

# The Review of Research Topics in the Field of E-Business

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**Abstract:** *Because of its multidisciplinary character and rapid integration into numerous aspects of daily life, e-business has gained significant popularity in the past twenty years. In the early 1990s, research on e-business focused on topics such as internal systems capabilities, adoption, and the impact of technology investments on success, based on ICT theories. However, with the dot.com crash in the new millennium, there was a shift in interest towards performance management, value creation, and strategy formulation. The intellectual capital literature expanded in relation to technological mergers and acquisitions, highlighting the importance of assessing the value of "digital capital". The current trend of embracing technology advancements requires professionals and academicians to have a forward-thinking perspective. This study aims to provide interdisciplinary scholars with a clear overview of the current state of e-business research, identify issues that may become obsolete owing to technology advancements, and explore future prospects in this field. The uniqueness of this study lies in its utilization of an integrated approach that combines a comprehensive review of relevant literature from the past two decades (1995-2013) in the field of e-business, along with a thorough analysis of 41 significant global e-business events that took place in 2013, organized by renowned academic and professional institutions. The utilization of a trilingual (Turkish, English, and German) keyword search method for accessing up-to-date information on current events, as well as translating it into English, has the potential to lead future research in this field. This study is the first to offer a thorough examination of previous e-business research from a broad viewpoint and employ practitioners' insights as a means of predicting future research areas.*

**Keywords:** E-Business, E-Commerce, E-Business Research Topics, Emerging Topics in E-Business

## I. INTRODUCTION

This study is based on the idea that e-business research, compared to other topics in business literature, needs to constantly adapt to the rapidly changing online environment. Professionals and scholars alike are recognizing the crucial importance of digital agility, the ability to adapt to change, and a forward-thinking mindset. The challenges encountered by academic studies in addressing the dynamic and rapidly evolving character of e-business themes are well-known in the research community. Several challenges to doing high-quality e-commerce research remain relevant today, such as the quick and constantly changing nature of terminology and data, which can lead to distortion.

Drew (2002) emphasizes that many management researchers lack experience with e-commerce technologies and that there is a lack of standardized instruments and study techniques in this field. This study aims to provide a clear and comprehensive overview of the current state of e-business research, identify areas that may become obsolete due to technological advancements, and make predictions for the future of this field. It serves as a roadmap for interdisciplinary academics seeking to navigate the complexities of e-business. The uniqueness of this approach resides in the utilization of an integrated technique that combines a comprehensive assessment of relevant literature, covering over two decades of e-business research, with a rigorous content analysis. The utilization of a trilingual keyword search method to access up-to-date information on current events and subsequently translating it into English has the potential to lead future research in this field. Moreover, based on our current understanding, this study is the initial one to offer a thorough examination of previous e-business studies from a broad viewpoint.

The majority of journals from which the keyword searches yielded relevant articles either have a low ranking or are unranked. This suggests that higher ranking journals do not provide as much attention to themes linked to e-business as

they do in other journals. An examination of the A-rated journal, *Entrepreneurship Theory and Practice*, using specific keywords related to e-business and e-commerce, yielded no pertinent findings. Similarly, when searching for the keyword "internet" in the same journal, three relevant results were found. However, only two of these results (Kuratko & Mathews, 2004) and (Drori, Honig, & Shaeffer, 2009) had the words "internet firm" in their title. These two results cannot be considered generalist papers in the context of our current study. Similarly, the *Academy of Management Journal*, which has an A+ rating, did not have any articles with titles specifically related to e-commerce or e-business. The *International Journal of E-Business Research*, a scholarly publication focused on research in the field of electronic business, likewise lacks a thorough literature analysis.

In order to outline a study agenda, Drew (2002) enumerates 10 noteworthy research questions that have been investigated thus far. The compilation of his list was based on an extensive examination of literature from 1995 to 2002, as well as the author's own professional and personal experiences. Consequently, the author concludes that there is a notable scarcity of research on governance and corporate social responsibility in the field of e-business. Drew emphasizes the importance of studying e-business models from a comprehensive perspective. Additionally, Drew highlights the need to examine the leadership qualities necessary for managing in highly competitive and fast-paced situations. In their study, Ngai and Wat (2002) conducted a literature assessment of 275 journal papers published between 1993 and 1999 in order to define and determine the scope of e-commerce. Their classification criteria encompass four overarching categories: application domains, technological considerations, support, and implementation. The authors observe that there will be a definite rise in e-commerce research. They suggest the need for the development of new approaches or guidelines to tackle issues with public policy, taxation, regulation, and privacy. Furthermore, they highlight the scarcity of publications that provide technical e-commerce standards. Rowley (2006) compiles an analysis of conceptual viewpoints regarding the function and characteristics of e-service and the e-service experience, which mostly pertains to the business aspect of e-commerce as it is currently understood. The author provides a comprehensive analysis of the quality factors discussed in earlier relevant research. However, this study primarily focuses on the retail component of the "e". Sukumar, Edgar & Grant (2011) provide a thorough overview of the existing research on e-business risks for UK SMEs in their empirical study. Nevertheless, this article does not meet the criteria to be considered a comprehensive e-business evaluation. In Lambert's (2002) analysis of the e-commerce literature, the objective is to ascertain the precise definition of the word "business model" and provide multiple definitions of the e-business model. Furthermore, the type and breadth of this study cannot be compared to the present one. Adolphs & Winkelmann (2010) conducted a comprehensive analysis of 42 publications that were published between 2000 and 2008. These studies focused on the subjects of e-commerce product personalization and website personalization. The authors categorize customization e-commerce research into three groups: implementation, theoretical foundations, and user-centric elements. Instead of focusing on categorization itself, their research centers on the mechanism of collecting relevant material in the field of personalized e-commerce. The distinguishing factor of the Adolphs and Winkelmann study in this field is their utilization of the VHB-JOURQUAL 2.1 database, a journal rankings database, as their methodological approach, which sets them apart from other literature reviews. In their study, Meckel et al. (2004) present a taxonomy that outlines the process of e-business adoption and the utilization of business and e-business strategies by small and medium-sized enterprises (SMEs). They argue that SMEs should engage in thorough planning before adopting e-business practices. Gupta, Koulamas, & Kyparisis (2009) conducted a comprehensive assessment of research conducted between 1992 and 2008 on the topic of e-business, specifically focusing on production and operations management. Lee, Hwang, & Kim (2007) discuss the lack of specialized journals in the field of e-business. They specifically focus on the increasing use of multidisciplinary authorship and research methodologies in electronic commerce. Wang & Chen (2010) conducted a comprehensive review from 1999 to 2008, where they categorized published e-commerce publications based on academic disciplines. The authors assert that engineering research is the primary source of articles in this discipline, whereas business and management studies only account for a measly 13%.

Following table provides a classification of previous e-business/ e-commerce related studies grouped according to their main subject:

E-Business Strategy/Website	(Weltevreden&Boschma,2008),(Spillan,Parnell,&Virzi,2011), (Doherty&Ellis-Chadwick,2009),(Stace,Holtham,&Courtney,2004), (Acharya,Kagan,Lingam,&Gray,2008),(Harison&Boonstra,2008), (Straub,Hoffman,Weber,&Steinfeld,2002),(Palmer,2002),(Stefani&
Performance and Measurement / E-Metrics	Xenos, 2009), (Ghandour, Benwell, & Deans, 2010), (Bremser & Chung, 2006), (Michopoulou&Buhalis, 2008), (Barua, Konana, Whinston, & Yin, 2001), (Hoffman & Novak, 1996), (Phippen, Sheppard, & Furnell, 2004), (Calero, Ruiz, &Piattini, 2005), (Barua et al., 2001), (Mehta & Sivadas, 1995), (Straub & Watson, 2001)
Strategy Organizational Change - Adoption	(Rayport&Sviokla, 1995), (Porter, 2001), (Hambrick & Fredrickson, 2001), (Wang & Lin, 2009), (Ghilic-Micu& Mircea, 2007), (Jelassi & Enders, 2005), (Ha &Forgionne, 2009), (Mohammadian, Pursultani, & Akhgar, 2010), (Hu, Wan, Ye, & Liu, 2012), (Huang & Benyoucef, 2012), (Chu & Smithson, 2007), (Li & Xie, 2012), (Min & Wolfenbarger, 2005)
Success/ Capabilities Criteria/	(Volery & Lord, 2000), (Sung, 2006), (Ramanathan, 2010), (Eikebrokk& Olsen, 2007), (Sebora, Lee, &Sukasame, 2008), (Doherty & Ellis- Chadwick, 2009), (Zhu, 2004), (Ding & Li, 2010), (Wu & Liu, 2010), (Pandya & Dholakia, 2005), (Kuo, Yen, & Chen, 2011), (Korgaonkar& O'Leary, 2006)
IS & Success/ Generation/ Performance Value	(Wang, 2008), (Licker, 2001), (Delone & Mclean, 2003), (Petter, Delone, & Mclean, 2008), (Chang, Chang, Ho, Yen, & Chiang, 2011), (Brown & Jayakody, 2009), (Liu & Arnett, 2000), (D'Ambra & Rice, 2001), (Hall et. al., 2008), (Soto-Acosta &Meroño-Cerdan, 2008), (Zhu et.al., 2004), (Wheeler, Colbert, & Freeman, 2003), (Marr, Schiuma, & Neely, 2002), (Oppong, Yen, &Merhout, 2005), (Helms et.al., 2008), (Holsapple & Singh, 2000), (Zwass, 2010)
Website Success & Quality	(Madeja & Schoder, 2002), ( Schaupp, Fan, & Belanger, 2006), (Hernández, Jiménez, & Martín, 2009), (Thorleuchter& Van den Poel, 2012), (Lee & Kozar, 2006), (Lee & Kozar, 2012), (Rocha, 2012), (González & Palacios, 2004), (Loiacono, Chen, & Goodhue, 2002), (Chen, Hsu, & Lin, 2010), (Ji-shun, 2010), (Liao, Proctor, & Salvendy, 2009), (Smith, 2008), (López & Ruiz, 2011), (Torrente et.al., 2013), (Chen et. al., 2010), (Schubert &Leimstoll, 2001), (Ji-shun, 2010), (Lazarinis, 2007)
E- Business Models	(Amit & Zott, 2001), (Zott, Amit, & Massa, 2011), (Amit & Zott, 2012), (Teece, 2010), (Zhang, Williams, & Polychronakis, 2012), (Chen, 2003), (Osterwalder & Pigneur, 2002), (Sharma & Gutiérrez, 2010), (Ghezzi, Balocco, &Rangone, 2010), (Sun, et.al., Lambert, 2002)
Trust & Success	(Srinivasan, 2004), (Urban, Amyx, & Lorenzon, 2009), (Velmurugan, 2009), (Zhang et al., 2011), (Reichheld & Scheffer, 2000), (Yoo, Sanders, & Moon, 2013)
Innovation	(Lin & Hsia, 2011), (Zhao, 2006), (Hasan & Harris, 2009), (Soto-Acosta, Loukis, Colomo-Palacios, &Lytras, 2010), (Lin & Hsia, 2011), (Kauffman, Srivastava, &Vayghan, 2012), (Zwass, 2003)

Although the majority of these articles are related to IT and technology, only a small number of them specifically address the stock market, internationalization, and intellectual capital. Similarly, there is a lack of empirical research on the assessment of digital capital. Based on this literature analysis, it can be inferred that no published publication has provided a summary and classification of previous studies on e-business research from a generalist perspective since Drew's study in 2002. In addition to the current literature study, a thorough examination of the agendas of 41 global e-business events held in 2013 by well-known academic and professional institutions was conducted. This analysis focused on identifying the most significant subjects that were discussed during that year. Two renowned search engines, Google and Yandex, were selected to conduct searches using terms in three languages (Turkish, English, and German) to find announcements for future academic and professional conferences, summits, seminars, and fairs taking place in

2013 and 2014. The author generated keywords based on their own judgment. The content that was originally displayed in the native language was translated into English by a qualified translation. The reason for selecting these specific languages was as follows: Based on a recent study conducted by Deloitte and Touche, which included the top 200 online retailers and 8 European countries, Turkey was identified as the leading performer in fulfilment activities such as placing and managing orders, processing payments, handling shipping details, and providing customer service. Additionally, Turkey demonstrated strong capabilities in areas such as personalization and recommendations, multi-channel operations, globalization, mobile commerce, social media integration, and rich content. Germany, following France, secured the second position in terms of the storefront dimension, which includes user management, catalog, product search, user experience, and shopping cart. (Van den Hoef, 2012). English, being a widely spoken language and with the UK and the US leading the way in e-commerce advancements, was the clear and logical initial selection. Several keyword searches conducted in Turkish and German yielded content that was directly generated in English.

## II. FINDINGS & DISCUSSION

The absence of study on governance and moral issues in previous studies, as identified by Drew (2002) a decade ago, remains valid in the present day. This study further supports Athanassakos' (2007) contention that there is a scarcity of research on the corporate value of e-businesses. In the field of finance, there is a lack of significant study on how the stock market reacts to e-business mergers and the technology crash. However, there are a few studies available on this topic, such as the one conducted by Park and Mezias in 2005. Another overlooked and intriguing domain is the concept of intellectual capital within the framework of e-business. The phrase "digital capital" was introduced by Tapscott et al. (2000) in the year 2000. However, it was not used in an empirical study until five years later, specifically in connection to employment websites (Liu & Chen, 2005). In the following year, a research study was carried out to analyze the digital capital indicators in the banking industry of Taiwan (Chang, 2006). A recent study conducted in Taiwan by Hsiung and Wang (2012) explores the possibilities for creating value through intellectual capital in the digital capital business. The author is aware of just one study that specifically examines e-business models and intellectual (or digital) capital. This study is a conference proceeding published by Gholamian et al. in 2010.

## III. CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

The advent of the digital revolution, with its myriad innovations and complexities, will compel academics to reassess their previous work. For example, the widely discussed sub-topic of e-business strategy, known as "e-business models," will now require revision to include the seamless integration of several channels. Research articles discussing the "critical success factors" and "key drivers in e-commerce" need to be re-examined in light of the significant growth of social networks. The performance and e-metrics literature would be considered inadequate without the establishment of approaches for quantifying the influence and effectiveness of social commerce. The increasing prevalence of large volumes of data and the optimal methods for analyzing and leveraging it continue to be a central inquiry across various fields. In the field of human resources and career development, there is a growing demand for social site engineers, alongside search engine marketers, content writers, advertising specialists, social media experts, and digital marketers. The field of website quality literature, which remains a highly relevant subject, will be broadened to include areas such as continuous optimization approaches, content management, responsive design, and seamless integration of devices. Attribution measurement will be used to accurately distinguish between the sources of income generated from various strategies, such as organizational, online, digital, mobile, social, company, and product-based strategies, in order to assess the impact of e-business strategy on firm performance. The themes of the semantic web and web mining, which gained popularity in the mid-2000s according to Stumme et. al. (2006), continue to be popular. Literature heavily focused on WEB 2.0 will soon be substituted by study in the Web 3.0 field, where scholars will address the challenge of understanding the thoughts, desires, and emotions of consumers. Similarly, curated shopping will be expanded by using emotion-inducing aspects to foster stronger connections with the client. From a theoretical perspective, e-business is currently lacking a dedicated framework.



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