level of development of IM as a discipline and a scientific field of enquiry. The key contribution of the chapter is not to propose a comprehensive nor exhaustive list of theories used in IM, but rather to use descriptions and definitions to analyse and interpret the key theories used in IM.

This chapter is arranged as follows: The next section presents the background which articulates the point of departure of this research and presents the development trajectory of IM over the years. After that, key definitions in light of this research are presented. The main body of this chapter explores the contextual nuances on the theories and concepts mostly used in IM research. Thereafter, a bibliometric analysis of the IM studies over the 10-year period is presented. The last sections of this chapter presents an analysis of the key IM theories and frameworks. The chapter ends with a conclusion section which gives a recap of key findings from this research.

#### **BACKGROUND**

In the contemporary age where the fourth industrial revolution (4IR) is hugely pronounced in almost all socio-economic establishments, the value of information as a competitiveness agent and the role of IM in the 4IR are further justified. A diverse range of context-aware technology innovations are being propagated to manage heterogeneous information resources (both static and dynamic). The value of information has been amplified by the proliferation of information and communication technologies (ICTs) designed sorely to focus on managing information in different contexts. Other than the rapid development of information-centric technologies, Kirkham (1991, p. 8) postulates that the result of the greater appreciation of the value of information has brought about exponential growth in the development and use of methodologies and theories concerned with the study of information. Owing to the foregoing, the contextualization of the study of information is a prerequisite for a discussion on the theories associated therewith so as to understand the intellectual grounding of any innovations related to IM. Studies on managing diverse information types have gone through a different era of evolution, hence, this study draws insights from literature and particularly builds on the earlier work by Gorman and Corbitt (2002). Figure 1 shows the different disciples that metamorphosed into the modern-day information management subject.

It is evident from Figure 1 that the central tenet of IM has evolved to incorporate more trans-disciplinary grounding from mathematics, economics, computer science, etc. Because of the increasing multi-disciplinary nature of IM, there are several technology innovations being realised. The different innovations have changed the role of individuals in the IM continuum and actual IM practices. Therefore, IM studies, research and practice have embraced a truly multi-dimensional orientation to keep abreast with the changing IM landscape. Today, there are automatic digital classification systems, intelligent systems able to make advanced decisions given their increased capabilities such as data and predictive

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