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Exploring The Strategic Role Of Activity-Based Costing In Modern Management Accounting

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Abstract

This study explores the strategic role of ABC in modern management accounting through a Systematic Literature Review (SLR) approach. A total of 50 peer-reviewed articles published between 2021 and 2026 were systematically analyzed to explore the evolution of ABC, its strategic contributions to managerial decision-making, patterns of organizational adoption, factors influencing implementation effectiveness, and future development directions. The findings indicate that ABC has evolved from a traditional cost allocation method into a strategic management accounting tool that provides more accurate cost information, supports managerial decision-making, improves operational efficiency, and enhances organizational performance. The analysis further reveals that the effectiveness of ABC adoption is influenced by organizational characteristics, industry complexity, technological readiness, and environmental conditions. Moreover, the integration of TDABC, digital technologies, and data analytics highlights the continuous transformation of ABC in addressing modern business challenges. This study contributes to the literature by synthesizing empirical evidence on ABC development and providing practical insights for organizations seeking to strengthen strategic decision-making through advanced costing systems.

Keywords: Activity-Based Costing, Modern Management Accounting, Strategic Cost Management, Time-Driven Activity-Based Costing, Organizational Performance.

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INTRODUCTION

The changing global business environment and digital transformation have increased organizations' need for accurate cost information to support strategic decisions (strategic decision-making) (Baferani et al., 2026; Qiu et al., 2023). Companies face the complexity of operational activities, efficiency pressures, as well as international competition that the system causes Traditional Costing it is increasingly difficult to provide relevant information. These conditions encourage the development of Modern Management Accounting that are able to connect activities, resources, and organizational value creation more comprehensively (Busschaert et al., 2025; Ibrahim et al., 2021).

ABC is evolving as an innovation in Management Accounting to address the weaknesses of traditional cost systems that often lead to distortions of indirect cost allocation (Overhead Cost). ABC is a cost accounting approach that explains the relationship between activities and resource consumption so as to produce more accurate cost information for management. The implementation of ABC is expanding in various international sectors such as manufacturing, healthcare, education, and public services because it is able to increase cost transparency and support information-based decisions (D) et al., 2021; Borzee et al., 2025).

Although ABC provides strategic benefits, its implementation still faces various obstacles such as data needs, complexity of implementation, and organizational readiness to utilize cost information (Cost Information) (Hadid & Hamdan, 2022). Some organizations have difficulty obtaining optimal benefits because cost systems are not always supported by an adequate organizational culture and control mechanisms. Research shows that the success of ABCs is influenced by both technical factors and the behavior of cost information users in organizations (organizational factors) (Friis & Hansen, 2026; Gurler et al., 2025).

Subsequent developments gave birth to TDABC as a refinement of ABC through the approach of activity time and capacity resource (Pashkevich et al., 2023). TDABC was developed to improve the accuracy of cost measurement by linking resource consumption to activity time used in the organization's operational processes. In the healthcare sector, TDABC is widely applied to evaluate service costs, identify resource waste, and improve service process efficiency. This approach allows healthcare organizations to obtain more transparent cost information and supports value-based strategic decisions (Busschaert et al., 2025).

In the manufacturing sector, TDABC is used to optimize production capacity, improve process efficiency, and identify opportunities for operational improvement through more

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detailed measurement of resource consumption. The implementation of TDABC helps manufacturing organizations understand the cost structure more accurately, reduce non-value-added activities, and improve the effectiveness of resource management. Studies show that TDABC is able to strengthen the quality of cost-based strategic decisions and support the improvement of organizational operational performance (Borzée et al., 2025).

International phenomena show the importance of strategic costing systems in dealing with cost efficiency pressures in various industries. For example, the global healthcare sector is facing increasing service costs so organizations are starting to implement TDABC to calculate patient costs more accurately, including in services Oncology Care, Telemedicine, and Value-based healthcare. In addition, the manufacturing industry faces supply chain complexity and digital transformation that requires cost information real-time for decision-making. This condition shows that ABC is developing as a strategic instrument to increase organizational efficiency and value (Varriale et al., 2023; Cidav et al., 2021; Paula et al., 2021).

In the development of the digital economy, ABC is undergoing transformation through integration Big Data, Artificial Intelligence, and Machine Learning to improve the organization's cost analysis capabilities (Ibrahim et al., 2021; Hammann, 2024). Global industry phenomena show that companies are starting to use analytics technology to generate faster, more accurate, and predictive cost estimates in the face of market uncertainty. The integration of accounting information systems with digital technology expands the functionality of the accounting information system. Management Accounting from just a report provider to a support for the organization's strategic decisions (Strategic Information System) (Baferani et al., 2026; Tingey et al., 2021).

In addition to improving operational efficiency, modern ABCs are also evolving to support sustainability and organizational value creation through environmental cost measurement (environmental cost) as well as more effective use of resources (Her et al., 2024; Flame et al., 2023). In the health, public, and manufacturing sectors, an activity-based approach is used to improve cost accountability as well as evaluate the relationship between resources and results obtained. These developments suggest that ABCs have a broader role as a strategic information system in the face of modern organizational challenges (Modern organizational challenges) (Lowing et al., 2025; Jeet et al., 2021). Thus, the implementation of ABC not only focuses on cost control, but also becomes a strategic instrument in increasing transparency, effectiveness, and competitiveness of organizations.

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Based on the development of previous research, studies on ABC still show fragmentation between aspects of implementation, technology, and strategic role in Modern Management Accounting (Busschaert et al., 2025). Some studies emphasize cost accuracy, while others focus on digitalization, sustainability, or strategic decision-making. Therefore, it is necessary Systematic Literature Review (SLR) to integrate various empirical findings and understand how ABC evolves into a strategic instrument in Modern Management Accounting.

LITERATURE REVIEW

Contingency Theory

Contingency Theory explains that the effectiveness of a management accounting system depends on the compatibility between organizational characteristics, the business environment, and the need for managerial information. In context Management Accounting, this theory emphasizes that there is no one universal costing system because each organization has different complexity of activities, cost structures, and decision needs. Therefore, the application ABC influenced by the organization's ability to adapt the cost system to the internal and external conditions faced (Tu & Thi, 2022; Hadid & Hamdan, 2022; Pavlatos, 2021).

The application of ABC can be understood through the perspective of Contingency Theory Because the effectiveness of such systems is influenced by the degree of compatibility between costing design and organizational characteristics. Organizations with complex activities, high proportion of indirect costs, and strategic information needs tend to have a greater need for sophisticated costing systems. Research shows that the factors of company size, operational complexity, and business environment are important determinants in the successful implementation of modern cost systems (Hadid & Hamdan, 2022; Tu & Thi, 2022; Ding et al., 2021).

Activity-Based Costing (ABC)

ABC is an approach in Management Accounting which allocates costs based on activities that use organizational resources. In contrast to traditional cost systems, ABC provides cost information through the identification of activities and factors that cause costs so that organizations are able to understand resource consumption patterns more accurately. Research developments show that ABC has developed into a strategic instrument that supports cost

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analysis, process efficiency, and managerial decision-making (Busschaert et al., 2025; Hadid & Hamdan, 2022; Ding et al., 2021).

The implementation of ABC is growing in various sectors such as healthcare, manufacturing, and public services because these sectors have complex activities and high cost transparency needs. In the healthcare sector, ABC and TDABC are used to measure service costs in more detail, while in manufacturing they are used to improve process efficiency and cost control. This shows that ABC has undergone a transformation from a cost calculation method to a strategic information system in modern organizations (Busschaert et al., 2025; Defourny et al., 2023; Cidav et al., 2021).

Strategic Role of Activity-Based Costing

The strategic role of ABCs relates to its ability to provide cost information that supports performance evaluation, activity control, and managerial decision-making. Activity-based information helps organizations identify key sources of costs, evaluate value-added activities, and determine more effective resource use strategies. In practice Modern Management Accounting, ABC serves as a strategic analysis tool that connects cost information with organizational goals (Qiu et al., 2023; Farsi & Erkoyuncu, 2021; Hadid & Hamdan, 2022).

Empirical research shows that ABC's strategic contribution is seen in its ability to increase cost transparency and support the optimization of organizational processes. In the health sector, ABC helps to link costs to service outcomes, while in the manufacturing sector it supports the evaluation of production activities and resource use efficiency. These differences in benefits show that ABC's strategic value is influenced by the sector's context, activity characteristics, and organizational information needs (Paula) et al., 2026; Borzee et al., 2025; Defourny et al., 2023).

Modern Management Accounting and the Evolution of ABC

Development Modern Management Accounting shows that ABC continues to undergo transformation through the development of TDABC and the integration of digital technology. TDABC was developed to increase the flexibility of the cost system through an approach to activity time and resource capacity so that it is more suitable to be applied to organizations with complex processes. These developments show that ABC continues to adapt to the increasingly dynamic cost information needs in the modern business environment (Baferani et al., 2026; Busschaert et al., 2025; Defourny et al., 2023).

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In addition to TDABC, technology integration such as Big Data, Machine Learning, and accounting information systems expand the function of the ABC in supporting strategic decision-making. Digital technology allows organizations to generate faster, more accurate, and predictive cost information, thereby strengthening the role of the ABC as a management information system. Thus, the development of the modern ABC demonstrates the close relationship between technological innovation, information needs, and organizational strategy (Baferani et al., 2026; Hammann, 2024; Ibrahim et al., 2021).

METHOD

This study applies the Systematic Literature Review (SLR) method guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standard to trace, select, and analyze relevant studies related to ABC and its role in the development of modern management accounting. The literature sources analyzed come from scientific articles indexed on Scopus and Web of Science (WoS), which are reputable academic databases and are widely used in research in the field of management accounting.

In line with the literature sources used, this study is dominated by scientific publications indexed by Scopus, especially in the Q1 to Q4 quartile. The articles analyzed include various empirical studies and conceptual studies on the implementation of ABC, the development of TDABC, strategic cost management, and digital transformation in management accounting systems. The literature comes from various industry contexts such as manufacturing, healthcare, education, public services, and technology that show the development of ABC globally.

To obtain relevant and quality articles, the selection process in this literature study is carried out through several stages as follows:

1. Literature searches use specific keywords, namely:
   a. The Relationship of ABCs with Management Accounting.
   b. The Relationship of ABC with Strategic Cost Management.
   c. The linkage of TDABC to cost efficiency and strategic decision-making.
2. Review and selection of articles based on title, abstract, year of publication, and relevance of research findings to the variables studied.
3. A thorough examination of the entire article to ensure compliance with the inclusion criteria set in this study.

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Based on these selection stages, the research data includes 50 journal articles published in the 2021–2026 time frame. This study establishes inclusion criteria that emphasize the focus on Activity-Based Costing, Time-Driven Activity-Based Costing, and their contribution to modern management accounting. The literature selection process follows the PRISMA stage, where at the initial stage 463 articles were identified, then filtered into 341 articles after going through the initial screening. Furthermore, through further evaluation based on inclusion criteria and methodological feasibility, 50 articles were obtained that were eligible for in-depth analysis and became the main database of this research. A PRISMA diagram illustrating the flow of literature selection can be seen in the following image:

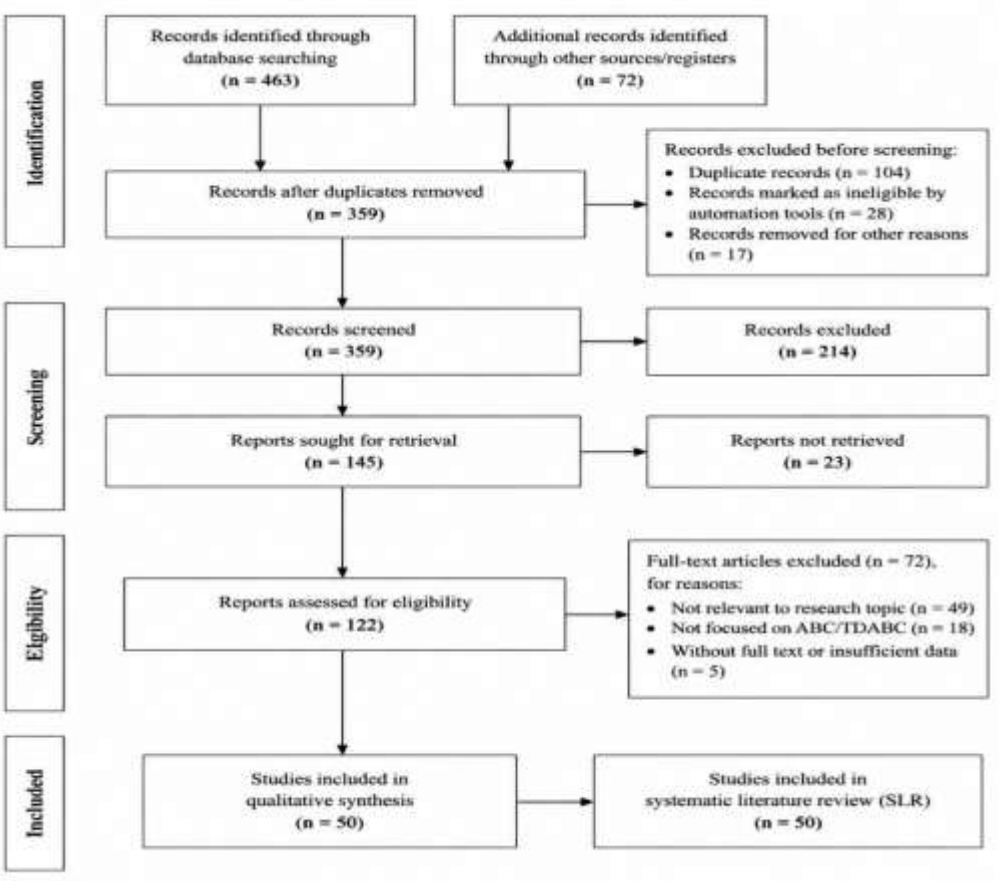


Figure 1. PRISMA Flow Diagram

The distribution of the 50 selected articles reflects the distribution of research from various countries and international journals based on the indexation of publications used, thus becoming the main indicator of the quality, credibility, and reliability of the literature in this

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study. Most of the articles come from journals indexed by Scopus and Web of Science with variations in the publication quartile, which shows that studies on ABC and modern management accounting have received wide attention in the international academic literature. The percentage distribution based on the index of journals used in this study can be seen in the following table.

Table 1. Journal Index Distribution

Journal Index	Number of Articles	Percentage
Scopus Q1	24	48,0%
Scopus Q2	14	28,0%
Scopus Q3	8	16,0%
Scopus Q4	4	8,0%
Total	**50**	**100%**

Source : Data processed, 2026

Based on Table 1, all articles analyzed in this study came from Scopus indexed journals with distribution in the Q1 to Q4 quartile. Most of the articles came from the Scopus Q1 journal with 24 articles (48.0%), followed by Scopus Q2 with 14 articles (28.0%). The dominance of publications in the upper quartile journals shows that research on ABC, TDABC, and the development of modern management accounting has become an important concern in reputable international literature.

The composition of the journal index shows that studies on ABC have a strong level of academic contribution because many are published in journals with high scientific selection standards. In addition, the existence of articles in Scopus Q3 as many as 8 articles (16.0%) and Scopus Q4 as many as 4 articles (8.0%) shows that ABC research is also developing in various application contexts and industrial sectors. This shows that ABC is not only a theoretical study, but also continues to be developed through empirical research in various organizational environments.

Table 2. Distribution of Research Theories

Theories Used	Number of Articles	Percentage
Contingency Theory	15	30,0%
Resource-Based View Theory	8	16,0%

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Theories Used	Number of Articles	Percentage
Institutional Theory	6	12,0%
Agency Theory	5	10,0%
Diffusion of Innovation Theory	4	8,0%
Transaction Cost Economics Theory	3	6,0%
Stakeholder Theory	3	6,0%
Technology Acceptance Model Theory	2	4,0%
Dynamic Capabilities Theory	2	4,0%
Legitimacy Theory	1	2,0%
Theory of Planned Behavior	1	2,0%
Total	**50**	**100%**

Source : Data processed, 2026

Based on Table 2, Contingency Theory is the most dominant theory used in research on ABC with a total of 15 articles (30.0%). The dominance of this theory shows that the implementation of ABC is closely related to the suitability between the cost information system and organizational characteristics, complexity of activities, operational structure, and managerial decision-making needs. In addition, Resource-Based View Theory is the second widely used theory with a total of 8 articles (16.0%) because ABC is seen as a strategic source of information that can improve the utilization of organizational resources.

In addition to these two theories, ABC's research also uses several other theories such as Institutional Theory, Agency Theory, Diffusion of Innovation Theory, and Transaction Cost Economics Theory. The diversity of theories shows that ABC's study in modern management accounting does not only focus on the technical aspects of cost calculation, but also considers organizational factors, management behavior, innovation adoption, and the relationship between cost information systems and improving organizational performance. Thus, the development of ABC's research shows a multidisciplinary approach in explaining the strategic role of the costing system.

Table 3. Distribution of Research Countries

Country	Number of Articles	Percentage
United States	8	16,0%

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Country	Number of Articles	Percentage
United Kingdom	6	12,0%
Australia	5	10,0%
Netherlands	4	8,0%
Germany	4	8,0%
Italy	3	6,0%
Spain	3	6,0%
Belgium	3	6,0%
Japan	3	6,0%
China	2	4,0%
Brazil	2	4,0%
Indonesia	2	4,0%
Canada	1	2,0%
Thailand	1	2,0%
Chile	1	2,0%
Total	**50**	**100%**

Source : Data processed, 2026

Based on Table 3, the distribution of research countries shows that studies on ABCs have developed in various regions of the world. The United States is the country with the largest article contribution of 8 articles (16.0%), followed by the United Kingdom with 6 articles (12.0%) and Australia with 5 articles (10.0%). The dominance of these developed countries shows that research on strategic costing systems is more developed in business environments that have a high level of operational complexity, large organizational structures, and the need for strong management information to support strategic decision-making.

The dominance of developed countries in ABC research is also related to the level of development of management accounting systems, the maturity of technology infrastructure, and the ability of organizations to adopt cost management innovations. Companies in developed countries generally have more complex operating characteristics, global supply chains, high levels of competition, and the need for resource efficiency that encourages the use of activity-based costing systems. Meanwhile, research from developing countries is still relatively more limited

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due to the limitations of technology implementation, organizational readiness, and the uneven adoption of modern management accounting practices .

Nevertheless, ABC research is not only concentrated in developed countries, but also covers various developing countries such as China, Brazil, Thailand, Chile, and Indonesia. The presence of research from developing countries shows that the need for accurate and strategic cost information is starting to increase along with the growth of industry, digital transformation, and increasing demands for organizational efficiency. The geographical distribution shows that ABC is a global issue that can be applied to various economic contexts with different organizational characteristics.

Table 4. Distribution of Research Sectors/Industries

Sector/Industry	Number of Articles	Percentage
Hospitals and Healthcare	12	24,0%
Manufacturing Company	10	20,0%
Public Companies and Government Services	6	12,0%
Information and Digital Technology Industry	5	10,0%
Education and Colleges	4	8,0%
Logistics and Supply Chain	4	8,0%
Agriculture and Food Industry	3	6,0%
Banking and Financial Services	3	6,0%
Tourism and Hospitality	2	4,0%
Energy and Environmental Industry	1	2,0%
Total	**50**	**100%**

Source : Data processed, 2026

Based on Table 4, the hospital and healthcare sectors were the most studied sectors in ABC's research with 12 articles (24.0%), followed by manufacturing companies with 10 articles (20.0%). The dominance of these two sectors is due to the complex characteristics of activities, the high proportion of indirect costs, and the need for accurate cost information to improve operational efficiency and support strategic decision-making of the organization. In the

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healthcare sector, ABC is widely used to identify the resource consumption of each service activity, while in the manufacturing sector, ABC helps companies understand the structure of production costs more accurately.

In addition to the health and manufacturing sectors, ABC's research also includes public companies, information technology, education, logistics, financial services, and various other sectors. The expansion of the research object shows that ABC has developed as a strategic instrument that not only functions for cost allocation, but also supports resource control, performance evaluation, cost transparency, and improvement of the quality of managerial decisions. This shows that the role of ABC is increasingly important in modern management accounting practices because it is able to adapt cost information needs to various organizational characteristics.

DISCUSSION

1. The ABC Development in Modern Management Accounting

The results of the literature synthesis show that ABC Experienced significant development from a cost measurement system to a strategic instrument in practice Modern Management Accounting. In its early stages, ABC was developed to address the limitations of traditional cost systems that are considered incapable of accurately generating cost information, especially in organizations with complex activities and a high proportion of indirect costs. Through an activity-based approach, ABC enables organizations to understand the relationship between resource consumption, operational activities, and cost formation more comprehensively. These developments are the basis for ABC's transformation in supporting the increasingly complex needs of modern management information (Baferani et al., 2026; Busschaert et al., 2025; Hadid & Hamdan, 2022).

As the business environment changes, the development of ABC is no longer limited to the function of cost calculation, but is beginning to be directed to support the organization's strategic decision-making. The literature shows that ABC is able to provide more relevant information related to value-added activities, process efficiency, control of resource use, and evaluation of organizational performance. This change in function shows a paradigm shift in management accounting, namely from an approach that is only oriented towards cost control to an approach that supports strategic value creation. Therefore, the development of ABC reflects the ability of management accounting systems to adapt to the needs of modern

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organizations that require more accurate and relevant cost information (Qiu et al., 2023; Tu & Thi, 2022; Ding et al., 2021).

Table 5. Development Activity-Based Costing in Modern Management Accounting

Period	Developmental Stages of ABC	Key Characteristics
1980–1990	The Emergence of ABC	Developed as an alternative to traditional cost systems through activity identification and cost drivers to improve the accuracy of cost information.
1990–2005	Expansion of ABC Implementation	ABC is starting to be applied to various organizations for the analysis of product, customer, process, and activity control.
2005–2015	TDABC Development	ABC was developed through a time and resource capacity approach to make it more flexible and easy to implement.
2015–2020	ABC integration with Strategic Management Accounting	ABC is used as a tool to support strategic decisions, performance evaluation, and organizational cost management.
2020–2026	ABC Digital Transformation	ABC thrives through the integration of digital technologies, information systems, data analytics, and technology-based approaches.

Source : Data processed, 2026

Based on these developments, it can be seen that ABC is undergoing a wider functional transformation in Modern Management Accounting. In the early period, ABC focused more

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on improving the accuracy of cost allocation through the identification of activities and resources consumed by the organization. However, subsequent developments showed the expansion of ABC's role towards strategic analysis, efficiency evaluation, and organizational performance improvement. The development of TDABC is an important form of adaptation because it is able to overcome the limitations of traditional ABC through a more flexible approach to time and resource capacity. This shows that ABC continues to evolve following the complexity of organizational activities and changing management information needs (Busschaert et al., 2025; Defourny et al., 2023; Cidav et al., 2021).

In recent developments, ABC is increasingly integrated with digital technology that allows organizations to obtain cost information faster, more accurately, and predictably. Integration with information systems, data analytics, and artificial intelligence-based technologies expands ABC's capabilities as a tool to support strategic decisions. These developments show that modern costing systems no longer only serve to explain historical costs, but also help organizations plan, predict, and evaluate business strategies. Thus, ABC is evolving to become an important part of the system Modern Management Accounting which supports efficiency, innovation, and increased organizational competitiveness in an increasingly dynamic business environment (Baferani et al., 2026; Hammann, 2024; Ibrahim et al., 2021).

2. The Strategic Role of Activity-Based Costing in Managerial Decision Making

The results of the literature synthesis show that ABC has evolved from a cost-allocation method to a strategic information system in Modern Management Accounting. ABC provides cost information based on activity and resource consumption so that it can produce a more accurate picture of costs than traditional systems. In perspective Contingency Theory, the effectiveness of ABC depends on the suitability between the cost information system and the characteristics of the organization, such as the complexity of activities, cost structure, and managerial needs. Thus, the strategic benefits of ABC arise when the system is implemented according to the conditions of the organization (Qiu et al., 2023; Hadid & Hamdan, 2022; Ding et al., 2021).

The application of ABC shows that the strategic value of this system differs based on the industry sector and the characteristics of the organization's activities. In the hospital sector, ABC helps identify the cost of each complex service activity, while in the manufacturing sector, ABC supports product cost analysis, process efficiency, and control of

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production activities. These differences in benefits show that there is no one costing approach that is suitable for the entire organization. Appropriate Contingency Theory, the success of ABC is influenced by the organization's ability to adapt the cost system to the operational environment and management information needs (Busschaert et al., 2025; Borzee et al., 2025; Hadid & Hamdan, 2022).

Literature review also shows that the development of ABC differs between countries because it is influenced by the level of business maturity, technological infrastructure, and management accounting practices. Developed countries such as the United States, the United Kingdom, and Australia show higher rates of ABC research because organizations face global competition and complex cost information needs. Meanwhile, developing countries still face challenges in the form of limited resources, technological readiness, and implementation capabilities. These conditions show that the adoption of ABC is influenced by external environmental factors of the organization (Baferani et al., 2026; Ibrahim et al., 2025; Tu & Thi, 2022).

In addition to providing accurate cost information, ABC plays a strategic role in improving the quality of decision-making through the identification of value-added activities, efficiency evaluation, and optimization of resource utilization. Activity-based information allows management to understand cost-forming factors and determine process improvement strategies more appropriately. However, the benefits of ABC are highly dependent on management support, data quality, user competence, and integration with the organization's information system. This shows that the success of ABC is the result of an interaction between system design and organizational context (Baferani et al., 2026; Defourny et al., 2023; Ding et al., 2021).

Overall, the results of the literature review show that ABC has an important role in strengthening the function of Modern Management Accounting through the provision of relevant information for strategic decisions. ABC's development towards TDABC and the integration of digital technologies demonstrates the system's ability to adapt to changing business environments. Thus, ABC not only serves as a cost control tool, but also becomes a strategic instrument that supports the efficiency, flexibility, and competitive advantage of modern organizations (Baferani et al., 2026; Busschaert et al., 2025; Ibrahim et al., 2021).

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3. Organizational Adoption and Activity-Based Costing Performance Implications

The results of the literature synthesis show that the success of the implementation of ABC is not only determined by the technical advantages of the cost system, but also influenced by the readiness of the organization to adopt and integrate the system into the management process. In perspective Contingency Theory, the implementation of ABC results in different benefits between organizations because they are influenced by the size of the company, the complexity of activities, the cost structure, and the need for managerial information. Organizations with a high level of operational complexity tend to benefit more because they need a cost information system that is able to explain resource consumption more accurately (Hadid & Hamdan, 2022; Tu & Thi, 2022; Ding et al., 2021).

The literature shows that internal organizational factors are an important element in determining the success of ABC adoption. Peak management support, user engagement, data quality, and human resource capabilities are factors that affect the effectiveness of costing system implementation. Companies that have an information-based organizational culture and strong control system tend to be able to utilize ABC as a performance improvement tool. On the other hand, organizations with limited resources and low technological readiness can experience obstacles in obtaining optimal benefits from the implementation of ABC (Ibrahim et al., 2025; Tingey-Holyoak et al., 2021; Kubota, 2023).

The difference in the impact of ABC implementation is also seen in various industry sectors. In manufacturing companies, ABC contributes to improving the efficiency of the production process through the identification of activities that result in high costs and evaluation of resource use. In the health sector, ABC helps organizations control service costs through activity mapping and resource consumption analysis. Meanwhile, in the public and service sectors, ABC is used to improve cost transparency and accountability in resource management. These differences show that the benefits of ABC are highly dependent on the characteristics of activities and strategic objectives of the organization (Busschaert et al., 2025; Borzee et al., 2025; Qiu et al., 2023).

In addition to sector characteristics, the context of the country also influences the success rate of ABC adoption in organizations. Countries with more competitive business environments and more developed management systems generally have higher rates of ABC adoption because organizations need cost information that supports business strategies. In contrast, in developing countries, ABC implementation still faces challenges in the form of

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limited technology investment, lack of management accounting expertise, and resistance to organizational change. These conditions show that the implementation of ABC requires adjustments to the institutional environment and organizational capabilities (Baferani et al., 2026; Defourny et al., 2023; Ibrahim et al., 2021).

Overall, the results of the literature review show that ABC makes a positive contribution to improving organizational performance when applied under appropriate conditions. ABC is able to improve cost efficiency, improve the quality of management information, and support data-driven decision-making. However, these benefits do not appear automatically because ABC's success depends on the alignment between the costing system, organizational strategy, and operational environment. Thus, ABC in Modern Management Accounting It must be understood as a strategic management system that requires organizational readiness to produce optimal performance impact (Baferani et al., 2026; Hadid & Hamdan, 2022; Ding et al., 2021;).

4. Digital Transformation and the Future Direction of Activity-Based Costing in Modern Management Accounting

The results of the literature synthesis show that the development of ABCs in the era of digital transformation has changed the role of the costing system from just a cost measurement tool to a data-driven strategic information system. Changes in the increasingly dynamic business environment encourage organizations to need faster, more accurate, and adaptive cost information to support decision-making. In perspective Contingency Theory, the transformation of ABC occurs because organizations need to adapt management accounting systems to technological changes, operational complexities, and ever-evolving strategic needs. Thus, digitalization is becoming an important factor influencing the relevance of ABC in modern management accounting practices (Baferani et al., 2026; Qiu et al., 2023; Ibrahim et al., 2021).

The development of TDABC is a form of adaptation of ABC to the needs of modern organizations. In contrast to traditional ABC which requires the identification of many activities and Driver Cost, TDABC uses the time approach as the basis for measuring resource consumption so that it is more flexible and efficient in its application. The literature shows that TDABC is widely applied to organizations with complex activities because it is able to

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provide simpler but still relevant cost information for management. These developments show that ABC continues to undergo refinements to improve cost analysis capabilities and support organizational strategic decisions (Busschaert et al., 2025; Defourny et al., 2023).

In addition to the development of TDABC, the integration of digital technology is an important direction in the development of today's ABC. The use of information systems, data analytics, and digital-based technology allows organizations to manage cost information in a more integrated manner with operational processes. This integration allows management to conduct cost analysis more quickly, identify activity patterns, and respond to changes in the business environment more effectively. However, the success of the implementation of digital-based ABC is still influenced by the readiness of the organization, the quality of technology infrastructure, and the ability of human resources to utilize the information generated (Hammann, 2024; Ding et al., 2021).

The development of ABC digitalization also shows that there are differences in implementation based on the characteristics of countries and industrial sectors. Organizations in countries with a more advanced level of technological maturity and management accounting practices tend to adopt digital-based costing systems faster because they have adequate infrastructure and resource support. Meanwhile, sectors such as hospitals and manufacturing have a higher need for the development of digital ABCs because they face great complexity of activities and efficiency pressures. These conditions strengthen the view that Contingency Theory that the effectiveness of accounting innovation depends on the fit between technology, organizational structure, and the business environment (Ibrahim et al., 2025; Borzee et al., 2025).

Overall, the results of the literature review show that the future of ABC will be increasingly influenced by the organization's ability to integrate costing systems with digital technology and business strategic needs. ABC is expected to not only function as a tool for calculating costs, but also to develop into a data-driven decision support system that is able to increase organizational efficiency, transparency, and competitiveness. Technological developments such as data analytics and integrated information systems provide opportunities for ABC to remain relevant in Modern Management Accounting. Therefore, the next direction of research needs to explore how technology integration can strengthen the strategic value of ABC in various organizational contexts (Baferani et al., 2026; Qiu et al., 2023; Ibrahim et al., 2021).

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CONCLUSION

Based on the results of a review of 50 scientific articles, this study concludes that ABC has undergone significant development from a cost measurement method to a strategic instrument in modern management accounting. ABC not only functions to improve the accuracy of cost information, but also supports managerial decision-making, operational efficiency, and optimization of organizational resources. The results of the synthesis show that the strategic role of ABC is seen through its ability to provide activity-based information that helps organizations understand resource consumption patterns and improve the quality of business decisions.

Viewed from the perspective of Contingency Theory, the effectiveness of the implementation of ABC is greatly influenced by the suitability between the characteristics of the costing system and the conditions of the organization, such as the complexity of activities, industrial sectors, company size, and the business environment. The implementation of ABC provides different benefits to the manufacturing sector, hospitals, financial services, and public organizations because each sector has different cost information needs. In addition, the development of TDABC and the integration of digital technology shows that ABC continues to adapt to the needs of modern organizations to produce more flexible, strategic, and data-driven information.

RESEARCH LIMITATIONS

This study has several limitations that need to be considered in understanding the results of the study. The analysis conducted is highly dependent on the characteristics of the available articles, including variations in research methods, organizational contexts, industry sectors, and different research locations. These differences lead to heterogeneity in the measurement of ABC implementation as well as its impact on organizational performance. Therefore, the interpretation of the results needs to consider that the strategic benefits of ABC can differ according to the conditions and needs of each organization.

In addition, variations in the rate of adoption of ABC between countries and sectors are factors that limit the generalization of the findings overall. Organizations in developed countries tend to have more supportive technology readiness and management systems than organizations in developing countries. Differences in regulations, organizational culture, human resource capabilities, and technological infrastructure can affect the successful implementation of ABC. In

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addition, the rapid development of digital technology leads to the need for further research to understand how ABC continues to transform in the modern business environment.

SUGGESTIONS

Further research is suggested to expand the study of the relationship between ABC and the development of digital technologies in the context of modern management accounting. Future studies may explore the integration of ABC with technologies such as big data analytics, artificial intelligence, integrated information systems, and predictive analytics to understand how these technologies enhance ABC's capabilities as a strategic decision-making tool. In addition, cross-country and cross-sectoral empirical research is needed to identify the contingency factors that most determine the success of ABC implementation.

For organizations and management accounting practitioners, the application of ABC needs to be viewed not only as a method of cost control, but as a strategic information system that supports organizational value creation. Adjustments between ABC design, business strategy, activity characteristics, and technological readiness are important factors so that the benefits of the system can be obtained optimally. Thus, the development of ABC in the future is expected to be able to strengthen the role of management accounting in dealing with business complexity and increasing organizational competitiveness in a sustainable manner.

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