

Disruptive Innovation and Business Development, A Bibliometric Study

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ABSTRACT

This study examines the impact and diffusion of disruptive technologies across multiple sectors, reflecting growing scholarly interest in this field. Disruptive innovations are characterized by novelty, cost efficiency, and the ability to challenge established market leaders, thereby reshaping competitive environments. The purpose of this study is to analyze the drivers, contextual factors, and implications of disruptive technologies through a literature review approach. The findings indicate that disruptive technologies often provide simpler and more affordable solutions for underserved market segments, leading to significant industrial transformation and shifts in competition. Their success is influenced not only by technological capability but also by regulatory support, infrastructure readiness, and socio-economic conditions. The study also identifies several theoretical and methodological gaps that require further investigation. Practically, the results suggest that firms should strengthen adaptive strategies, while policymakers need to create supportive environments for innovation. Overall, this study contributes to the understanding of disruptive technologies and their role in competitive advantage and industrial transformation.

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INTRODUCTION

Innovation is widely recognized as a key driver of economic growth and sustainable competitive advantage (Damanpour and Wischnevsky 2006; Nagano, Stefanovitz, and Vick 2014; Si and Chen 2020). Within this broader stream, disruptive innovation, introduced by Christensen et al. (2006), has become a central concept for explaining how new entrants reshape industries. Disruptive innovations enable smaller firms with limited resources to challenge incumbents by creating new markets or transforming existing ones through more accessible, affordable, or convenient offerings (Adner 2002; Bower and Christensen 1995; Christensen et al. 2006). Their influence is evident across sectors such as technology, finance, healthcare, and consumer goods. Recent advances in digital technologies—including artificial intelligence (AI), blockchain, and quantum computing—have further amplified

the disruptive potential of innovation (Ferdaus et al. 2024; Gill et al. 2019, 2022). AI has transformed data analysis and decision-making (Dubey et al. 2022; Wang, Lin, and Shao 2022), blockchain has reconfigured secure and decentralized transactions (Chen and Bellavitis 2020; Marikyan et al. 2022; Upadhyay 2020), and quantum computing promises radical gains in processing power with implications for encryption and machine learning (Akbar, Khan, and Hyrynsalmi 2024; Sáez-Ortuño et al. 2024). These developments underscore both the opportunities for enhanced performance, customer engagement, and operational efficiency (Akter et al. 2016; Lin and Lin 2023; Wamba et al. 2017) and the challenges firms face in continuously adapting to rapid technological change (Phillips and Wright 2009; Warner and Wäger 2019). Understanding the dynamic nature of disruptive innovation is therefore essential for explaining contemporary business development and strategy (Kivimaa et al. 2021; Palmié et al. 2020; Pandit et al. 2018).

Despite the prominence of disruptive innovation in the literature, existing studies provide only a fragmented understanding of how it shapes industries and business processes. Prior work highlights its transformative potential but often examines specific sectors, technologies, or outcomes in isolation (Olabode et al. 2022; Si and Chen 2020). Several gaps persist. First, there is limited systematic evidence on how disruptive technologies modify competitive dynamics and the mechanisms through which new entrants displace incumbents (Ansari and Krop 2012; Giachetti and Li Pira 2022). Second, the implications of disruptive innovation for core business functions—such as supply chain management, customer service, and product development—remain underexplored (Orlando et al. 2022; Rad et al. 2022). Third, while firms that leverage emerging technologies often achieve superior performance (Bendoly, Rosenzweig, and Stratman 2009; Wamba et al. 2017; Zahra 1996), there is no clear consensus on the most effective strategies for managing disruptive change (Blume et al. 2020; Carayannis, Gonzalez, and Wetter 2003). Finally, the ethical and societal ramifications of disruptive innovation have received comparatively little attention, with prior research focusing predominantly on technological and economic outcomes (Feder 2018; Liu et al. 2020; Jha et al. 2022; Repsol 2024).

To analyse these phenomena, this study draws on several complementary theoretical perspectives. Disruptive Innovation Theory (DIT) posits that smaller firms can become market leaders by introducing disruptive innovations that initially target underserved segments but eventually redefine market standards (Bower and Christensen 1995; Christensen et al. 2006). The Resource-Based View (RBV) emphasizes the role of unique, valuable, and hard-to-imitate resources in enabling firms to appropriate value from disruptive change (Robins and Wiersema 1995). The Dynamic Capability framework highlights a firm's ability to sense opportunities and threats, seize them, and reconfigure resources in response to environmental shifts (Grindley and Teece 1997; Teece, Pisano, and Shuen 2009). Complementing these views, the Open Innovation paradigm stresses the importance of external collaboration and knowledge inflows and outflows in responding effectively to disruption (Chesbrough 2003).

Against this backdrop, this study aims to address several gaps in the disruptive innovation literature. Prior research has tended to focus on isolated cases, industries, or technologies, resulting in a lack of comprehensive mapping of the field and its broader implications for business growth (Antonio and Kanbach 2023; Lyytinen and Rose 2003). Moreover, there is limited integrative evidence on effective strategic responses to disruption and on how firms can systematically design capabilities and partnerships to navigate turbulent environments (Frizzo-Barker et al. 2020; Volberda et al. 2021). Empirical insights into the social and ethical consequences of disruptive innovation, including its impact on different stakeholder groups, are also scarce. By systematically synthesizing existing research, this study seeks to clarify the intellectual structure of the field, highlight underexplored themes, and identify promising avenues for future inquiry.

Accordingly, the principal objective of this research is to conduct a bibliometric analysis of studies on disruptive innovation with a specific focus on their implications for company growth. The study aims to (i) map the evolution of the disruptive innovation literature, (ii) identify major thematic clusters, influential scholars, and key

publications, and (iii) examine how disruptive innovation has been linked to business operations and strategic outcomes. By providing a comprehensive overview of the state of the art and distilling best practices and strategic approaches, this study contributes to a deeper understanding of how disruptive innovation reshapes industries and drives growth. The findings are expected to inform both future research and managerial decision-making in the context of ongoing technological disruption.

METHOD

This study employs a bibliometric analysis, a well-established research evaluation methodology (Donthu et al. 2021; Dragović et al. 2024; Hajek, Youssef, and Hajkova 2022; Salam and Senin 2022). Bibliometric analysis involves using statistical techniques to measure and analyze literature quantitatively (Goyal, Chauhan, and Mishra 2021; Xu et al. 2021). The data for this study were collected through a search on Scopus.com using the keywords "disruptive," "innovation," and "business." Scopus was chosen due to its comprehensive coverage of international publications and its recognition by the Indonesian Ministry of National Education for indexing Indonesian publications. The publication period was restricted to the last decade (2013–2023) to ensure a focus on recent research. The analysis encompassed three fields: Business, Management and Accounting; Economics, Econometrics and Finance; and Social Sciences. Only publications in English were included to ensure a uniform understanding among readers regarding specific terms and concepts.

The VOSviewer tool was utilized for data processing (Waltman, Yan, and van Eck 2011). It facilitates co-occurrence analysis, which reveals study subjects statistically by counting data pairings; network analysis, which shows relationships between studies; and bibliographic analysis, which investigates research themes within the area (Bai et al. 2024; Malacina and Teplov 2022; Puerta et al. 2020). VOSviewer provides several advantages, including easy visualization, comprehensive network analysis, and simplified mapping of research trends (Bukar et al. 2023; Martins, Gonçalves, and Branco 2022). Its use allows researchers to analyze inter-field relationships and identify potential collaborations across disciplines, fostering opportunities for interdisciplinary research and scientific innovation (Van Eck and Waltman 2007; Waaijer, van Bochove, and van Eck 2010). This methodology enhances the understanding of research structures and dynamics within the field, promoting a more integrated view of the research landscape (Mascarenhas, and Marques 2018).

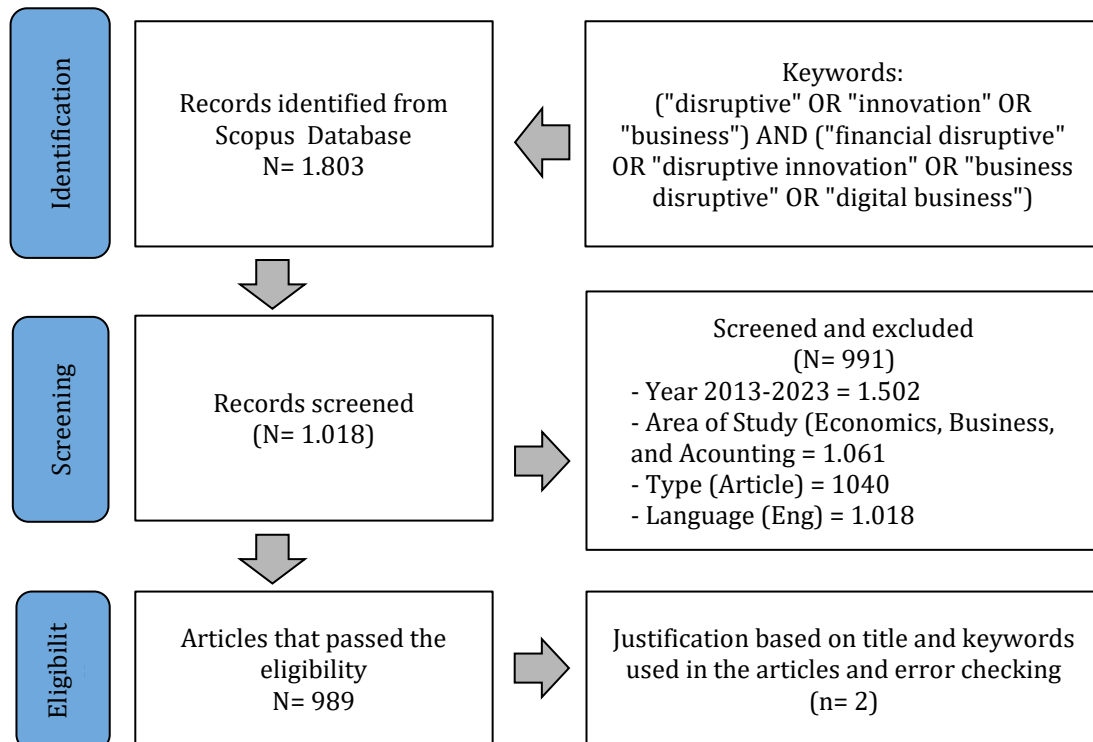


Figure 1. Identification and Eligibility Flow of Relevant Articles

RESULT AND DISCUSSION

The data processed in this research totaled 1,007 papers gathered through several stages of filtering, obtained from the Scopus.com page on 15 March 2026. Data were obtained in several stages as presented in Table 1 below:

Table 1. Stages of the publication data filtering process

Screening	Number of papers
All papers with keywords of disruptive, innovation, and business	1,803
Limited to 2013 – 2023	1,502
Limited to 3 areas of study: Business, Management and Accounting; Economics, Econometrics and Finance; Social Sciences	1,061
Limited to publication stage: final publication	1,040
Restricted languages: English	1,018
Data used for processing	989

Data Source; from scopus index processed by the author in 2026 (Elsevier 2023; Scopus 2025)

The data published in this column show the amount obtained after the filter. From a total of 1,803 publication data before the screening, this decreased to 989 publications after the final stage of the screening process. A total of 989 publications from 2013 to 2023 with the distribution and development are shown in Figure 2.

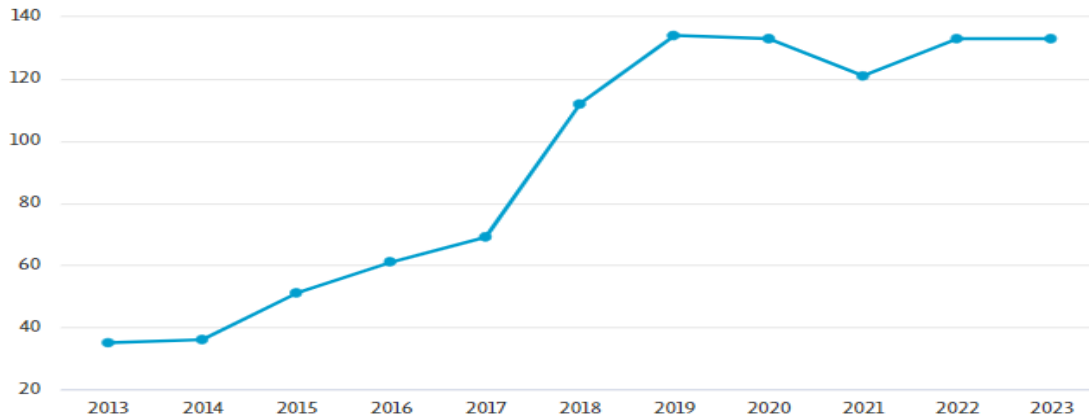


Figure 2. Chart of the Development of Disruptive Innovative Research

Data Source; from scopus index processed by the author in 2026 (Elsevier 2023; Naeini et al. 2022; Scopus 2025)

In general, Figure 1 illustrates a rising trend in the quantity of publications pertaining to disruptive innovation between 2013 and 2023. 34 publications were made in 2013, rising to 69 in 2017, and the number of publications kept growing quickly, reaching 134 in 2019. Following its high, the number of publications declined to 121 in 2021, subsequently rebounding to 133 in 2022, and maintaining this figure in 2023. Figure 3 displays the various countries' contributions to publications about disruptive innovation, emphasizing the significant role these nations play in this field's study and development.

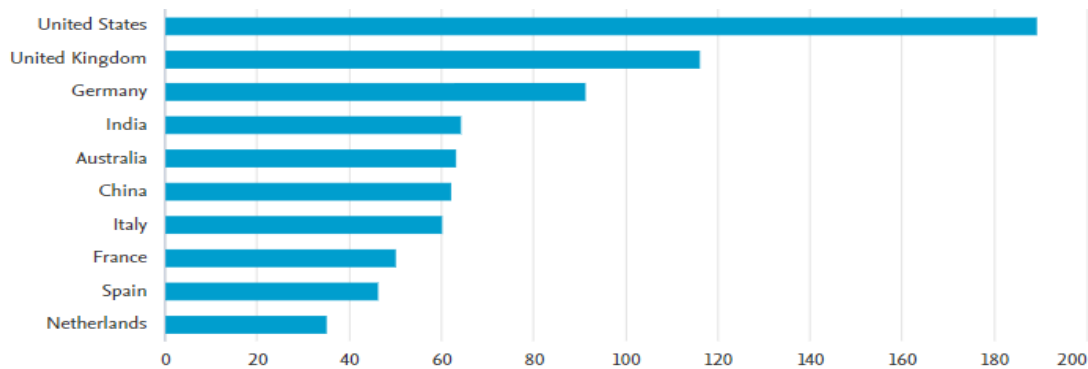


Figure 3. A chart showing publications on disruptive innovation by country of origin

Data Source; from scopus index processed by the author in 2026 (Elsevier 2023; Scopus 2025)

The top 10 nations that contribute to articles on disruptive innovation are shown in Figure 2. The United States ranks first with 189 documents, while the United Kingdom ranks second with 116 documents. Germany, Australia, and Canada are some of the other noteworthy suppliers. Overall, the Netherlands comes in at number 10, with 35 documents. In addition, the figure showcases the top 10 most-cited articles on the subject, providing information on their citation counts and their influence on the research landscape.



Table 2. Papers with the highest citations on the topic: disruption, innovation, and business

No.	Title	Authors	Author h-index & FWCI	Year	Journal, ed	Publisher	Scopus Quartiles	Quoted
1	Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector	Guttentag, D.	15; 5.33	2015	Current Issues in Tourism, 18(12), pp.1192–1217	Taylor and Francis Ltd.	Q1	1,168
2	Fintech: Ecosystem, business models, investment decisions, and challenges	Lee, I., Shin, YJ	22; 3.34 3; 5.54	2018	Business Horizons, 61(1), pp. 35–46	Elsevier Ltd.	Q1	599
3	From rapid prototyping to home fabrication: How 3D printing is changing business model innovation	Rayna, T., Striukova, L.	16; 3.22 15; 3.74	2016	Technological Forecasting and Social Change, 102, pp. 214–224	Elsevier Inc.	Q1	528
4	Open Science now: A systematic literature review for an integrated definition	Vicente-Saez, R., Martinez-Fuentes, C.	3; 4.72 11; 1.81	2018	Journal of Business Research, 88, pp. 428–436	Elsevier Inc.	Q1	285
5	Blockchain as a disruptive technology for business: A systematic review	Frizzo-Barker, J., Chow-White, PA, Adams, P.R., Ha, D., Green, S.	6; 6.98 17; 3.68 4; 7.12 4; 8.87 13; 5.92	2020	International Journal of Information Management, 51, 102029	Elsevier Inc.	Q1	283
6	Digital business strategy and value creation: Framing the dynamic cycle of control points	Pagani, M.	18; 1.16	2013	MIS Quarterly: Management Information Systems, 37(2), pp. 617–632	Management Information Systems Research Center	Q1	277
7	The disruptor's dilemma: TiVo and the US television ecosystem	Ansari, SS, Garud, R., Kumaraswamy, A.	24; 3.57 40; 4.89 15; 4.76	2016	Strategic Management Journal, 37(9), pp.1829–1853	John Wiley and Sons Ltd	Q1	276
8	Mapping out the sharing economy: A configurational approach to sharing business modeling	Muñoz, P., Cohen, B.	23; 3.17 20; 4.22	2017	Technological Forecasting and Social Change, 125, pp. 21–37	Elsevier Inc.	Q1	263
9	Humans as a service: The promise and perils	Prassl, J.	9; 2.93	2018	Oxford University Press, pp. 1–199	Oxford University Press	-	261

No.	Title	Authors	Author h-index & FWCI	Year	Journal, ed	Publisher	Scopus Quartiles	Quoted
10	of work in the gig economy Technological discontinuities and the challenge for incumbent firms: Destruction, disruption or creative accumulation?	Bergek, A., Berggren, C., Magnusson, T., Hobday, M.	28; 6.99 24; 2.15 19; 1.69 33; 1.10	2013	Research Policy, 42(6-7), pp. 1210–1224	Elsevier	Q1	230

The most frequently cited research articles in the fields of business, innovation, and disruption are shown in Table 2. The primary research conducted by Guttentag (2015) investigates the influence of Airbnb on the tourism accommodation industry and has received the maximum number of citations, totaling 1,168. The widespread impact of this article highlights the substantial modifications that Airbnb has brought to conventional approaches in this industry. Lee and Shin (2018) have made a significant addition to the field of fintech ecosystems and business models. Their work has been cited 599 times, indicating its crucial importance in comprehending the changing financial landscape. The study conducted by Rayna and Striukova (2016) explores the impact of 3D printing on business model innovation. With a total of 528 citations, the study highlights the significant potential of new technologies in reshaping business processes. Further gaining traction are the thorough examination of blockchain technology by Frizzo-Barker et al. (2020) and the systematic review of open science by Vicente-Saez and Martinez-Fuentes (2018), which have received 285 and 283 citations, respectively. These research, which have been published in prestigious magazines such as *Current Issues in Tourism* and *Business Horizons*, enhance our overall comprehension of technological disruptions and their consequences. The elevated citation counts demonstrate the active involvement of the scientific community with these subjects and signify the significance of the works in pushing forward the field. Together, these pieces enhance the conversation about how cutting-edge business models and technologies are altering sectors and point out areas that merit more investigation and study.

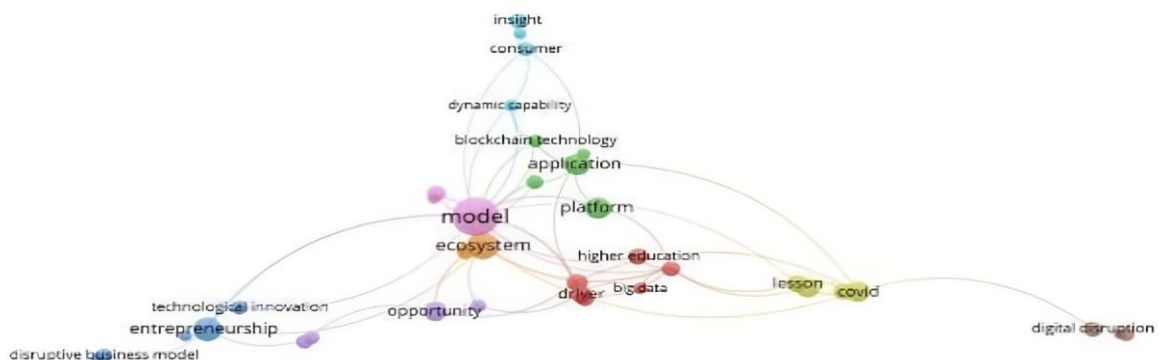


Figure 4. VOSviewer results from variable nets in publications on disruptive innovation
 Data source; author-processed VOSviewer method (Van Eck and Waltman 2007; Waaaijer et al. 2010).

Figure 4 represents the results of the VOSviewer application analysis which visualizes and analyzes the citation network and collaboration among researchers on disruptive innovation topics. It facilitates users to understand the structure and relationships in the research domain. The larger the circle size of a variable indicates the more frequent the variable is used in various studies. Different colors demonstrate thematic groups or cluster maps in the literature.

Table 3. Distribution of variables by cluster

Cluster	Variable 1	Percentage	Variable 2	Percentage	Variable 3	Percentage	Variable 4	Percentage	Variable 5	Percentage
1	Barrier	20%	Big Data	20%	Blockchain Technology	20%	Disruptive Business Model	20%	Proof	20%
2	Application	25%	Digital Entrepreneurship	25%	Fintech	25%	Entrepreneurship	15%	Lesson	10%
3	Digitalization	20%	Pyramid	20%	Platforms	20%	New Business Model	20%	Value Creation	20%
4	Evolution	25%	Stakeholders	25%	Technological Innovation	25%	Higher Education	25%		
5	Consumer	20%	Digital Era	20%	Digital Distractions	20%	Circular Economy	20%		
6	Dynamic Capabilities	25%	Ecosystem	25%	Disruptive Business Model Innovation	25%	Model	15%	Outlook	10%
7	Toughness	30%	Incumbent Company	30%	Radical Innovation	20%	Connection	20%		
8	Disruptive Business Model	30%	Innovation	30%	Technology Trends	20%	Research Focus	20%		
9	Market Trends	25%	Value Proposition	25%	Strategic Management	25%	Industry Challenges	15%	Competitive Advantage	10%

Data Source; from scopus index processed by the author in 2026 (Elsevier 2023; Scopus 2025)

The research conducted using VOSviewer demonstrates the formation of clusters in publications related to disruptive innovation, emphasizing significant groupings of citations and collaborative connections within the field. The clustering, as delineated in Table 3, offers valuable insight into the impact and interconnectedness among

different subjects. **Cluster 1** consists of Barrier, Big Data, Blockchain Technology, Disruptive Business Model, and Proof, each accounting for 20% of the total. **Cluster 2** consists of the following categories: application, digital entrepreneurship, fintech, entrepreneurship, and lessons. The percentages for these categories range from 10% to 25%. **Cluster 3** encompasses the following elements: digitalization, pyramids, platforms, a new business model, and value creation. Each of these elements is equally distributed, accounting for 20% of the cluster. **Cluster 4** is centered around four main areas: evolution, stakeholders, technological innovation, and higher education. Each of these areas contributes equally, accounting for 25% of the focus. **Cluster 5** focuses on the topics of consumers, the digital era, digital distractions, and the circular economy. **Cluster 6** encompasses the topics of dynamic capabilities, ecosystems, disruptive business model innovation, models, and outlook, with the respective percentages ranging from 10% to 25%. **Clusters 7 and 8** focus on the concepts of toughness, incumbent company, radical innovation, connection, and innovation, with ownership stakes reaching up to 30%. **Cluster 9** encompasses market trends, value propositions, strategic management, industry challenges, and competitive advantage, with a distribution ranging from 10% to 25%. These findings provide useful insights for researchers, publishers, and institutions, helping to comprehend the organization and dynamics of scientific literature and inform decisions regarding research focus and collaboration.

Table 4. Development of Research Variables

Label	Group	Total	Average Pub. Year	Label	Group	Total	Average Pub. Year
Big data	1	6	2017,0	Entrepreneurship	3	24	2019,6
Connection	6	5	2017,2	Incumbent company	8	5	2019,6
Lesson	4	13	2017,9	Dynamic capabilities	6	6	2019,7
Radical innovation	9	5	2018,2	Platforms	2	19	2019,7
Consumer	6	8	2018,3	Digital era	7	5	2019,8
Disruptive business model innovation	8	8	2018,3	Proof	4	16	2019,8
Barrier	1	9	2018,3	Ecosystem	7	30	2019,8
Internet	5	7	2018,4	Disruptive business model	3	8	2019,9
Evolution	1	10	2018,5	Fintech	2	8	2020,0
New business model	3	5	2018,6	Digitalization	1	12	2020,5
Higher education	1	11	2018,6	Technological innovation	3	8	2020,5
Pyramid	5	7	2018,7	Application	2	19	2020,5
Model	9	62	2019,0	Circular economy	9	9	2020,7
Opportunity	5	16	2019,1	Digital distractions	8	10	2020,7
Value creation	5	8	2019,1	Digital entrepreneurship	3	5	2020,8
Driver	1	13	2019,2	Blockchain technology	2	7	2021,1
Outlook	6	9	2019,2	Stakeholders	2	5	2021,2
				Covid	4	18	2021,9
				Pandemic	4	11	2022,0
				Toughness	7	7	2022,0

Data Source; from scopus index processed by the author in 2026 (Elsevier 2023; Scopus 2025)

Table 4 showing the trend development in variables in disruptive innovation publications signifies a trend towards digitalization and technological developments in business. This may allow future authors to explore further regarding blockchain variables, stakeholders, and resilience.

The findings of a VOSviewer investigation on co-authorship are shown in Figure 4, which shows how closely academics and organizations are collaborating in the subject of disruptive innovation. The network graphic illustrates the interconnectedness of different study points through collaborative interactions. Distinct clusters of articles with similar citation counts and joint endeavors are shown by the various colors in the mesh.

With just a few connections between authors exposed, the visualization emphasizes how thin the co-authorship network is in this topic. This suggests that there is a low level of researcher collaboration in the disruptive innovation field. The network diagram, due to its tiny scale, indicates that the level of collaboration is restricted, and there are possibilities to improve cooperative research endeavors in this field. In summary, the analysis highlights the importance of enhancing collaborative efforts to enhance research networks and promote the integration of different perspectives in the field.

Table 5. Distribution of authors by cluster

Cluster 1		Cluster 2		Cluster 3	
Author	H-index & FWCI	Author	H-index & FWCI	Author	H-index & FWCI
Bollweg, L.	3; 0.41	Azzam, M.	14; 0.82	Daim, T.	44; 1.08
Lackes, R.	6; 0.49	Khalil, T.	8; 3.63	Zhang, Q.	176; 5.35
Siepermann, M.	5; 0.47	Sami, N.	8; 1.13	Zhang, W.	43; 0.94
Weber, P.	34; 0.89				
Cluster 4		Cluster 5		Cluster 6	
Author	H-index & FWCI	Author	H-index & FWCI	Author	H-index & FWCI
Almunawar, MN	16; 1.78	Chen, H.	58; 1.33	Lo Presti, L.	23; 1.21
Ansari, M.	23; 2.31	Chen, J.	76; 1.05	Marino, V.	11; 1.02
Cluster 7		Cluster 8		Cluster 9	
Author	H-index & FWCI	Author	H-index & FWCI	Author	H-index & FWCI
Fenwick, M.	9; 2.31	Neittaanmaki, P.	25; 0.90	Boni, AA	12; 0.40
Vermeulen, E.P.M	59; 0.83	Watanabe, C.	26; 1.81		

As indicated in Table 3, Table 5 offers a comprehensive summary of writers within particular clusters. Using this table as a guide, scholars can examine the variables linked to each cluster and determine the contributions of major authors. Future researchers can utilize the authors mentioned in each cluster to identify pertinent references and acquire valuable knowledge about influential works in their specific area of study. This method enables more focused literature assessments and aids in identifying crucial sources for future research.

Disruptive innovation has received increasing scholarly and managerial attention because of its profound implications for industry transformation, business competitiveness, and market development. Unlike incremental innovation, which improves existing products or services, disruptive innovation typically begins with simpler, lower-

cost solutions that serve niche or underserved markets before gradually improving in performance and capturing mainstream demand. Over time, such innovations can challenge and even displace established industry leaders by offering new value propositions, cost structures, and modes of consumption. For example, Airbnb disrupted the traditional accommodation sector by introducing a peer-to-peer lodging platform that provided more affordable and personalized alternatives to conventional hotels (Guttentag, 2015), while Uber transformed urban transportation through an app-based service model that challenged conventional taxi systems (De-Miguel-Molina, 2021; Wilson and Mason, 2020). The diffusion and acceptance of disruptive innovation are shaped by attributes such as relative advantage, compatibility, complexity, trialability, and observability, which influence how new technologies are adopted and integrated into mainstream markets (Amuzu-Sefordzi et al., 2018; Vagnani and Volpe, 2017; Zhang and Dhaliwal, 2009). Beyond individual sectors, disruptive innovation also reshapes broader market dynamics, business models, supply chains, consumer behavior, and industry standards (Nagy, Schuessler, and Dubinsky, 2016). Its impact can be observed in 3D printing, which enables rapid prototyping and customization in manufacturing (Rayna and Striukova, 2016), blockchain, which offers new mechanisms for securing transactions and managing digital assets (Javaid et al., 2022; Zachariadis, Hileman, and Scott, 2019), fintech, which reconfigures financial services and investment practices (Anagnostopoulos, 2018), and the gig economy, which alters traditional employment patterns and economic structures (Prassl, 2018). As these innovations evolve, they not only create new opportunities but also address emerging market and societal challenges, underscoring their critical role in advancing industry standards, fostering competitive dynamics, and stimulating continued research on innovation-led transformation (Ben, Diridollou, and Hamadache, 2020).

RESEARCH TRENDS AND CONTRIBUTIONS

The study of disruptive innovation has evolved significantly, reflecting its profound impact on various sectors and its role in reshaping traditional business models. Recent research highlights the transformative nature of disruptive innovations, with studies such as Rayna and Striukova (2016) detailing how 3D printing has revolutionized manufacturing processes by enabling rapid prototyping and customization. This technology not only disrupts traditional manufacturing but also fosters new business models and supply chain strategies. Similarly, (Frizzo-Barker et al. 2020) have provided valuable insights into the disruptive potential of blockchain technology, emphasizing its capacity to transform financial transactions and data security. Blockchain's decentralized and immutable nature challenges established financial institutions and introduces novel approaches to business operations. (Basili et al. 2007) further underscores the significance of digital transformations, illustrating how digital business strategies create new value propositions and redefine competitive landscapes. This aligns with (Ansari and Krop 2012), who analyzed TiVo's impact on the television industry, showcasing how disruptive innovations can challenge and ultimately reshape existing market structures.

The breadth of research into disruptive innovation underscores its relevance and growing importance across multiple industries. For instance, research by (Adner 2002; Christensen et al. 2006) highlights how disruptive innovations can initially serve niche markets but eventually shift industry dynamics by addressing previously unmet needs. This progression is evident in the technological advancements such as artificial intelligence (AI), which (Dubey et al. 2022; Dubey, Gunasekaran, and Samar Ali 2015; Wang et al. 2023) have shown to enhance decision-making and operational efficiency. Similarly, (Akter et al. 2016; Lin and Lin 2023) demonstrate how companies leveraging AI can achieve significant performance improvements. However, the rapid pace of technological change necessitates ongoing adaptation by firms to remain competitive, as noted by (Phillips and Wright 2009; Warner and Wäger 2019). The strategic responses of companies to disruptive innovations, as explored by (Blume et al. 2020; Haarhaus and Liening 2020), reveal a need for further investigation into the most effective methods for navigating these shifts.

Additionally, research by (Kivimaa et al. 2021; Pandit et al. 2018) suggests that understanding the ethical and societal implications of disruptive technologies is crucial, an area that remains underexplored. Overall, the current research landscape underscores the need for a comprehensive analysis of how disruptive innovations affect business strategies and operations, providing valuable insights for future studies and strategic decision-making.

Regional and Sectoral Insights

The impact of disruptive innovations is not uniform across all regions and sectors, highlighting the necessity of context-specific analyses. Government policies, industrial structures, and socio-economic conditions significantly influence how disruptive innovations are developed and adopted. (Bogers et al. 2017; Paskaleva 2011) conducted a comprehensive review on open science, emphasizing that the successful implementation of innovative practices often depends on local and national contexts. Their study revealed that differing governmental policies and institutional frameworks can either facilitate or hinder the progress of disruptive innovations. This aligns with the Institutional Theory (Scott, Hughes, and Kraus 2019), which posits that organizational practices and innovations are shaped by the broader institutional environment in which they operate. The theory helps explain why similar disruptive innovations might be adopted at different rates or with varying impacts across different regions due to institutional and contextual differences.

Local case studies offer additional insights into how specific regions adapt to disruptive innovations. (Ma et al. 2018; Sanasi et al. 2020) employed a configuration approach to investigate sharing economy business models, revealing how regional factors influence the adaptation and implementation of disruptive innovations. They found that local economic conditions and cultural factors significantly affect how new business models are received and integrated into existing market structures. (Sovacool, Daniels, and AbdulRafiu 2022) explored the adoption of bike-sharing services in China, demonstrating that technological advancements can catalyze the growth of disruptive innovations in emerging markets. Their study highlights how different socio-economic environments and infrastructural conditions shape the evolution and success of disruptive technologies. This supports the Diffusion of Innovations Theory (M.Rogers 2008), which emphasizes that the rate and manner of technology adoption vary depending on contextual factors such as economic development and social readiness. Understanding these regional and sectoral differences is crucial for comprehending the broader implications of disruptive innovations on global business dynamics.

Government and Policy Implications

Government policies and regulations significantly influence the development and diffusion of disruptive innovations. Effective public policies, including tax incentives, research and development subsidies, and investments in technological infrastructure, can create favorable environments for innovation to flourish. Bergek et al. (2013) examined the role of technological discontinuity and the strategies employed by incumbent firms in response to disruptive innovations. Their study underscores the necessity of supportive regulatory frameworks that not only mitigate the risks associated with disruptive changes but also promote an environment conducive to innovation. Such frameworks are crucial for fostering research and development, which are essential for the successful emergence and scaling of disruptive technologies.

Regulatory policies can shape the trajectory of disruptive innovations by either facilitating or obstructing their progress. For instance, Prassl (2018) analyzed the gig economy and its regulatory challenges, highlighting how legal frameworks impact its growth and integration into the economy. The study revealed that well-designed regulations can help balance the benefits of new business models with societal concerns, thereby fostering innovation while addressing potential negative impacts. This aligns with the Policy Innovation Framework (PIF), which emphasizes that government interventions can guide the development of disruptive technologies by setting standards, providing incentives, and removing barriers. The effective alignment of policy with technological advancements ensures that innovations not only emerge but also contribute positively to economic and social development.

Variables Influencing Disruptive Innovation

Understanding disruptive innovation requires a comprehensive examination of various influencing variables, including market dynamics, business model transformations, shifts in supply chains, and regulatory frameworks. Market dynamics, such as competition levels and market openness, play a pivotal role in shaping the potential for disruptive innovations to take root and flourish. The degree of competition can either spur innovation by pushing companies to differentiate themselves or hinder it by creating barriers to entry for new players. Additionally, the accessibility of education and skills is crucial in enabling the workforce to adapt to and drive disruptive innovations (Agyei-Boapeah et al., 2022).

Technological advancements are central to the development and impact of disruptive innovations. Emerging technologies often facilitate market entry and enable the creation of novel business models. For instance, the rise of fintech and digital platforms demonstrates how new technologies can reshape traditional industries by offering more efficient and accessible alternatives (Agyei-Boapeah et al., 2022). Moreover, the concept of abundance, as articulated by Mahto et al. (2020), provides a fresh perspective on how technological developments and global economic shifts contribute to the emergence and proliferation of disruptive innovations. This concept highlights how the availability of abundant resources and technologies can lead to significant disruptions in established markets and industries.

CONCLUSION

This study provides a systematic synthesis of the rapidly expanding literature on disruptive technologies and demonstrates that their influence extends beyond technological change to the restructuring of business models, market dynamics, and customer behaviour. By integrating evidence across industries, the findings clarify how disruptive innovations—characterized by simplicity, affordability, and novel value propositions systematically challenge incumbents and enable the emergence of new competitive logics. A key contribution of this research is to reveal the pivotal role of contextual factors particularly regulatory frameworks and socio-economic conditions in shaping the diffusion, legitimacy, and performance outcomes of disruptive technologies. The study shows that supportive legal infrastructures and targeted investments in innovation ecosystems are not merely complementary, but often decisive in unlocking the transformative potential of these technologies. Conceptually, this work advances the disruptive innovation discourse by moving beyond firm- or technology-level analyses to highlight multilevel interactions between technology, institutions, and strategic responses. Practically, it offers an evidence-based foundation for managers to anticipate and orchestrate strategic adaptation, and for policymakers to design enabling environments that balance innovation with societal considerations.

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