Mergers And Acquisitions in The Hightech Company: A Bibliometric Review and Future Research Directions

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Abstract

Purpose – This study is aimed to shows the research interest trend about mergers and acquisitions (M&A) in high-tech companies.

Methodology – This research uses a combination of bibliometric analysis and content analysis. Bibliometric analysis is fundamentally concerned with the quantitative and statistical analysis of a set of connected documents using several bibliometric indicators that offer an overall summary of a research area. While, a structured SLR sticks to a strict scientific design based on clear, prespecified and reproducible methods.

Findings – A technology company's growth options affect its likelihood of being acquired, and companies with high growth options tend to choose organic growth over acquisitions with other technology companies. M&A size has an "inverted U"-shaped relationship with post-acquisition innovation performance, and post-acquisition R&D investment can moderate the relationship. Increasing the level of post-acquisition R&D investment can increase technology uptake capacity and extend the positive effect interval of M&A measures on post-acquisition innovation performance.

Research limitations – This study only covers research published related to strategic planning in digital marketing, the data selected only use synta strategic, and the co-occurrence analysis was used to present the conceptual structure in this study.

Practical implications – This research will help practitioners to understand the basis of job satisfaction in textile factory workers and contribute to the scientific community by providing thematic maps and recommendations for future research of this field of study.

Introduction

Significant changes in the business environment, such as globalization, regulations, developments in information technology and telecommunications, as well as market fragmentation, have created intense competition. Company reactions to this increase in competition varied widely. Some decide to direct resources to smaller segments, some stick with what they are doing, and some merge into the larger companies in the field. The last option

is part of a corporate restructuring effort to achieve synergies through economies of scale and financial economies, leveraging additional resources and increasing market responsiveness. According to Tarigan (2018), there are 3 types of business combinations namely: mergers, consolidations, and acquisitions. Merger is defined as a combination of two or more organizations in which only one company survives. This definition is also known as a legal amalgamation or legal amalgamation. According to Chiaramonte et. al., (2023), Mergers and acquisitions (M&A) are considered an effective path aimed at restructuring or consolidating corporate business activities. Conversely, an acquisition occurs when a company acquires another company, so that even though the name of the target company remains, ownership has moved to the acquiring company, the process is called a subsidiary merger (Tarigan et al., 2018).

Mergers and acquisitions (M&A) are considered as an important growth strategy for companies to meet the ever-increasing demands from various stakeholders (Krishnamurti & Vishwanath, 2010). According to Hax and Majluf (1996), organizations can use mergers and acquisitions to set long-term goals, action programs, and resource allocation for organizations. Today, many global companies are moving from starting a new business from scratch to mergers and acquisitions. Mergers and acquisitions are the strategy chosen by the company to realize this promising synergy.

The big-companies, which are considered to be leading in their fields, perform mega - M&A, so as to achieve additional advantages in growth and diversification (Trautwein, 1990). We can quote certain of such companies, for example to cite, the mergers between Exxon and Mobile, between America Online and Time Warner, and between Chrysler and Daimler and the acquisition of the German communication company Mannesmann by its competitor Vodafone AirTouch for 179 billion dollars. Some companies, like Cisco, adopt this alliances strategy as their leading competitive strategy, rather than innovating and developing on their own (buy vs. build) and have an acquisition minded culture, which is appropriate to the market in which they function (Chatterjee & Bourgeois, 2011). The Cisco Company has performed more than 60 acquisitions during the years 1996-2000 and in this period the company's stocks raised an average of more than 50% a year (Gadiesh et al., 2003). Another example is IBM that performed 17 acquisitions of an overall value of about 1.5 billion dollars in 1999 (Fowler & Kilsby, 2003).

According to data from Global Expansion, until 2019 there were 49,849 mergers and acquisitions ranging from large multinational deals to small regional agreements (Sebayang, 2022). Referring to Bloomberg data on business insights, in 2022 the technology sector will dominate M&A transactions with 46 transactions. while the financial sector ranks second with 36 transactions, followed by the non-cyclical consumer sector with 34 transactions and the communications sector with 31 transactions (Fitri et al., 2022). There are four Acquisitions and Mergers of Indonesian Technology Companies in 2022, the telecommunications industry in Indonesia from two Indonesian cellular operators, namely Indosat Ooredoo and Hutchison Tri Indonesia, hotel and travel ticket reservation service companies, Tiket.com with the BliBli marketplace (PT Global Digital Niaga), GoTo, a company resulting from the merger of Gojek and Tokopedia, and cellular operator company PT XL Axiata Tbk (XL Axiata) have acquired two Indonesian technology companies, namely PT Link Net Tbk and PT Hipernet Indodata (Hipernet) (Riyanto, 2022).

Several literature review studies that examine mergers and acquisitions have been carried out, but none of these literature review studies examine mergers and acquisitions in Technology

Companies. In the study by Chiaramonte et. al., (2023) who researched bibliometrically and content analyzed 174 papers and 354 authors on M&A in the financial industry from 1987 to 2021. Furthermore, there is research by Cumming et. all., (2023) which presents an analysis of publication patterns and major themes in research on mergers and acquisitions in finance and accounting. The two studies focus more on the financial industry. whereas research from Ferreira et al., (2014) does not focus on any industry, but adopts a strategic and international business management perspective and examines sixteen journals up to 2010. .

Based on several previous studies, this research focuses on the main determinants of M&A in technology companies. Therefore, we conducted a literature review by applying the methodology of bibliometric analysis and content analysis (Khan et al., 2022). The bibliometric approach coupled with content analysis sheds light on influential and intellectual literary structures in the field of research. More specifically, this approach helps us to find answers to the following research questions:

- What are the influential aspects of the literature on M&A in the hight-tech firms?
- What are the cluster in the literature on M&A in the hight-tech firms?

What are the potentials research that can be developed from M&A in the hight-tech firms in the future?

Literature Review

The business environment in today's time is rapidly changing with respect to competition, products, people, markets, customers and technology. In order to continuously maximize shareholder value, it is not enough for the companies to keep pace with these changes but is expected to beat competitors and innovate. Rapid technological developments make companies to continue to innovate to maintain competitive advantage, so a good strategy is needed to maintain this advantage. Growth strategy is divided into two types organic and inorganic.

Mergers and acquisitions (M&A) are the inorganic growth strategies for achieving accelerated and consistent growth. Mergers and Acquisitions have always played a vital role in corporate history, ranging from corporate raiders who believes in policy 'greed is good' and ending up buying companies in a hostile manner and breaking them apart, to today's trend where corporate use mergers and acquisition for external and industry consolidation (Sherman & Hart, 2006).

Merger happens between two firms under which they combine their practices in an order, so that each gains a new area of expertise. As a result of which, the the combined firm's clients are benefitted with broader range of services and talents (Holtzman, 1994). According to research, a merger takes place when two or more corporations combine and share their resources so as to achieve common objectives and The shareholders of the combining firms often remain as joint owners of the combined entity (Sudarsanam, 1995), But according to other, a merger is a combination of two or more companies in which the assets and liabilities of the selling firms are absorbed by the buying firm. (Sherman & Hart, 2006).Another researcher quotes that a merger is a process, in which two corporations combines and only one survives and the merged corporation ceases to exist. Sometimes there is a combination of two companies where both the companies cease to exist and an entirely new company is created (Gaughan, 2002).

Merger and acquisition strategies are also frequently used in technology companies. Technology companies can choose to grow through acquisitions, joint ventures, and strategic

alliances (Schmid & Polat, 2018). Merger and acquisition activity is a critical means by which technology firms obtain the resources needed to compete in global markets (Graebner, 2004). Technology companies need to develop innovation and technology because in the digital era innovation is needed to survive and maintain competitive advantage. In developing innovation and technology, companies can invest in research and development (R&D) or acquire companies with advanced technology according to company needs.

Research Methods

In the Methodology phase, we combined bibliometric analysis and content analysis. This approach is widely used in recent literature in the business and finance domain (Khan et al., 2022). Bibliometrics, first proposed by Price (1965), aims to understand scientific networks across articles, while content analysis is a qualitative way of discussing dynamics and trends in the literature. Following the above methodological framework from Chiaramonte et. al., (2023), we conducted the analysis in the following five dimensions: 1) Bibliometric citation analysis; 2) co-authorship bibliometric analysis; 3) Content analysis. The software used is the "Bibliometrix" package from RStudio, together with "Biblioshiny" (Aria & Cuccurullo, 2017). In addition, to derive the visualization network, we use VOSviewer. This two software are the most famous and widely used tools that.

This research covers all papers related to merger and acquisition strategy in technology companies. The data sources we use are from two databases from Scopus and Web of Science. To find relevant literature, we use appropriate keywords. There are two criteria for our keyword search, namely mergers and acquisitions plus technology companies. The keywords we use are: ("M&A" OR "Merger*" OR "mergers and acquisitions" OR "mergers and acquisitions" OR "mergers & acquisitions" OR "consolidation*") AND ("hightech industry" OR "hightech firm " OR "hightech company" OR "high-tech industry" OR "high-tech firm" OR "high-tech company" OR "Technology industry" OR "Technology firm" OR "Technology Company"),

Results and Discussion

This section will explain the stages of the research using the Systematic Literature Review with reference to the PRISMA Flowchart. There are 4 stages of the review process that must be carried out, including: 1) identification; 2) screening; 3) eligibility; and 4) analysis.

Table 1. Merger and acquisition in technology firms keyword search

Topic	String
Merger and Acquisition	("M&A" OR "Merger*" OR "mergers and acquisitions" OR "merger and acquisition" OR "mergers & acquisitions" OR "consolidation*")
Technology Firms	("hightech industry" OR "hightech firm" OR "hightech company" OR "high-tech industry" OR "high-tech firm" OR "high-tech company" OR "Technology industry" OR "Technology firm" OR "Tecnology Company")
Full String	("M&A" OR "Merger*" OR "mergers and acquisitions" OR "merger and acquisition" OR "mergers & acquisitions" OR "consolidation*") AND ("hightech industry" OR "hightech firm" OR "hightech company" OR "high-tech industry" OR "high-tech firm" OR "high-tech company" OR "Technology industry" OR "Technology firm" OR "Tecnology Company")

1) Identification process

This research covers all papers related to merger and acquisition strategies in technology companies. The first step is related to the choice of database to extract data for bibliometric analysis. For this review, we used two databases from Scopus and Web of Science. In the second

step, we searched for relevant literature using appropriate keywords. There are two criteria for our keyword search, namely mergers and acquisitions plus technology companies. From the keywords used, we obtained 278 articles from Scopus and 84 articles from the Web of Science. For details of the strings that we use can be seen in the Table 1.
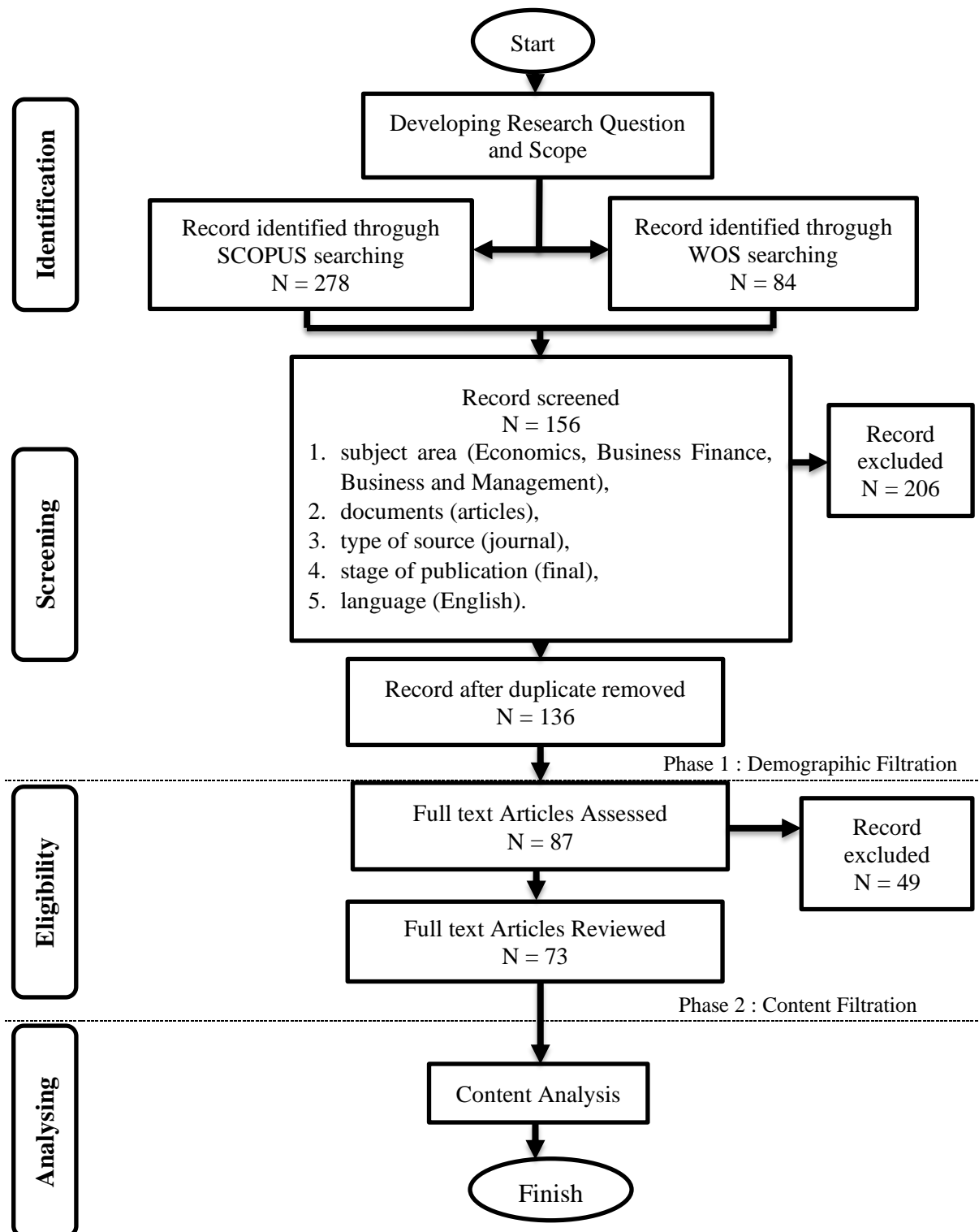

Figure 1. PRISMA Flow Chart

2) Screening Process

All results obtained from the identification of data, which total 364 articles, will be filtered and will be entered based on the criteria. There are six criteria used in this study, namely subject area (Economics, Business Finance, Business and Management), documents (articles), type of source (journal), stage of publication (final), language (English). After the screening process, 124 articles were obtained from Scopus and 32 articles from the Web of Science.

The results of the search will be downloaded later, where the information to be exported includes citation information, bibliographical information, abstracts & keywords, and other information. From these two data sources, it was processed using *R Studio* software to remove duplicate data, so that the data obtained was 136 articles.

3) Eligibility Process

At this stage a re-check will be carried out regarding the literature that has been downloaded, this check is carried out by filtering the data manually by carrying out a thorough abstract understanding. At this stage there are two steps, namely for the first step reviewing the title, abstract, and keywords. We have 73 articles from 136 articles

The second step review the article as a whole to verify that it meets the requirements for analysis. If literature is found that is irrelevant to mergers and acquisitions in technology companies, the downloaded data will be deleted and will not be used. Of these 73 articles from first step, there are xx articles met the criteria to be the selected primary study based on our SLR.

4) Analysing
The Trend of Mergers and Acquisitions in The Hightech Company

This study used the performance bibliometric analysis tools to understand mergers and acquisitions in the high-tech company. T he following is some information about the trend of mergers and acquisitions in the hightech company.

Table 2. Main Information of the Data Collected

Criteria	Description	Results
MAIN INFORMATION ABOUT DATA	Timespan	1995:2022
	Sources (Journals, Books, etc)	49
	Documents	73
	Annual Growth Rate %	5,27
	Document Average Age	8,74
	Average citations per doc	30,1
	References	253
DOCUMENT CONTENTS	Keywords Plus (ID)	319
	Author's Keywords (DE)	280
AUTHORS	Authors	165
	Authors of single-authored docs	14
AUTHORS COLLABORATION	Single-authored docs	15
	Co-Authors per Doc	2,47
	International co-authorships %	1,37
DOCUMENT TYPES	article	71
	article; book chapter	1
	article; early access	1

Table 2 presents the main structure of the collected data. Our publications span from 1995 to 2022, and consist of 73 articles, published in 49 journals and written by 165 authors. The first paper on M&A in a high-tech company was published in 1995, which described how to introduce a new product from ICL which was a product of the British merger mania of the 1960s (Kayes, 1995).
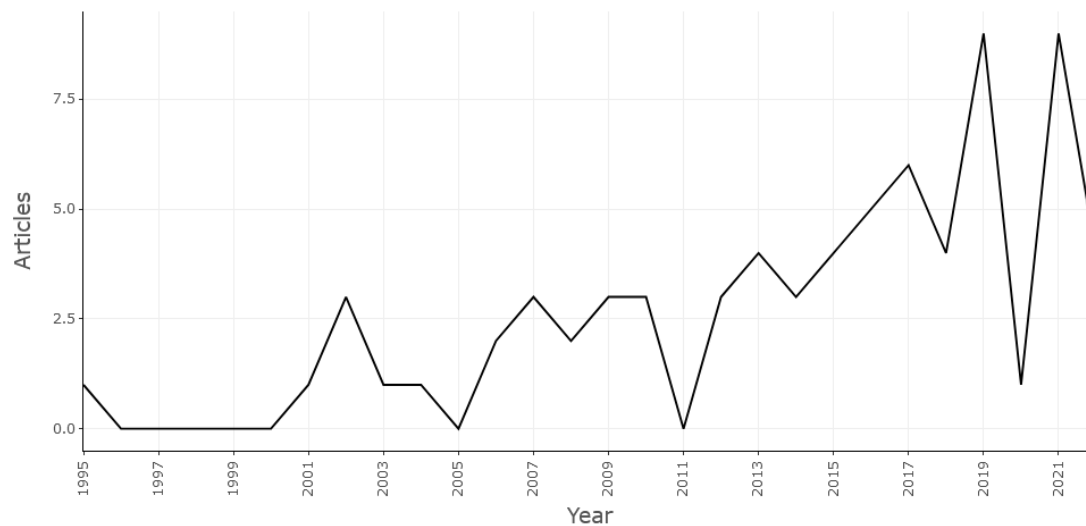
Figure 2. Distribution of Research by Year

In Figure 2. shows the distribution of research per year. From the figure, the number of studies produced per year has increased, although it had decreased in 2020, then increased again in 2021 and so on. This shows that the discussion regarding mergers and acquisitions in the high-tech company has received the attention of researchers. The most research was produced in 2019 and 2021, where the number of articles produced in each of these years amounted to 9 articles.

Table 3. Most Productive and Influential Journals

Journal	First Article	h_index	g_index	m_index	Article	Total Citation
STRATEGIC MANAGEMENT JOURNAL	2004	5	6	0,25	6	661
INTERNATIONAL JOURNAL OF TECHNOLOGY MANAGEMENT	2003	4	5	0,19	6	33
RESEARCH POLICY	2006	4	5	0,222	5	332
TECHNOLOGY ANALYSIS AND STRATEGIC MANAGEMENT	2002	3	3	0,136	3	172
JOURNAL OF HIGH TECHNOLOGY MANAGEMENT RESEARCH	2008	2	3	0,125	3	55
JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	2006	2	2	0,111	2	68
JOURNAL OF WORLD BUSINESS	2008	2	2	0,125	2	122
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	2017	2	2	0,286	2	21
ASIA PACIFIC BUSINESS REVIEW	2019	1	1	0,2	1	7
ASIA-PACIFIC JOURNAL OF BUSINESS ADMINISTRATION	2016	1	1	0,125	1	2

Table 3 shows several journals related to strategic management and technology, especially studies on M&A in the hightech industry. as well as various bibliometric metrics used to measure the performance and impact of these journals. Leading journal publications on M&A in the financial industry mostly come from the Strategic Management Journal and International Journal of Technology Management with 6 articles which is the highest number. then for the least is Asia Pacific Business Review and Asia-Pacific Journal of Business Administration with a total of 1 article. then for the total citations, the most are from the Strategic Management Journal of 661 citations and the least from the Asia-Pacific Journal Of Business Administration of 2 citations.

Table 4. Most Productive and Influential Authors

Author	Article	Total citation
Abetti P	5	21
Cloodt M	2	308
Das A	2	16
Duysters G	2	404
Hagedoorn J	2	450
Kapil S	2	16
Laamanen T	2	23
Lee J	2	2
Mccarthy K	2	9
Rehn U	4	16

Table 4 shows the most productive and influential authors in research on mergers and acquisitions in high-tech companies, which is calculated based on the number of authors' research produced by the authors and the total number of author's citations. The most prolific authors are Abetti P with 5 articles and Rehn U with 4 articles. but in terms of quotations, the two authors do not have many citations. Abetti P only with 21 citations and Rehn U with 16 citations. While the author with the highest number of citations is Hagedorn J with 450 citations.
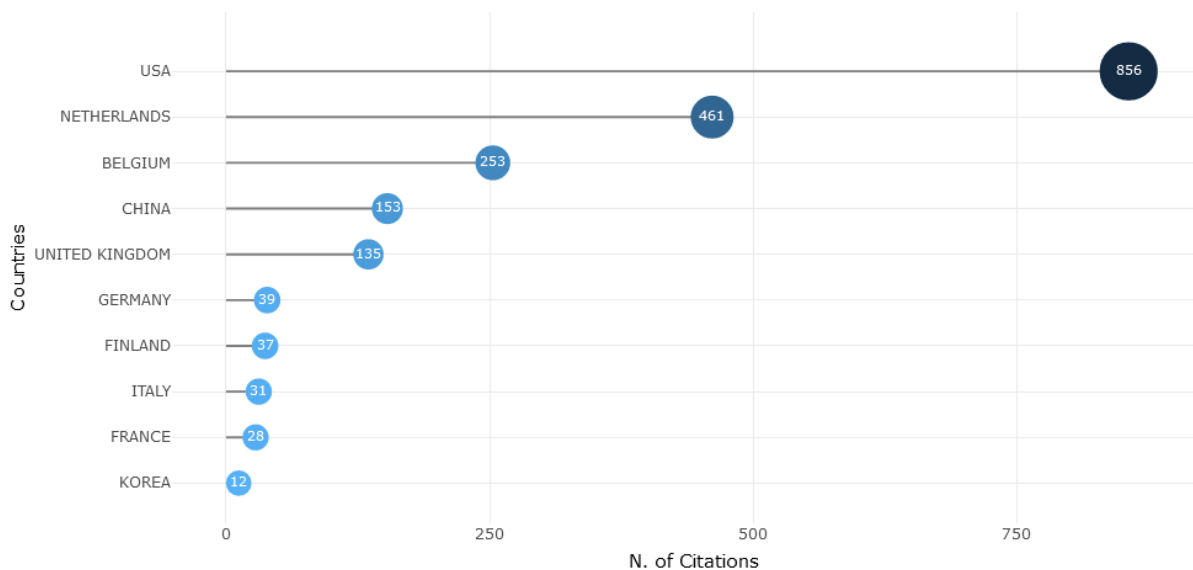

Figure 3. Most Cited Country

Based on Figure 3, the United States is the most frequently cited country in research on mergers and acquisitions on high-tech companies. The Netherlands is the second most cited country and Belgium is the third. That means, the field of study investigated develops its roots in the US and the Netherlands, but there is still a large gap between the US and France compared to other countries.

Table 5 shows the most impactful research based on global citations. Of the 73 selected research data, Graebner ME (2004), Cloodt M (2006), and Vanhaverbeke W (2002) are the top three most influential in research on mergers and acquisitions in high-tech companies. This study provides trends regarding mergers and acquisitions in high-tech companies.

Table 5. Most Global Cited Documents

Paper	Total Citations	TC per Year
Graebner ME, 2004, Strategic Manage J	392	19,60
Cloodt M, 2006, Res Policy	299	16,61
Vanhaverbeke W, 2002, Organ Sci	253	11,50
Grigoriou K, 2017, Strategic Manage J	167	23,86
Hagedoorn J, 2002, Technol Anal Strateg Manage	151	6,86
Liu X, 2008, J World Bus	80	5,00
Huang Z, 2017, Strategic Manage J	63	9,00
Kohers N, 2001, Financ Manage	61	2,65
Xue Y, 2007, Rev Account Stud	57	3,35
Gao LS, 2006, J Manage Inf Syst	56	3,11

Conceptual Structure of Mergers and Acquisitions in The Technology Company

In order to better understand Mergers and Acquisitions in the Technology Company, the co-occurrence analysis was used to provide conceptual structure and visualized by thematic map which represent the research themes investigated in this study. Thus, five main themes were clustered, which is the "merger and acquisitions/acquisitions and merger/ acquisitions", "high tech", "research and development", and "innovation performance".
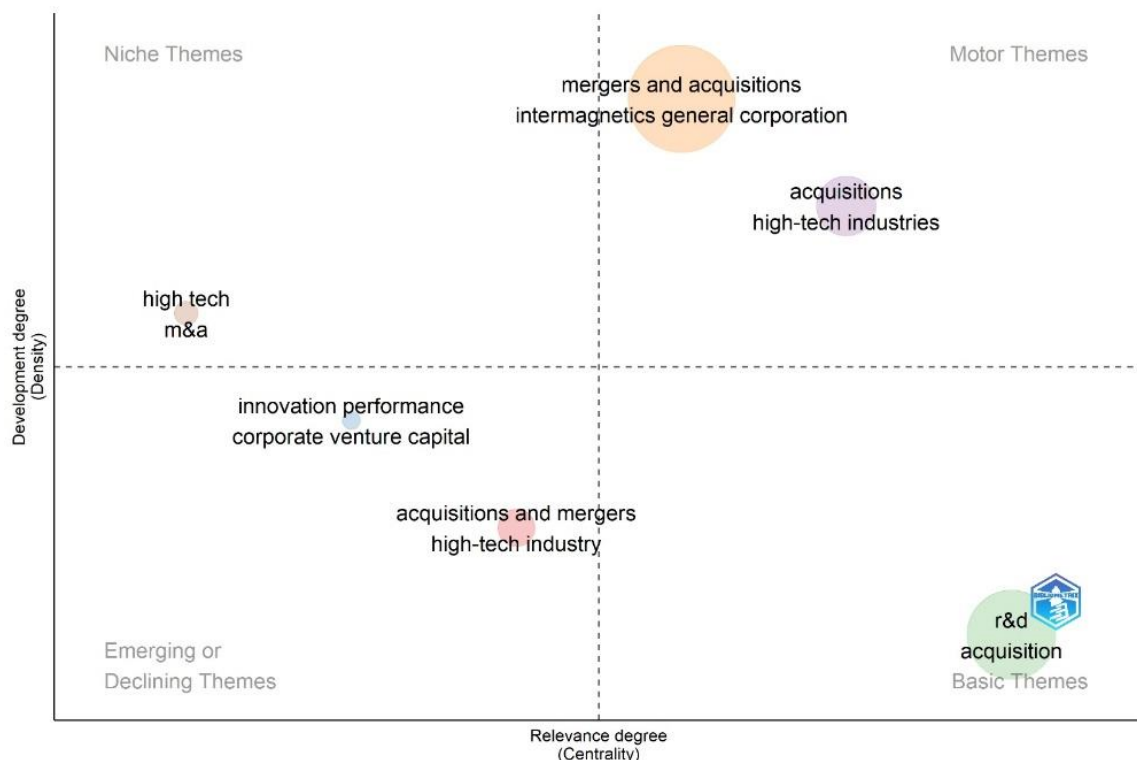

Figure 4. Thematic Map

From the figure above, the "merger and acquisitions" and "acquisitions" clusters are included in "motor themes" in top-right quadrant, the "innovation performance" and "acquisitions and merger" clusters are included in "emerging or declining themes" in bottom-left quadrant, the "r&d" cluster is in basic themes in bottom-right quadrant and the "high tech" is in "niche themes" in top-left quadrant. The topic of researches in this field are not very focused on several topics, the topic of the researches in this field of study are around developed or less developed and peripheral areas. It means, the researches in the "mergers and acquisitions" and "acquisitions" clusters are highly developed and important, but the researches

in the "innovation performance" and "acquisitions and mergers" clusters are marginal or vanishing.

Characteristic of Mergers and Acquisitions In The Technology Company

The conceptual structure of Mergers And Acquisitions In The Technology Company is analyzed through content analysis of the six clusters to generate the characteristic of the researches in this research area.

1) Mergers and Acquisitions

This "mergers and acquisitions" cluster is the largest cluster in this study. Vanhaverbek et al., (2002) formulated hypotheses pertaining to the number of direct ties between two companies, their proximity in the overall alliance network, and their centrality in that network. In so doing, vanhaverbek distinguish between ties that connect firms from the same and from different industry segments, and those that connect firms from the same or from different world regions. These hypotheses are tested on a sample of strategic alliances and acquisitions in the application specific integrated circuits (ASIC) industry.

The findings show that a series of strategic alliances between two partners increases the probability that one will ultimately acquire the other. Whereas previous direct contacts tend to lead to an acquisition, this is not true of previous indirect contacts, which increase the probability that a link between the companies, once it is forged, takes the form of a strategic alliance. In the case of acquisitions, firms that are more centrally located in the network of interfirm alliances tend to be acquirers, and firms with a less central position tend to become acquired. These findings underscore the importance of taking previously formed interfirm linkages into account when explaining the choice between strategic alliances and acquisitions, as these existing links influence the transaction costs associated with both alternatives.

Managing acquired foreign firms often proves to be a challenging task for the acquiring firms. Zhu et al., (2015) propose that industry characteristics are very important to an acquiring firm's actions, suggesting the existence of systematic differences in post-acquisition value creation in different industries. Moreover, the effect of these distinct approaches to value creation is also contingent on the bilateral national relationships of institutional distance, language differences, and diplomatic relationships between the home and host countries of the acquiring and acquired firms. Their study of 847 related cross-border acquisitions in the information technology industry in 27 home countries and 38 host countries provide support for these arguments. Specifically, they found that acquiring firms in service information technology industries where post-acquisition autonomy is more important in value creation out perform those in manufacturing industries where post-acquisition integration is preferred. Results also show institutional distance and language differences strengthen this relationship; in contrast, diplomatic relationships weaken the relationship.

The appropriate selection (prediction) of M&A targets for a given bidder company constitutes a critical first step for an effective technology M&A activity. Yet existing studies only employ financial and managerial indicators when constructing M&A prediction models, and select candidate target companies without considering the profile of the bidder company or its technological compatibility with candidate target companies. Such limitations greatly restrict the applicability of existing studies to supporting technology M&A predictions. To address these limitations, Yang et al., (2014) propose a technology M&A prediction technique that encompasses technological indicators as independent variables and accounts for the

technological profiles of both bidder and candidate target companies. Forty-three technological indicators are derived from patent documents and an ensemble learning method is developed for our proposed technology M&A prediction technique. Their evaluation results, on the basis of the M&A cases between January 1997 and May 2008 that involve companies in Japan and Taiwan, confirm the viability and applicability of the proposed technology M&A prediction technique. In addition, their evaluation also suggests that the incorporation of the technological profiles and compatibility of both bidder and candidate target companies as predictors significantly improves the effectiveness of relevant predictions.

2) Research and Development (R&D)

This "R&D" cluster is the second largest cluster in this study. Desyllas & Hughes (2008) investigate the prevalence of the motive to source technological knowledge externally through corporate acquisition. Drawing on make-or-buy and organizational learning theories, they infer the implications of this explanation for the acquirers' preacquisition innovative characteristics. Using an international sample of 6106 high technology acquisitions during 1984-2000, they assess the contribution of innovative characteristics to the acquisition likelihood. For firms acquiring small private firms and former subsidiaries—but not public target —the evidence is consistent with three propositions: (1) A firm's commitment to internal R&D is negatively affected by the decision to acquire; (2) Low R&D productivity increases the likelihood of acquisition; (3) A large knowledge stock predisposes firms to acquire because they perceive they are capable of selecting and absorbing targets. They conclude that acquisitions of small private firms and former subsidiaries are a viable R&D strategy to explore a range of potential future innovation trajectories for large public firms

3) High-tech

With high tech firms now representing the majority of acquisitions among all pubic, nonregulated firms, Davis & Madura (2015) attempt to determine how a tech firm's growth options influence its likelihood of being acquired. In particular, they develop a new growth options proxy called Gamma (Γ) to represent the return relative to investment in research and development. They find that Γ is inversely related to the likelihood of being acquired. Robustness tests show that this relationship holds regardless of the subperiod assessed, the size category assessed, whether tech firms are engaged in friendly or hostile acquisitions, the method used to identify tech firms, and whether the R&D definition includes capital expenditures. The relationship is even more pronounced when tech targets have a relatively low valuation (based on the market book ratio). Furthermore, Davis find that tech firms with a high Γ are less likely to acquire targets. In general, tech firms with a high Γ appear to prefer organic growth rather than expansion by combinations with other tech firms.

4) Innovation Performance

Based on the framework of 'M&A size integration process innovation outputs', Zhao et al., (2019) examine the relationship between M&A and postacquisition innovation performance, and the moderating effect of postacquisition R&D investment. Using zero inflated negative binomial regression with data on mergers and acquisitions of 277 high-tech firms in China from 2005 to 2015, they found that M&A size has an inverted Ushaped effect on post-acquisition innovation performance. Postacquisition R&D investment shows a significant moderating effect on this inverted U-shaped relationship and puts the inflection point of the inverted U-shaped curve to the right from 23% to 39%. Thus, for the acquiring firm, increasing

the post-acquisition R&D investment level can effectively improve its technology absorption capacity, thereby extending the positive effect interval of M&A size on its post-acquisition innovation performance.

The Potentials Research

There is some potential research that can be done in the field of mergers and acquisitions (M&A) in high-tech companies. Some interesting topics to research include:

a. Effect of M&A on innovation: Research can focus on the impact of M&A on the innovation capabilities of high-tech companies. How does M&A affect research and development activities, intercompany collaboration, and innovative output? Does M&A generate synergies or stifle innovation?

b. Factors for M&A success: Research can explore the factors that influence M&A success in the high-tech industry. Are there specific factors influencing the integration of culture, technology or management in the context of M&A in this sector?

c. Evaluation of value in M&A: Research can examine methods of evaluating value in M&A in high-tech companies. How is company value determined in a context that is often based on intellectual assets, intellectual property or growth potential? How should traditional valuation methods be adapted to reflect the particular aspects of high-tech companies?

d. Technology integration in M&A: Research can focus on challenges and effective approaches to integrating technology infrastructure and information systems between companies involved in M&A. How to manage differences in existing technologies, architectures and platforms to achieve the desired synergies?

Conclusion

The trend of mergers and acquisitions (M&A) in high-tech companies shows increasing research interest over time. These studies involve a number of authors and are published in various journals. In 2021, the number of articles produced reached its peak. Journals such as the Strategic Management Journal and the International Journal of Technology Management publish the most articles related to M&A in the high-tech industry. In terms of influence and citing, the most prolific authors don't necessarily have the highest number of cites. Geographically, the United States is the country most frequently mentioned in M&A research on high-tech companies, followed by the Netherlands and Belgium. The most influential studies in this field cover topics such as innovation, incorporating corporate culture and corporate value strategy.

M&A (mergers and acquisitions) in high-tech companies is an important area of research. Several findings suggest that a strategic alliance between two partners can increase the likelihood that one partner will eventually acquire the other. Companies that are in a central position in the intercompany alliance network tend to be the acquirers, while companies with a less central position tend to be the acquirers. Industry characteristics also influence the actions of the acquiring company and its success in creating value after the acquisition.

This research also shows that predictive effective M&A takes into account the bidder's company profile and the suitability of its technology to the target company. As an R&D strategy, acquisitions of small companies and former subsidiaries can be a way for large companies to explore future innovations. A technology company's growth options affect its

likelihood of being acquired, and companies with high growth options tend to choose organic growth over acquisitions with other technology companies. M&A size has an "inverted U"-shaped relationship with post-acquisition innovation performance, and post-acquisition R&D investment can moderate the relationship. Increasing the level of post-acquisition R&D investment can increase technology uptake capacity and extend the positive effect interval of M&A measures on post-acquisition innovation performance.

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