

Journal of

Business and Strategic

Management

(JBSM)

**Impact of Digital Technology Capabilities on Operational
Performance of the Media Industry: A Systematic Review**



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Impact of Digital Technology Capabilities on Operational Performance of the Media Industry: A Systematic Review

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Accepted: 6th August 2023 Received in Revised Form: 9th August 2023 Published: 12th August 2023

Abstract

Purpose: The media sector comprises diverse modes of communication, such as print, broadcast, and digital platforms. The emergence of digital media has resulted in substantial changes, posed challenges to conventional media platforms, and presented novel prospects. Notwithstanding, the media sector encounters impediments such as copyright infringement apprehensions and the imperative to generate revenue from digital material. In addition, the industry has been disrupted by technological advancements and competition from digital behemoths such as Google and Facebook. The utilization of digital technology capability and digital innovation has become essential in augmenting operational performance. The significance of digital innovation in the media industry is increasingly being acknowledged. However, there is a dearth of literature concerning the impact of digital tech on performance in this sector.

Methodology: The present study endeavors to bridge the existing research lacuna by undertaking a systematic review of literature to investigate the correlation between digital technology proficiency, digital innovation, and operational efficacy in the media sector. The PRISMA protocol was employed to conduct a search across four databases, and a content-based research methodology was utilized to analyze the collected studies. The search strategy involved the integration of controlled vocabulary terms and keywords, as well as the application of Boolean operators to enhance the precision of the search across multiple databases, including Web of Science, Scopus, IEEE Xplore, and Google Scholar. The inclusion criteria comprise studies that were conducted subsequent to the year 2010, authored in the English language, and have undergone peer-review. In accordance with the established inclusion criteria, a cumulative total of 23 studies (n =23) were deemed eligible for analysis.

Findings: The findings of the systematic review show the significant impact of digital technology proficiency on the functional efficiency of the media sector. The capacity of digital technology, which includes proficiency, assets, and skills, is of paramount importance in propelling digital advancement and augmenting operational efficacy. The integration of

digital technologies within the media industry has resulted in the democratization of content, the convergence of media platforms, and the emergence of novel hybrid media formats. The impact of digital capabilities on business performance can change, but in order to increase business performance, digital capabilities must lead to new digital innovations, which in turn can boost business performance.

Unique contribution to theory, practice and policy: In order to achieve success in the contemporary digital landscape, media entities must strategically confront technological challenges, adopt digital advancements, and adjust to evolving market dynamics.

Keywords: *Operational Performance, Digital Technology, Dynamic Capability, Digital Innovation, Systematic Review, Media Industry*

Background to the Study

The media industry encompasses diverse modes of communication through various channels, including print, broadcast, and digital formats (Malmelin & Villi, 2017). The advent of digital media has brought about a significant transformation in the field of communication (Simangunsong, 2021). Conventional forms of media, such as newspapers, magazines, television, and radio, continue to persist (Barrios-Rubio, 2021). The industry is characterized by its dynamic and evolving nature, which is influenced by technological advancements and shifts in consumer behavior. Media entities function within a multifaceted and swiftly evolving technology-oriented milieu, necessitating their adept execution of diverse responsibilities spanning commercial, recreational, and communal spheres (Omidi et al., 2022). The products of media work are characterized by their distinctiveness from those of other industries, highlighting their unique nature (Murschetz et al., 2020; Omidi et al., 2022). According to Yasa et al. (2019), business performance is a standard used by organizations to determine success, and it represents the ability of the enterprise to explicate its operational activities. Therefore, organizations must attain performance, which reflects their effectiveness in managing and allocating resources.

The operational performance of the media industry pertains to the proficiency and efficacy with which media entities execute their routine operations, encompassing the creation of content, production, dissemination, audience involvement, and revenue generation (Salamon, 2019). The concept involves various elements including the distribution of resources, administration of workflow, technological framework, and the capacity to respond to evolving market conditions. The media industry is impacted by various external factors that include policy and regulatory frameworks, shifting audience habits, and technological transformation (Chua & Westlund, 2019; Barrios-Rubio, 2021). Digital technology encompasses various technologies like computers, smartphones, software applications, and the internet (Yu et al., 2022). Its adoption has transformed business operations, aligning with factors such as digital transformation and strategic alignment in the modern business landscape (Malmelin & Villi, 2017; Yasa et al., 2019). Digital technologies have had a wide range of effects on the media sector. For instance, it has drastically cut entrance barriers, making it possible for smaller players and independent content producers to compete with

long-established media behemoths (Omidi et al., 2022). Content democratization has broadened the media landscape. Digital technologies also enable user-generated content production and sharing. Digital technologies also facilitate media convergence. Traditional media outlets have grown online by using digital platforms to communicate with consumers (Malmelin & Villi, 2017). As they adjust to the digital era, this convergence has eroded the distinctions between various media industries, including television, print, and radio (Barrios-Rubio, 2021). In addition, it has spawned fresh hybrid media forms like cross-platform collaborations and multimedia storytelling (Salamon, 2019).

Digital technologies have, however, also introduced obstacles to the media sector in addition to these benefits. Concerns about copyright protection and intellectual property rights have been expressed as a result of how simple it is to access and share digital content (Panagiotidis & Veglis, 2020). Additionally, because established revenue structures are being challenged, the monetization of digital material has grown to be a critical concern. In the digital age, media companies are struggling to create viable economic models (Carlson, 2019; Milosavljević & Vobič, 2019). Moreover, the media industry is currently experiencing significant disruption, facing not only technological advancements but also competition from dominant players like Google, Amazon, Facebook, and Apple (GAFA). This has prompted a need for legacy media (traditional mass media outlets) to explore new formats and reach audiences beyond their conventional channels, posing substantial challenges for them (Murschetz et al., 2020). Therefore, it is necessary for legacy media to strategize how they ought to address technological issues, as well as hyper-competition in the digital era for them to succeed. According to Khin and Ho (2018), there are several factors that mediate the relationship between digital capability and organizational performance. Specifically, digital innovation has been identified in literature as one of the main factors. The growing significance of digitalization has led to a heightened focus on digital innovation as a crucial area of research, given the escalating demand for innovative digital solutions. Notwithstanding the increasing scholarly attention towards digital innovation, the body of literature pertaining to this subject remains in its nascent phase. The majority of research on digital innovation tends to approach the subject matter through a lens that emphasizes technical, architectural, or information system perspectives (Gao et al., 2023). Moreover, the context of most previous studies have been on general industries, with a little focus on the media sector.

Statement of the Problem

The improvement of organizational performance is one of the most critical objectives of every business. In this regard, the impact of digital technology on a firm's performance continue to generate great scrutiny by scholars (Yu et al., 2022). In light of the dynamic market landscape characterized by the proliferation of digital technology and the increasing need for customized experiences, it is imperative for organizations to adapt in order to effectively manage strategic and operational transformations (Yasa et al., 2019; Yu et al., 2022). The adoption of digital transformation has become a critical imperative for businesses to leverage networking capabilities, optimize quality and efficiency, and reconfigure their

fundamental competitive advantage (Malmelin & Villi, 2017). All industries have been affected by digital transformations, including the media, which is now forced to urgently innovate production methods, optimize resource allocation, and enhance production efficiency (Barrios-Rubio, 2021). However, emerging evidence shows that digital capability alone is not sufficient to improve operational performance (Heredia et al., 2022). Previous studies that have explored the impact of digital transformations have not explored mediating factors, such as digital innovation (Heredia et al., 2022). According to Yana et al. (2019), technological innovation is a critical tool for enhancing performance and competitiveness. Prior scholarship on digital transformation and business performance has emerged across various disciplines, including sociology, management, IT, and journalism (Vial, 2019; Yasa et al., 2019; Yu et al., 2022). In recent years, there has been a notable increase in research on the factors that influence the operational performance in the media industries (Murschetz et al., 2020; Panagiotidis & Veglis, 2020; Omid et al., 2022). The most commonly used theories to explain digital capabilities in the media include the Resource-based view (RBV), the dynamic capability view (DCV), and the Unified Theory of Acceptance and Use of Technology (UTAUT).

These are crucial in understanding how media organizations adopt and utilize digital technology. RBV and DCV provide insights into the strategic management of resources and capabilities to enhance operational performance, while UTAUT helps explain user behavior and intention to use digital technology systems in the media industry (Teece et al., 2016; Vial, 2019; Yu et al., 2022; Liu et al., 2022). Despite the increased interest in the subject, the existing literature on this topic is still highly disjointed. Although some efforts have been done to connect the various concepts and ideas conceptually, there is still a gap due to missing of a systematic and inclusive approach to critically connect the empirical studies. Therefore, it is necessary to do a systematic review of existing scholarship on operational performance in the media industry to integrate findings from different studies. Through this approach, the study will contribute to the growing body of knowledge on the impacts of digital technologies on the media industry. The study offers a contemporary foundation for posing numerous intriguing and uninvestigated inquiries, which can lead to a more comprehensive understanding of media work. This can aid upcoming scholars in navigating the various orientations that exist within this research domain. From a pragmatic perspective, this could assist media practitioners in developing a more deliberate understanding of their occupation across various contexts and sectors, and potentially inspire them to pursue more significant approaches to media work.

Specific Objectives

- i To assess the impact of digital technology capability on operational performance of the media industry.
- ii To examine the impact of digital innovation on operational performance of the media industry
- iii To evaluate the impact of digital technology capability on digital innovation in the media industry

- iv To assess the mediating role of digital innovation on the relationship between digital technology capability and operational performance of the media industry?

Research Methodology

Research Design

The methodology used in this research is a systematic literature review (SLR) approach. Following a protocol explained by Omid et al. (2022), the study extracted studies from four databases (Web of Science (WoS), Scopus, IEEE Xplore, and Google Scholar). The PRISMA protocol was employed to facilitate the creation of a corpus of scholarly articles (Calderon-Monge & Ribeiro-Soriano, 2023). Afterward, a content-based research approach was employed to scrutinize the studies. The PRISMA protocol provides a graphical depiction in the form of a flowchart that streamlines the different phases of the SLR procedure, which include identification, screening, eligibility evaluation, and incorporation. The main aim of this methodology is to formulate a plan, analyze, and evaluate research initiatives with the purpose of extracting and integrating knowledge from academic resources (Calderon-Monge & Ribeiro-Soriano, 2023).

Search Strategy

The databases Web of Science (WoS), Scopus, IEEE Xplore, and Google Scholar were thoroughly reviewed. Controlled vocabulary terms (subject headings) and study-related keywords were combined to conduct the search. The search technique intended to find publications that investigated how the media industry's operational performance was impacted by digital technologies. Key words including "digital technology capability," "operational performance," "media industry," "digital innovation," "resource-based view," "dynamic capabilities," and "media organizations" were included in the search criteria. To narrow the search and find relevant articles, Boolean operators (AND, OR) were used. Each database required a different search syntax. In Web of Science and Scopus, the search strategy was (("Digital technology capability" OR "Digital capabilities" OR "Digital resources") AND ("Operational performance" OR "Performance measurement") AND ("Media industry" OR "Media organizations" OR "Mass media") AND ("Digital innovation" OR "Innovation adoption")). IEEE Xplore's search technique included technology and media studies-specific subject headings. Google Scholar used key terms, phrases, and combinations without regulated vocabulary to capture more literature. The search strategy was refined iteratively based on initial search results and consultation with research librarians to ensure its comprehensiveness and relevance to the study's objectives. Additional filters, such as publication date and language, were applied to further refine the search results. The selected articles underwent a rigorous screening process based on predefined inclusion and exclusion criteria to identify those that met the eligibility criteria for the systematic review.

Data Analysis

A thematic content analysis was done to identify, analyze, and report patterns concerning the study questions. The initial phase of the study involved an extensive review of selected final

papers, focusing on reading and taking comprehensive notes. Subsequently, prevalent patterns and themes were discerned, resulting in the creation of preliminary semantic codes that encapsulated the salient features of the aforementioned papers. The present study involved an examination of the associations between the aforementioned codes and the gathered notes, with the aim of revealing overarching subthemes. The objective of this endeavor was to enhance comprehension of the correlation between digital competencies and operational efficacy within the media sector, in accordance with the study's aim. Figure 2 Shows the review process used in the study.

Results

Data Synthesis and Thematic Analysis

What is the impact of digital technology capability on the operational performance of the media industry?

The review generated insights concerning how digital technology capability impacts operational performance of the media industry. Various studies reported on how different digital technologies have been used in the media, and their impacts on various aspects of the industry. The results provide insight into the correlation between digital technology proficiency and diverse facets of operational efficacy in the media sector. Agur's (2019) study emphasizes the cultural setting and the rise of new actors, such digital fixers, who make it easier for journalists to get material. Greater connectivity and insularity in media work are made possible by mobile messaging apps. The study places a strong emphasis on how professional autonomy and long-standing journalistic norms play a part in choosing whether or not to utilize chat apps. The findings help explain how the use of digital technology, particularly mobile chat apps, affects the operational effectiveness of the media sector by influencing communication, information availability, and journalistic issues. Various other studies that were reviewed mirror these findings (Cherian & Farouk, 2015; Guo, 2021). Kosterich and Napoli (2015) examined industry advancements pertaining to social TV analytics within the United States. The analysis conducted by the authors emphasized the favorable influence of digital technology proficiency on the operational efficacy of media enterprises. The application of digital technology in the analysis of television data has facilitated the enhancement of the overall operational efficiency of these organizations. These assertions are supported in the studies by Doyle (2015), Cherian and Farouk (2015), and Firmansyah et al. (2022)

A quantitative cross-sectional survey was conducted by Khattak and Nasir (2012) in Pakistan to ascertain the primary challenges that online media presents to traditional print newspapers. The research results revealed that the escalating dominance of online media had a noteworthy effect on the operational performance of print newspapers, as they encountered an expanding peril in light of technological progressions. In Switzerland, Omidi et al. (2022) looked into the changes in media production due to technology. The findings of the study highlighted the importance of digital technology expertise in enhancing operational performance. The authors acknowledged that the use of technical advancements had made it possible for media

organizations to improve their operational proficiency, output, and effectiveness in conveying information and engaging with their audience. A study by Cherian and Farouk (2015) looked at how operational performance is impacted by digital technology capability. The literature review examined how the United Arab Emirates' publishing industry would be affected by the widespread use of electronic newspapers. The analysis found that the publishing industry's financial advantages and operational efficiency were positively impacted by the adoption of digital technology skills, such as web-based news portals. A similar study in China by Guo (2021) investigated the present issues connected with the adoption of novel media technology in China by conducting a thorough examination of the literature. The study's findings suggest that knowledge of digital technology was crucial in improving the quality and speed of information distribution, which in turn had a positive impact on media sector operational efficiency.

The results of the review confirm that the capability of digital technology has a substantial impact on the operational performance of the media sector. Online platforms, TV analytics, and new media technology have all been integrated to increase efficiency, productivity, income generation, and audience engagement (Arsenault, 2017; Agur, 2019; Barrios-Rubio, 2021; Wu, 2022). Digital technology has helped media companies adapt to changing circumstances and suit audience needs (Cherian & Farouk, 2015; Omidi et al., 2022). Digital technology have helped media companies improve content delivery, production, and performance (Barrios-Rubio, 2021).Munger's research (2019) examined the financial implications of clickbait media in the US, revealing the growing role of digital technology in the spread of incorrect information. The findings of the study emphasize the significance of digital technological expertise in enhancing the transmission and influence of media information, whether those effects are positive or negative. Social media and digital platforms have made it easier to share and consume news and information, which has expanded accessibility and a wider audience. This has affected both audience engagement and operational performance (Khattak & Nasir, 2012). Beyond content distribution, digital technologies have affected the operational performance of media firms, particularly in the fields of data analytics and audience monitoring.

Wayne's (2021) analysis of the commercial discourses surrounding Netflix's audience statistics brought to light the use of audience data for differentiation. The situation serves as an example of how the media industry has come to rely on digital technology's capabilities, particularly in the areas of data collecting and analysis, to shape content plans, audience segmentation, and revenue creation (Wayne, 2021). Taken together, the studies' results highlight the significant influence of digital technology proficiency on the operational efficiency of the media sector. The media industry has undergone significant changes in recent times due to the advent of digital technologies (Doyle, 2015). These technologies include online platforms, data analytics, social media, and audience measurement tools (Cherian & Farouk, 2015). They have had a profound impact on various aspects of the industry such as content delivery, audience engagement, revenue generation, and operational strategies. The assimilation and adeptness in these technologies are pivotal for media

enterprises striving to conform, flourish, and sustain competitiveness in the digital epoch (Khattak & Nasir, 2012; Lamot, 2021; Lu & Nam, 2021).

What is the impact of digital innovation on the operational performance of the media industry?

The systematic review also examined the effects of digital innovation on the operational performance of the media sector. The results offer significant perspectives on the impact of digital advancements on diverse facets of the sector, elucidating the correlation between digital innovation and operational efficacy. The media industry has undergone a significant transformation in terms of content production and distribution as a result of digital innovation (Barrios-Rubio, 2021). According to Doyle's (2013) research, media organizations have transformed into digital multi-platform entities by incorporating digital technologies. The transition has resulted in noteworthy modifications in the manufacturing procedures and yield, thereby enabling an increased availability and variety in the dissemination of content (Doyle, 2015). Cherian and Farouk (2015) found that the incorporation of digital advancements, such as web-based news portals, social media, and mobile applications, has augmented the operational efficacy of media enterprises by enhancing the scope, interaction, and pertinence of their content. Moreover, the employment of digital technologies has enabled the endurance and adjustment of conventional media during the epoch of digital civilization. Firmansyah et al. (2022) conducted a study which demonstrated a noteworthy transition from traditional print media to digital news sources, highlighting the transformative influence of technological advancements on the media industry. The advent of digital technologies has presented prospects for conventional media to expand their scope, broaden their sources of income, and interact with a more extensive viewership via online platforms and nascent media technologies (Guo, 2021).

Moreover, the media industry has been subject to a significant transformation in audience measurement and data analytics due to digital innovation. The incorporation of digital technologies, such as TV analytics and audience metrics, has facilitated media organizations in acquiring significant insights into audience preferences and behaviors (Kosterich & Napoli, 2015). According to Wayne (2021), media organizations have been enabled to enhance their content strategies, customize their offerings for particular target audiences, and enhance their operational performance in relation to audience engagement and revenue generation.

Besides, Barrios-Rubio (2021) explored how digital innovation affects the media industry's operational performance, particularly in the context of Colombia's radio sector. The results point to altered production and consumption behaviors as a result of the industry's evolution in the digital environment. To adapt to the digital ecosystem and improve their operational effectiveness, radio stations now need to integrate web-radio, app-radio, and social media platforms. According to the survey, radio content's core values in the digital age are connectedness, ubiquity, timelessness, and interactivity. Additionally, the focus of audience attention on smartphone displays has made it necessary to incorporate video forms and terminology to draw in and keep audience involvement (Barrios-Rubio, 2021). Furthermore,

the advent of digital innovation has caused a disruption in conventional methods of news production and consumption. Wu's (2022) research emphasized the disruptive influence of nascent media technologies, including data news and robot news, on the hegemony of television news. The advent of digital innovation has presented novel challenges and prospects for the news industry, thereby requiring the adoption of innovative approaches to news communication. Although traditional news remains relevant, it is unlikely to be entirely supplanted (Wu, 2022). The impacts of digital innovation transcend the realms of content and audience analytics. The impact of digital society has also had an effect on the endurance and adjustment of conventional media. Firmansyah et al. (2022) conducted a study that highlights a noteworthy transition from traditional print news to digital news, underscoring the transformative impact of digital technologies on the media industry. According to Guo (2021), conventional media channels have utilized digital platforms and emerging media technologies to expand their coverage, diversify their sources of income, and interact with a wider demographic.

How does digital technology capability affect digital innovation in the media industry?

The aim of this segment is to investigate the correlation between digital technology proficiency and digital innovation within the media sector. The findings of various studies indicate that digital technology capability plays a crucial role in driving and shaping digital innovation within the sector. By incorporating cutting-edge technologies, media entities can facilitate inventive practices, optimize operational efficacy, and adjust to the ever-changing digital milieu. According to Barrios-Rubio (2021), digital technological capability is crucial for promoting the adoption and application of digital innovations in the radio sector. The industry's capacity to use digital technologies to improve operational performance and adapt to the changing demands and tastes of their audience is demonstrated by the use of web-radio, app-radio, and social media platforms. The research shows how radio stations may interact with their audiences in new ways, such as through multi-device, multi-tasking, and multi-user experiences, thanks to digital technology capability. The radio industry has incorporated social media platforms into its operations, changing how stations and listeners interact. They contribute to the creation, sharing, and involvement of audiences. Notifications are a part of radio stations' digital production workflows since they help them draw listeners, communicate breaking news, and promote exclusive material. (Barrios-Rubio, 2021).

Doyle (2013) examined the effects of multiplatform distribution on newspaper production, content, and business models. The study focused on prominent UK newspaper groups and highlighted the need of strong integration between IT, commercial, and editorial operations, as well as the desire to experiment and develop, in using digital technology. The findings stressed that newspaper publishers must adapt and innovate to survive technological transformation and diminishing print readership and advertising. Adding web and mobile channels to print distribution was a frequent reaction. These findings are supported by a related study (Doyle, 2015). Findings further build on prior research emphasizing the relationship between resource allocation and investment patterns inside media companies and their capacity to adapt, perform well, and generate new revenue in the digital world (Oliver et

al., 2014; Cherian & Farouk 2015; Kalombe & Phiri, 2019). The capacity of media organizations to efficiently employ and exploit digital technologies is encapsulated in the concept of digital technology capability, which comprises their expertise, competencies, and assets (Arsenault, 2017; Guo, 2021). Research has indicated that the proficiency in digital technology plays a crucial role in the commencement, execution, and triumph of digital innovation endeavors. The study conducted by Omid et al. (2022) involved a systematic review of literature aimed at investigating technological advancements in the field of media work. The research underscored the significance of possessing digital technology proficiency in facilitating innovation and adjusting to the evolving media milieu. The study determined that media entities possessing greater proficiency in digital technology are inclined towards adopting and executing pioneering digital tactics.

The capacity of digital technology empowers media entities to investigate and embrace nascent technologies that stimulate digital advancement (Khattak & Nasir, 2012; Lamot, 2021). The incorporation of technological advancements, such as artificial intelligence, data analytics, and automation, facilitates the optimization of operational procedures, customization of content, and augmentation of user engagement for media enterprises. The study conducted by Lu and Nam (2021) was an experimental research endeavor that aimed to optimize video auditing for the purpose of providing algorithm-based judgments. The research emphasized the significance of artificial intelligence in producing concise videos that effectively engage the viewers. According to Lu and Nam's (2021) research, the ability to utilize digital technology is a crucial factor in effectively utilizing new technologies for the purpose of creating and delivering innovative content.

In addition, the capacity of digital technology enables organizations to exhibit agility and responsiveness in the face of evolving market demands and audience preferences. Media firms that possess strong digital technology capabilities are more adept at adjusting to disruptive technologies, exploiting nascent trends, and exploring novel modes of content creation and dissemination (Lamot, 2021). The challenges and opportunities presented by automation in the newsroom were investigated by Milosavljević and Vobič (2019). The study emphasized the significance of possessing digital technology proficiency in adopting and assimilating automation advancements, thereby upholding fundamental principles of journalism while satisfying changing audience demands. The digital technology capability enables the facilitation of collaboration and partnerships, thereby fostering a culture of innovation within media organizations. The study conducted by Agur (2019) pertained to qualitative research that explored the function of mobile chat applications in the realm of journalism amidst political turmoil in Hong Kong. The research revealed that mobile chat applications have introduced novel forms of cooperation and joint creation within the field of journalism. This emphasizes the potential of digital technology proficiency in enabling media entities to utilize collaborative tools and platforms for the purpose of innovative content creation, verification, and dissemination (Agur, 2019; Munger, 2019; Murschetz et al., 2020). Thus, the findings of the reviewed studies indicate a strong relationship between digital technology capability and digital innovation in the media industry. Media entities possessing

advanced digital technology capabilities are inclined to introduce and embrace digital innovations that augment operational efficiency, audience engagement, and content delivery (Lamot, 2021; Lu & Nam, 2021). The capacity of digital technology allows media entities to exploit nascent technologies, promote organizational flexibility, facilitate cooperation, and adjust to the evolving media terrain (Wayne, 2021; Wu, 2022). In order to succeed in the contemporary digital landscape, media entities must allocate resources towards the cultivation and augmentation of their digital technological proficiencies (Willig, 2021). They should also promote a climate of originality and creativity, and adopt nascent technologies to stimulate digital innovation and maintain competitiveness within the dynamic media milieu (Khattak & Nasir, 2012; Barrios-Rubio, 2021).

Does digital innovation mediate the relationship between digital technology capability and operational performance in the media industry?

The reviewed studies indicate that digital innovation functions as a mediator in the correlation between digital technology capability and operational performance. Digital capability is the aptitude, expertise, and assets that media entities possess to proficiently exploit digital technologies, as previously expounded. The capability empowers organizations to commence and execute digital innovations that possess the capacity to influence operational performance. Digital innovation refers to the utilization and implementation of new digital technologies and tactics that result in enhancements across diverse facets of the media sector. The findings indicate that the mediating function of digital innovation is dependent on the digital technology proficiency of media entities. The degree of proficiency in digital technology plays a crucial role in determining the effectiveness of organizations in adopting and executing digital innovations that have a favorable impact on operational performance. Numerous scholarly investigations have underscored the intermediary function of digital innovation in the correlation between digital technology capability and operational performance within the media sector. Kosterich and Napoli (2015) conducted a study on the advancements in the field of social TV analytics and discovered that the incorporation of digital technologies for analytical purposes resulted in enhanced performance outcomes for media enterprises. This implies that the utilization of digital technology proficiency, through the implementation of digital innovation endeavors like social TV analytics, has the potential to moderate the effect on operational efficacy (Arsenault, 2017).

In addition, the integration of digital advancements, such as the assimilation of online news platforms, active participation in social media, and utilization of mobile apps, has demonstrated a positive impact on the efficiency of operations within the media sector (Cherian & Farouk, 2015). The advancements in digital technology have led to the development of innovative tools that enhance the delivery of content, foster audience engagement, and facilitate revenue generation. It can be inferred that media entities possessing advanced digital technology capabilities are inclined to adopt digital innovations that have a favorable effect on their operational efficiency. The study by Omid et al. (2022) involved a systematic review of literature on technological advancements in media work. The findings indicated that the relationship between digital innovation and operational

performance is moderated by the digital technology capability. The research highlighted that media firms possessing advanced digital technology capabilities are inclined to implement inventive digital tactics, thereby augmenting their operational performance results. The Pikiran Rakyat Newspaper in West Java, Indonesia, was the center of a research on how the print media sector endured in the digital era by Firmansyah et al. (2022). The study included quantitative and qualitative data using a sequential explanatory approach. The quantitative information obtained from a study showed that respondents remained to be interested in reading newspapers, noting benefits like the lack of clickbait and the accuracy of the material. The qualitative findings suggested that print media can continue to exist as a company symbol but not as a major revenue generator. According to the report, print media's survival in the digital age rests on tactics like upholding credibility, embracing digital technology, and providing accurate and thorough news. According to Cherian and Farouk (2015), entities possessing advanced digital technology capabilities are more adept at managing the intricacies and difficulties related to digital innovation, resulting in enhanced operational consequences.

The incorporation of digital advancements and their resultant effects on operational efficiency are subject to contextual factors, including but not limited to organizational culture, resources, and external market conditions. Studies by Kosterich and Napoli (2015) and Omidi et al. (2022) emphasize the importance of considering these contextual factors in understanding the mediating role of digital innovation. The successful adoption and implementation of digital innovations in the media industry are contingent upon the interplay between organizational culture, resources, and market conditions. Specifically, organizational culture and resources are crucial factors that facilitate the integration of digital innovations, whereas market conditions can influence the strategic priorities and emphasis of digital technology capability. Taken together, the findings of the reviewed studies show that digital innovation plays a mediating role in the correlation between digital technology capability and operational performance within the media sector. The capacity of digital technology empowers media entities to commence and execute digital advancements, which possess the potential to yield favorable effects on operational performance results. The implementation of digital advancements, propelled by the capabilities of digital technology, results in enhancements in the dissemination of content, involvement of the audience, generation of revenue, and other facets of operational efficacy. Nevertheless, additional investigation is necessary to examine the complexities of this correlation and the situational variables that impact it within the media sector.

Summary of findings

Impact of Digital capability on operational performance of media industry

The literature examined underscores the critical influence of digital technology proficiency on the operational performance of the media sector. The integration and application of digital technologies, including mobile chat applications, datafication and big data services, and emerging media technologies, have enabled efficient management of information in real-time, fostered networked relationships among media enterprises, and enhanced the

dissemination of news. Research findings indicate that the ability to utilize digital technology is a critical factor in improving operational effectiveness, generating revenue, delivering content, engaging with audiences, and adapting to evolving media environments (Khattak & Nasir, 2012; Kosterich & Napoli, 2015; Doyle, 2013; 2015; Munger, 2019; Agur, 2019; Wayne, 2021, Lamot, 2021, Firmansyah et al., 2022; Omid et al., 2022). In line with the Dynamic Capability View (DCV), digital technologies can be considered as dynamic capabilities (DC) that the organizations leverage on to enhance their performance (Murschetz et al., 2020). In this regard, the findings of the present review corroborates earlier findings on the impact of digital transformation in the media. For instance, Baumann (2020) showed that Its are essential in strategic management, which in turn improves organizational performance. Irbo and Mohammed (2020) reported that social media is a DC that influences business performance. With the use of technology, news organizations can use automation and artificial intelligence to produce and distribute content (Milosavljević & Vobič, 2019). Examples include the news-generating system RADAR, the business briefing system Quotebot, and the ice hockey game reporting system Voitto bot (Lu & Nam, 2021). Online data analytics are also used by news companies to solve issues with transparency and ethics in automated journalism. Insights from the study by Guo (2021) show that new media technology is dynamic. With the advancement of digital and internet technology, new media also evolves, showing the fluidity of media concepts. It depends on how new digital media is compared to TV and newspapers and how new TV is compared to them (Kalombe & Phiri, 2019). However, to some extent, new technologies have been shown to negatively affect innovation in journalism (Guo, 2021).

Impact of Digital innovation on operational performance of media industry

The results indicate a robust association between digital innovation and operational performance within the media sector. The advent of technology has brought about digital innovation, which has revolutionized the creation and dissemination of content, facilitated the endurance of print media in the digital age, enhanced audience measurement and data analytics, and upended conventional news production and consumption. The research highlights the favorable influence of digital innovation on financial gain, operational efficacy, content pertinence, and audience involvement. The incorporation of digital technologies, including social TV analytics, online news platforms, and mobile applications, has facilitated operational enhancements and improved performance outcomes for media entities (Doyle 2013; 2015; Cherian and Farouk, 2015; Wayne, 2021; Wu, 2022; Fermanagh et al., 2022). One of the innovations reported in the reviewed studies was the use of social media by media companies (Milosavljević & Vobič, 2019; Munger, 2019). These findings corroborate earlier studies that noted that digital news media prioritize social engagement over profit and aim to provide a comprehensive perspective (Nunes & Canavilhas, 2020). Another study done by Wai and Tin (2021) revealed that in politically unstable contexts like Hong Kong and South Korea, online platforms serve as a means to combat attacks on press freedom and promote citizen journalism. However, social media platforms can also pose threats to journalistic freedom and contribute to the spread of misinformation, impacting trust in the media.

Impact of digital capability on digital innovation in media industry

According to the research findings, the capacity of digital technology plays a crucial role in propelling digital innovation within the media sector. Media firms possessing sophisticated digital technology capabilities are more prone to embracing and executing digital advancements that augment operational efficacy. The integration of digital technologies, such as online news platforms, social media, television analytics, and audience metrics, has enabled enhancements in content dissemination, audience segmentation, income generation, and engagement with the audience. The results emphasize the significance of digital technology proficiency in facilitating media organizations to adapt to fluctuating surroundings, meet changing audience inclinations, and address the obstacles and prospects arising from the digital epoch (Munger, 2019; Agur, 2019; Milosavljevic & Vobic, 2019; Lu & Nam, 2021; Lamot, 2021; Wayne, 2021). Our findings, in this regard, contribute to the growing body of knowledge on digital innovation and transformation. According to Aström et al. (2022), digital technologies have a significant impact on society and industries, forcing businesses to adapt and use strategic responses to stay competitive. Consumer expectations and behavior are also altered by these disruptions, making consumers active participants in corporate conversations (Vial, 2019). Customers no longer rely only on businesses as a result, and they have higher expectations for services (Kien et al., 2016). Organizational focus is shifted toward clients who are connected to the internet by implementing information technology (IT) and going through organizational transformation. To effectively utilize digital technology and satisfy changing consumer needs, firms must overcome barriers to digital innovation (Calderon-Monge & Ribeiro-Soriano, 2023)

Mediating role of digital innovation on the relationship between digital capability and operational performance of media industry

The findings indicate that the interplay between digital technology capability and operational performance in the media industry is moderated by digital innovation. The implementation of digital advancements, including social TV analytics, online platforms, and innovative media technologies, has the potential to improve operational efficiency and performance outcomes. Digital innovation functions as a conduit linking digital technology proficiency and operational triumph through the utilization of sophisticated digital technologies, augmenting content strategies, audience targeting, customization, and revenue generation. The research emphasizes the significance of digital innovation in moderating the translation of digital technology capability into practical operational enhancements. Additionally, it underscores the crucial nature of cultivating an innovative culture to optimize the advantages of digital technology in the media sector (Cherian & Farouk, 2015; Arsenault, 2017; Kosterich & Napoli, 2015; .Omid et al., 2022; Firmansyah et al., 2022). The reviewed studies offer valuable perspectives on the intermediary function of digital innovation. However, it is crucial to recognize that the correlation among digital technology capability, digital innovation, and operational performance is intricate and diverse. The correlation between the variables can also be impacted by factors such as the organizational culture, available resources, and external market conditions. Hence, additional investigation is required to

acquire a comprehensive comprehension of the mechanisms by which digital innovation moderates the association between digital technology capability and operational performance in the media sector. Our findings, thus, corroborate previous studies. For instance, Khin and Ho (2018) noted that company has a better chance of creating cutting-edge digital solutions that will subsequently boost its operational performance if it can enhance its digital capabilities in managing its digital technology. Yasa et al. (2019) also noted that the management should take into account innovation to improve corporate performance. This SLR demonstrates how digital innovation can magnify the impact of digital capabilities on corporate success. Digital innovation in this context can be thought of as a creative IT approach that incorporates digital technology that appears to help company digitalization (Khin & Ho, 2018; Yasa et al., 2019).

Conclusion

The present systematic literature review offers significant perspectives on the correlation among digital technology capability, digital innovation, and operational performance within the media sector. The results underscore the important influence of digital technology expertise in propelling and molding digital innovation within media establishments. The incorporation of technological innovations, such as online news websites, social networking sites, and mobile apps, has exhibited favorable outcomes in terms of operational efficacy, dissemination of content, involvement of the audience, and generation of revenue. The significance of an organization's capacity to implement and execute innovative digital strategies is underscored by the observable mediating function of digital innovation in the correlation between digital technology capability and operational performance. In addition, contextual elements, including but not limited to organizational culture, available resources, and market conditions, are pivotal in shaping the effective uptake and execution of digital innovations. The impact of digital capabilities on business performance can change, but in order to increase business performance, digital capabilities must lead to new digital innovations, which in turn can boost operational performance. It is imperative to recognize the constraints of the research, which encompass the concentration on published literature within a particular timeframe, the likelihood of disregarding pertinent unpublished research, and the restricted applicability of outcomes to other media markets or regions. It is recommended that forthcoming research endeavors take into account the aforementioned constraints and delve deeper into the fluidity of digital technology proficiency, digital innovation, and their influence on the functional efficacy of media establishments. In summary, this systematic literature review offers significant insights and establishes a basis for further research. Additionally, it provides practical implications for media organizations that aim to navigate and capitalize on the opportunities presented by digital technologies in the swiftly changing media landscape.

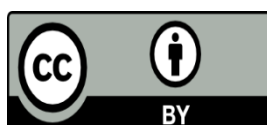
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