

# Digitalization of Behavioral Accounting as a Foundation for Managerial Decision Making

Bayar Gardi<sup>1</sup>, Rizwan Ali<sup>2</sup>

<sup>1</sup>Gasha Technical Institute, Kurdistan Region, Iraq

<sup>2</sup>Government College University Faisalabad, Pakistan

Email: bayargardi@gmail.com

**ABSTRACT** – Digital transformation has fundamentally reshaped the landscape of behavioral accounting, presenting both challenges and opportunities for enhancing managerial decision-making. Systems based on big data, artificial intelligence, and block chain enable more comprehensive information processing and enhance the accuracy of organizational behavior analysis. Nevertheless, the effectiveness of such integration is frequently hindered by behavioral barriers originating from users themselves. This study seeks to address two central issues: how digital technologies are transforming behavioral accounting practices to support managerial decisions, and how behavioral obstacles may affect the effectiveness of technological integration. Through a literature review of recent international publications, the analysis demonstrates that digital technologies can reduce cognitive biases, reinforce transparency, and improve objectivity in decision-making processes. However, resistance to change, limited digital literacy, distrust in technological systems, and technological anxiety have been shown to slow adoption and diminish the potential benefits of these advancements. Accordingly, the effectiveness of digital technology integration in behavioral accounting is determined not only by technical factors but is also significantly influenced by individual behavioral readiness and organizational culture. These findings underscore the critical importance of considering human factors in any digitization initiative, so that the designed systems can function as more strategic, adaptive, and sustainable decision-support instruments amid the dynamics of modern business.

**Keywords:** behavioral accounting, digital technology, big data, artificial intelligence, blockchain, cognitive bias, decision-making.

## A. INTRODUCTION

The advancement of digital technology has brought significant transformation in the field of accounting, particularly in relation to the behavioral aspects of organizations. Innovation driven by artificial intelligence, big data analytics, and accounting automation compel companies to shift from traditionally record-oriented workflows to processes informed by real-time information (Gani & Darmawan, 2022). This shift affects not only technical dimensions but also alters the way individuals within organizations process information and make strategic decisions.

Digitalization is fostering an increasingly complex accounting environment in which data accuracy and the speed of analysis have become key determinants of managerial decision quality. Technology provides new tools that allow for faster, more measurable interpretation of financial behaviors (Koval & Tomchuk, 2024). As a result, management processes are no longer solely reliant on intuition, but instead involve the integration of quantitative evidence with behavioral factors that influence decision-making.

From a global perspective, many companies have migrated their accounting systems to cloud-based platforms, allowing data access across departments and geographic regions (Spilnyk et al., 2024). This transition offers substantial opportunities for managers to realize real-time insights into employee behavior, market trends, and consumption patterns. Thus, digital technology not only supports efficiency, but also enriches the understanding of organizational behaviors relevant to behavioral accounting.

This evolving landscape presents a complex array of challenges and opportunities. On one hand, digitalization enhances the transparency and accuracy of information (Surya, 2024). On the other, managers face the risk of misinterpretation due to information overload

or behavioral biases embedded within digital systems (Oliveira et al., 2024). In consequence, the integration of digital technology into behavioral accounting should be viewed as a strategic endeavor to elevate the quality of managerial decision-making.

In behavioral accounting, digital technology provides new tools for understanding how individuals process financial information. For instance, analytical dashboards allow managers to identify cognitive biases in budgeting and forecasting. Thus, technology serves as both a tool for recording transactions and a diagnostic instrument that reveals the behavioral dynamics underlying the numbers.

The application of digital technology to behavioral accounting extends organizational capabilities in designing incentives and internal control mechanisms. Big data-based systems facilitate a more comprehensive analysis of employee behavioral patterns. This enables managerial decisions to be tailored to the psychosocial realities of the firm. This highlights the close relationship between technology and behavior in shaping the quality of decision-making processes.

Despite the significant opportunities presented by digital technology integration, a fundamental challenge lies in the readiness of human resources to adopt such changes. Many managers encounter difficulties in interpreting digitally-based data due to limited analytical literacy, which raises the potential for new forms of bias in decision-making, even when digital systems provide more accurate information (Appelbaum et al., 2017).

Moreover, variations in technology acceptance among employees generate resistance that affects the effectiveness of digital systems. The gap between technology availability and behavioral acceptance by users can diminish the strategic value of digitalization in behavioral accounting (Vasarhelyi et al., 2015). This condition indicates that the core issue does not reside within the technology itself but rather in the integration of human behavioral aspects to optimize the utility of digital systems. The integration of digital technology in behavioral accounting is a phenomenon that warrants close examination. The quality of managerial decisions will determine a company's competitiveness in the digital era.

Therefore, making data-driven and behaviorally-informed decisions can enhance the accuracy of business strategies and

simultaneously strengthen organizational resilience amid global market dynamics. Additionally, the urgency of this topic arises from the reality that digital technologies are evolving at a pace that surpasses the rate of behavioral adaptation. If this gap is not scientifically understood, modern accounting systems are at risk of becoming ineffective. Thus, rigorous inquiry into the integration of technology and behavioral accounting is essential to ensure the ongoing quality of managerial decision-making.

The purpose of this study is 1) to elucidate the transformation of behavioral accounting practices resulting from the integration of digital technologies, and 2) to evaluate the impact of these changes on the quality of managerial decision-making. Furthermore, this study seeks to analyze behavioral barriers that may reduce the effectiveness of digital technology adoption in behavioral accounting practices.

## B. METHOD

This study uses a literature review approach to critically examine a range of relevant academic sources. The literature was sourced from international journals that address behavioral accounting, accounting information systems, and the application of digital technologies in decision-making processes. The review process entailed identifying articles that encompassed the concepts of digital technology integration, organizational behavior analysis, and managerial factors associated with behavioral accounting. Sources were selected from reputable academic databases, including Scopus, Web of Science, ScienceDirect, and Google Scholar, to ensure the scientific accountability of the analyzed data. This approach was chosen for its ability to synthesize theoretical frameworks and empirical evidence from relevant disciplines to produce a comprehensive analysis. As highlighted by Webster and Watson (2002), a systematic literature review helps establish a more coherent conceptual framework for the phenomena under investigation.

The analytical strategy involved classifying sources according to key themes: digital transformation in accounting, behavioral dynamics within organizations, and the quality of managerial decision-making. This process facilitated the identification of patterns, gaps, and interconnections among variables

influencing the effectiveness of digital technology integration. To maintain reliability, articles were selected based on criteria such as citation metrics and topical relevance to behavioral accounting. This approach aligns with the guidelines of Tranfield et al. (2003), who emphasize the necessity of methodological structuring in literature reviews to achieve credible synthesis. Consequently, each source was analyzed not only in conceptual terms but also for its contribution to understanding the dynamics of managerial behavior in the digital era. The literature analysis is organized in a descriptive and integrative manner, aiming to connect digital technology and human behavior within the managerial accounting framework.

The collected data were compared to identify convergent and divergent perspectives, subsequently developed into broader analytical discussions. This integrative approach extends the review beyond a single paradigm, encouraging interdisciplinary insights that enrich interpretation. In accordance with Snyder (2019), literature reviews serve as an effective method for constructing theoretical foundations and guiding the development of future empirical studies. Thus, the adopted methodology ensures that the findings comprehensively reflect the dynamics of digital technology integration in behavioral accounting and its implications for the quality of managerial decision-making.

### C. RESULTS AND DISCUSSION

#### **The Transformation of Behavioral Accounting Practices through Digital Technology**

The transformation brought about by digital technology has led to significant changes in behavioral accounting practices, introducing new approaches to understanding, analyzing, and influencing managerial decision-making processes. Advancements in big data, artificial intelligence, and enterprise resource planning (ERP) systems have expanded the scope of behavioral accounting beyond traditional analyses of perceptions, biases, and individual psychological dynamics within organizations. Instead, it is integrated with real-time information, expanding the cognitive capacities of managers. For example, cloud-based accounting systems enable managers to access automatically updated financial data, thereby reducing perceptual errors caused by information delays (Granlund, 2011).

Furthermore, predictive algorithms driven by machine learning allow organizations to analyze patterns in managerial behavior and formulate probabilistic recommendations, directly enhancing the accuracy of decision evaluation (Appelbaum et al., 2017). The impact of these changes lies not only in technical dimensions, but also in behavioral aspects, as digital technology shapes the ways in which individuals process information, interpret risks, and interact within collective decision-making processes.

When managers are confronted with voluminous data, digital systems function as cognitive filters that guide their attention toward key indicators. This reduces the heuristic biases commonly occurring in organizational environments (Arnaboldi et al., 2017). Therefore, it can be said that digital technology is a catalyst for revolutionizing behavioral accounting practices by increasing data availability and transforming how individuals behave, communicate, and make strategic decisions amid increasingly complex business dynamics.

The integration of digital technology into behavioral accounting carries implications for how individuals process information and form beliefs in decision-making. Previous behavioral accounting theories have emphasized human susceptibility to cognitive biases, such as overconfidence and anchoring, which may diminish decision quality. However, digital systems incorporating data mining and prescriptive analytics can now provide stronger, evidence-based insights to mitigate such biases. Through interactive data visualizations, managers are able to identify previously hidden trends and conduct more objective evaluations.

This development reinforces the role of accounting systems as behavioral control instruments by providing a transparent quantitative framework. According to Warren et al. (2015), big data technology enables managers to connect financial information with organizational behavioral indicators, thereby allowing them to more precisely understand the psychological consequences of their decisions.

This transformation not only creates efficiencies in accounting practices but also shapes new interaction patterns between humans and systems. When managers utilize digital platforms that provide real-time

feedback, psychological dynamics such as motivation, risk perception, and adaptive tendencies are likewise influenced. Thus, digital technology should be understood as an external factor that modifies behavioral responses, creates a more structured decision-making environment, and reduces the probability of deviations from organizational objectives (Mardikaningsih & Darmawan, 2022).

The substantial changes in behavioral accounting brought about by the adoption of digital technology are evident in the evolving role of accounting information systems, which have transitioned from mere recording tools to instruments of managerial behavioral control. Modern digital systems enable automatic transaction recording, integration of data across divisions, and more detailed activity tracking. These developments impact decision-making behavior, as managers are now able to analyze not only aggregate figures but also behavioral patterns reflected in operational data. For example, the latest generation of ERP systems integrates financial indicators with behavioral data, such as employee engagement and resource consumption patterns, thus providing a more holistic organizational perspective.

Hall (2010) affirms that digital accounting information systems serve as communication tools influencing individual behavior within organizations. In other words, technology does not only present information but also regulates how that information is interpreted and utilized within collective processes. Managers who previously relied on intuition now use systems that require the structured consideration of behavioral variables. This further supports the idea that digitalization has transformed behavioral accounting into an interactive discipline in which technology mediates between data and human agents.

Digital technology has enhanced the integration of agency theory with behavioral accounting and managerial control systems. Contemporary organizations often face conflicts of interest between principals and agents, which can lead to behavioral challenges such as opportunistic behavior or information manipulation. Blockchain technology has increased transaction transparency substantially, thereby limiting opportunities for such actions.

A Research by Dai and Vasarhelyi (2017) state that blockchain provides a permanent, immutable record, thereby strengthening managerial accountability. Beyond mere

transparency, this technology alters the trust dynamic between owners and managers, as managerial decisions can now be directly verified through smart contracts (Darmawan & Gardi, 2024). Consequently, agent behavior within organizations becomes more readily controlled, reducing the monitoring burden on principals. In the context of behavioral accounting, this transformation signifies that decision-making is no longer contingent solely on subjective perceptions or asymmetric information; rather, it relies on automated systems ensuring data reliability. Thus, blockchain technology is not merely a technical innovation but also a behavioral instrument that restructures relationships among actors within modern organizations.

Big data analytics serves as a principal driver of behavioral accounting transformation by enabling organizations to understand managerial behavioral patterns with greater granularity. Traditionally, behavioral accounting has often relied on limited experiments and surveys. At present, big data analytics enables the observation of actual behavior at scale and with higher accuracy. Demirkan and Delen (2013) emphasize that big data analytics can help managers predict the consequences of decisions even before implementation. Within the framework of behavioral accounting, this is particularly crucial, as risk perceptions, individual preferences, and heuristic biases can be tested through data-driven simulations. For example, real data on consumer and employee behavior may be used to anticipate psychological responses to pricing policies or compensation system changes. In other words, digital technology offers greater scope for behavioral experimentation, grounded in empirical evidence and more closely aligned with organizational realities. Ultimately, this approach fosters more accurate decision-making conditions and reduces behavioral deviations that could potentially harm the organization.

Changes in managerial accounting behavior, influenced by digital technology, are closely linked to social interactions within organizations. Internal social media, collaborative platforms, and digital communication systems have fundamentally changed the way managers coordinate and make decisions (Gardi et al., 2021). Decision-making no longer occurs solely within the confines of formal meeting rooms, but also



through real-time discussions on digital platforms. Kaplan and Haenlein (2010) emphasize that digital media expand the arena of social interaction, directly impacting the dynamics of organizational behavior. In the realm of behavioral accounting, this phenomenon establishes new conditions in which information transparency is enhanced, social pressure on managers intensifies, and collective expectations can be more readily formed.

Due to the existence of permanent digital records, every decision can be traced, analyzed, and reevaluated by various internal and external parties. This reinforces social control mechanisms while simultaneously reducing the likelihood of decisions deviating from organizational objectives. Hence, digital technology influences not only the technical dimension of accounting but also shapes collective behavioral patterns that play a critical role in managerial processes.

Artificial intelligence (AI) introduces an additional layer to the transformation of behavioral accounting, as it is capable of automating complex analyses previously performed exclusively by humans. Through AI, managers can receive both predictive and prescriptive recommendations, thereby enhancing their capacity to comprehend situational dynamics. Kokina and Davenport (2017) state that AI broadens the accountant's role from merely a reporter to a strategic advisor capable of interpreting analytic outputs for managerial purposes.

From a behavioral perspective, AI acts as a cognitive partner that helps mitigate memory limitations and perceptual biases inherent in human judgement. For instance, AI-based systems are able to detect anomalous patterns in transaction data that managers might otherwise overlook due to cognitive fatigue. Accordingly, digital technology functions to alter the behavioral dynamics of decision-making by supplying objective means that minimize the impact of personal bias. This transformation underscores that behavioral accounting practice in the digital era is increasingly shaped by the interplay between human agents and machines, ultimately resulting in more rational and evidence-based decisions.

Digital technology has also redefined performance evaluation models, a central focus of behavioral accounting. Traditionally,

performance evaluation was conducted periodically using historical data, a practice prone to retrospective bias. Presently, digital dashboards enable real-time performance assessment with a balanced representation of financial and non-financial indicators. Marr (2016) demonstrates that dashboard-based data visualization enables managers to grasp performance intuitively while accelerating responses to anomalies.

From a behavioral standpoint, this creates a context in which managers are more motivated to act adaptively, as their decisions are immediately reflected in metrics visible to all stakeholders. Consequently, behavioral accounting now operates within a more transparent framework, characterized by increased social pressure but also clearer behavioral incentives. Thus, digitalization reinforces accounting's function as a feedback system that not only records outcomes but also shapes managerial behavior throughout the decision-making process. The behavioral changes induced by digital technology are also evident in how managers perceive and address risk. Traditionally, risk was measured using financial reports and projections derived from static assumptions.

Today, digital technology enables the use of scenario-based simulations that are significantly more dynamic. Power (2016) asserts that digital technology expands the organizational capacity to manage risk by processing complex data to generate a variety of scenario alternatives. From a behavioral accounting perspective, this shift modifies managerial risk perception, as decisions are now grounded in measured probabilities that are comprehensively visualized, rather than mere intuition. The resultant effect is a reduction in behavioral biases—such as loss aversion or overconfidence—while improving the quality of alternative evaluations (Arifin & Darmawan, 2021). In consequences, digital technology transforms managerial behavior in risk appraisal, enhances decision-making quality, and reduces organizational vulnerability to uncertainty.

Digitalization has also revolutionized organizational learning patterns, which are vital in behavioral accounting. Technologies such as machine learning empower organizations to learn from historical data patterns to improve future decision-making. Brynjolfsson and McAfee (2017) emphasize that organizations

leveraging digital technology as a learning tool attain greater adaptive advantage over competitors. From a behavioral standpoint, this implies that managerial decisions are increasingly informed by collective knowledge that is continually updated through digital systems. Within this framework, behavioral accounting no longer solely investigates individual psychological responses, but also the interactions between individuals and knowledge-retaining systems. Thus, digital technology transforms behavioral accounting into a more dynamic discipline, where continuous learning is integral to the managerial decision-making process.

In conclusion, digital technology has fundamentally altered the landscape of behavioral accounting by expanding its scope, deepening analysis, and reinforcing behavioral control mechanisms for managers. Innovations ranging from big data and AI to blockchain and digital dashboards have introduced novel means to mitigate bias, increase transparency, and enrich decision-making quality. Christensen et al. (2021) emphasize that the integration of digital technology in modern accounting is inseparable from the dynamics of human behavior, as system efficacy hinges on human interpretation. Hence, technology not only functions as a technical instrument but also forms part of a behavioral ecosystem that shapes how managers think and act. This conclusion confirms that the future of behavioral accounting will increasingly depend on the extent to which digital technology can be integrated with an understanding of human behavior, fostering synergy between data and psychology in managerial decision-making processes.

### **Behavioral Barriers to Digital Technology Integration in Behavioral Accounting**

The integration of digital technology into behavioral accounting frequently encounters barriers originating from human behavioral factors. Although technologies such as big data, artificial intelligence, and blockchain offer substantial opportunities to enhance decision-making quality, user resistance remains a primary challenge. Rogers (2003) explains that the adoption of technology consistently follows the diffusion curve, with some individuals acting as innovators and early adopters, while others are resistant or slow to adapt. In the context of behavioral accounting, this resistance is evidenced by managerial

skepticism regarding the reliability of digital system outputs or employee apprehension about job displacement due to automation. Such behavioral obstacles result in suboptimal utilization of systems, despite the availability of digital infrastructure. This condition demonstrates that the effectiveness of digital technology integration depends not only on system sophistication but also on users' behavioral readiness to embrace change.

One of the predominant behavioral barriers is resistance to change. Employees and managers often feel a sense of comfort with familiar traditional systems, making them reluctant to transition to new technologies (Darmawan, 2024). Oreg (2006) emphasizes that resistance to change is a natural psychological response when individuals perceive threats to their identity, routines, or stability. In behavioral accounting, such resistance may manifest as a refusal to use ERP systems, reluctance to utilize digital dashboards, or even the disregard of recommendations generated by artificial intelligence. This hesitation is not merely a technical issue but is deeply rooted in cognitive and emotional responses that can undermine innovation efforts. As a result, change initiatives that ignore these psychological dimensions are likely to face significant implementation challenges.

Consequently, the potential of technology to enhance decision-making quality is not fully realized. Furthermore, this resistance can create a disconnect between management's strategic plans that advocate digitalization and operational behaviors that remain bound to legacy methods (Eddine et al., 2023). Therefore, the success of technology integration depends heavily on organizational change strategies that can overcome behavioral obstacles.

Another significant barrier is the limited digital literacy among users. While systems based on big data and artificial intelligence offer richer information, users lacking sufficient technical understanding often fail to interpret outputs accurately. Venkatesh et al. (2003) in the Unified Theory of Acceptance and Use of Technology (UTAUT) explain that performance expectancy, effort expectancy, social influence, and facilitating conditions are dominant factors determining technology acceptance. If users perceive systems as difficult to understand or lack confidence in their ability to use them, utilization rates will decline.

In behavioral accounting, this may lead to misinterpretation of analytics-based reports, ultimately affecting the quality of decision-making (Vărzaru, 2022). Therefore, low digital literacy is a significant behavioral barrier to technology integration.

A further impediment is distrust towards digital systems. In certain cases, users are more inclined to trust their intuition or personal experience over algorithm-based system recommendations. Gefen et al. (2003) underscore that trust is a pivotal factor in the adoption of information systems, especially when new technologies replace manual processes. Without sufficient trust, users may reject predictions or analyses provided by digital accounting systems. In behavioral accounting, this can result in persistently biased managerial decisions, despite the availability of objective data from technology. Such distrust impedes full integration since system effectiveness can only be achieved when users trust and rely on the recommendations supplied (Khairi & Darmawan, 2022).

Emotional attachment to legacy methods can also diminish the effectiveness of technology integration. Hirschheim (1988) explain that information system changes often provoke professional identity conflicts, wherein individuals feel that their established expertise has become obsolete. In behavioral accounting, senior accountants accustomed to manual methods may perceive digital systems as devaluing their skills. This condition may prompt passive resistance, such as minimal system usage or procrastination in adopting new features, thereby limiting the capacity of technology to optimize managerial decision-making processes.

Behavioral barriers also arise from digital fatigue. Maruping et al. (2017) state that intensive use of information systems can induce saturation, thereby reducing long-term adoption levels. In behavioral accounting, excessive exposure to dashboards, visual reports, and automatic notifications may cause information overload. When individuals experience digital fatigue, they tend to disregard system recommendations and revert to subjective judgment.

This phenomenon illustrates that, while digital technology increases data accessibility, behavioral impediments such as fatigue may reduce its effectiveness in supporting

managerial decision-making. In addition, incentive-related barriers significantly influence technology adoption. If organizations fail to provide recognition or rewards for technology use, individuals lack sufficient motivation to utilize systems optimally. Locke and Latham (2002) explain that goals and incentives influence work motivation. In behavioral accounting, insufficient incentives may cause managers to persist in traditional analysis and decision-making methods. When individuals do not perceive clear benefits or rewards, they are less willing to embrace new technology, which can cause efforts to integrate digital tools to lose momentum as user behavior does not align with the organization's strategic objectives.

Another behavioral barrier is the status quo bias. Samuelson and Zeckhauser (1988) demonstrate that individuals tend to maintain current practices rather than risk adapting to new systems. Status quo bias leads users to continue with legacy practices, even when digital technologies offer superior alternatives. In behavioral accounting, this is evident when managers rely on static, spreadsheet-based reports instead of utilizing dynamic ERP systems. This barrier slows the digitalization process and constrains the benefits of technology in enhancing decision quality.

Moreover, the persistence of status quo bias is often amplified by the perceived complexities and uncertainties associated with transitioning to new technological infrastructures. Users may feel overwhelmed by the potential need to alter established workflows, leading to resistance even in the presence of tangible benefits. This reluctance is not solely driven by habit, but also by concerns over losing familiar methods of control and predictability within organizational processes. In addition, successful digital adoption demands more than technical superiority; it requires a nuanced understanding of user motivation and adaptability. Therefore, barriers rooted in behavioral tendencies are closely intertwined with psychological comfort and cognitive alignment. By acknowledging these multidimensional influences, it becomes clear how reluctance to move beyond legacy approaches can evolve into broader challenges of system fit and user acceptance, as explored in the following discussion.

An additional constraint is the mismatch between individual work styles and system mechanisms. Zhang et al. (2016) highlight that technology adaptation depends on the alignment between user requirements and the features provided. If the system is perceived as unsupportive of preferred work practices, users will be reluctant to fully adopt it. In behavioral accounting, this may manifest as rejection of automated systems when users feel deprived of flexibility in data processing. Such incompatibility creates behavioral barriers that undermine effective technology integration.

Behavioral barriers are also shaped by organizational culture. Leidner and Kayworth (2006) assert that cultural values determine how individuals respond to new technologies. In organizations with conservative cultures, digitalization is often perceived as a threat to stability. Conversely, innovation-oriented organizations find it easier to accept new systems. The collective mindset within an organization influences whether employees view technology as an opportunity or a disruption. Therefore, cultural alignment with digital initiatives is essential for encouraging active participation and reducing resistance. In behavioral accounting, rigid cultures can foster systematic resistance to technology integration, thereby limiting the potential for digital technologies to optimally support decision-making. Ultimately, this highlights the profound influence of shared organizational values on the success or failure of digital transformation efforts.

Furthermore, entrenched norms and unwritten rules may reinforce employees' reluctance to depart from established practices, even in the presence of compelling technical advancements. Such resistance is often intensified by a lack of shared vision regarding the strategic value of technological transformation, which underscores the need for robust internal communication and leadership commitment. When organizations prioritize openness, ongoing learning, and adaptability as core values, employees are more likely to engage constructively with change and contribute to successful digitalization. In contrast, cultures characterized by risk aversion and hierarchical authority structures may implicitly discourage experimentation, thereby perpetuating the status quo and inhibiting innovation. Consequently, the formulation of proactive

strategies that address both technical and cultural dimensions becomes imperative for realizing the full benefits of digital integration within organizational contexts.

Finally, technological anxiety frequently emerges as a behavioral barrier. Parasuraman and Colby (2015) argue that technology can trigger negative emotions, including fear, anxiety, and distress. In behavioral accounting, technological anxiety causes users to avoid interacting with digital systems, despite recognizing their benefits. This results in suboptimal technology utilization and diminishes the effectiveness of integration. Therefore, technological anxiety is a critical behavioral factor that may hinder the success of digitalizing accounting.

#### D. CONCLUSION

The integration of digital technology into behavioral accounting has demonstrably brought about significant transformation in how organizations manage information and support managerial decision-making. Various instruments, such as big data, artificial intelligence, and blockchain, have expanded the capacity of accounting to produce analyses that are more objective, transparent, and relevant. These technologies not only enhance data processing capabilities but also allow for deeper insights into human behaviour and decision-making patterns. However, the effectiveness of such integration is determined not solely by technological sophistication but equally by users' behavioral readiness to accept and utilize these advancements. Obstacles such as resistance to change, status quo bias, distrust of systems, and technological anxiety may hinder the optimal utilization of digital technology. Thus, the success of digital transformation in behavioral accounting is the result of a complex interplay between technological factors and human behavioral factors that are mutually interrelated.

Looking ahead, efforts to strengthen the integration of digital technology in behavioral accounting must be directed toward strategies that enhance individual behavioral readiness at all organizational levels. Emphasis on digital literacy, change management, and the development of trust in systems will help to create a more adaptive work environment. Furthermore, fostering an organizational culture that encourages innovation and rewards technology utilization can serve as a critical



foundation for the sustainability of digital integration. This will ensure that technology functions not merely as a technical instrument but also as an integral part of a more intelligent and strategic decision-making ecosystem.

To further amplify the impact of digital integration in behavioral accounting, interdisciplinary collaboration between accountants, data scientists, psychologists, and IT professionals is essential. Such collaboration can bridge the gap between technical functionality and user-centric design, ensuring that digital tools are not only powerful but also intuitive and aligned with behavioral tendencies. For example, incorporating insights from behavioral science into the design of accounting systems can mitigate cognitive overload and promote better user engagement. This collaborative approach enhances the alignment between system capabilities and user behavior, ultimately increasing the adoption and effectiveness of technological innovations in accounting practices.

## REFERENCES

- Appelbaum, D., Kogan, A., Vasarhelyi, M., & Yan, Z. 2017. Impact of Business Analytics and Enterprise Systems on Managerial Accounting. *International Journal of Accounting Information Systems*, 25, 29–44. <https://doi.org/10.1016/j.accinf.2017.03.003>
- Arifin, S., & Darmawan, D. 2021. Technology Access and Digital Skills: Bridging the Gaps in Education and Employment Opportunities in the Age of Technology 4.0. *Journal of Social Science Studies*, 1(1), 163–168.
- Arnaboldi, M., Busco, C., & Cuganesan, S. 2017. Accounting, Accountability, Social Media and Big Data: Revolution or Hype? *Accounting, Auditing & Accountability Journal*, 30(4), 762–776. <https://doi.org/10.1108/AAAJ-03-2017-2880>
- Brynjolfsson, E., & McAfee, A. 2017. *Machine, Platform, Crowd: Harnessing Our Digital Future*. W. W. Norton & Company.
- Christensen, T. E., Czerney, K., & Grady, S. S. 2021. The Future of Accounting Research in a Digital World. *Journal of Accounting Literature*, 46, 100–118.
- Dai, J., & Vasarhelyi, M. A. 2017. Toward Blockchain-Based Accounting and Assurance. *Journal of Information Systems*, 31(3), 5–21. <https://doi.org/10.2308/isyss-51804>
- Darmawan, D. 2024. Distribution of Six Major Factors Enhancing Organizational Effectiveness. *Journal of Distribution Science*, 22(4), 47–58. <https://doi.org/10.15722/JDS.22.04.202404.47>
- Darmawan, D., & Gardi, B. 2024. Digital-Oriented Leadership and Organizational Transformation: Fostering Operational Efficiency, Team Collaboration, and Innovation in the Digital. *International Journal of Service Science, Management, Engineering, and Technology*, 5, 37–42.
- Demirkan, H., & Delen, D. 2013. Leveraging the Capabilities of Service-Oriented Decision Support Systems: Putting Analytics and Big Data in Cloud. *Decision Support Systems*, 55(1), 412–421. <https://doi.org/10.1016/j.dss.2012.05.048>
- Eddine, B. A. S., Darmawan, D., Mardikaningsih, R., & Sinambela, E. A. 2023. The Effect of Knowledge Management and Quality of Work Life on Employee Commitment. *Journal of Human Sciences*, 10(1), 87–100.
- Gani, A., & Darmawan, D. 2022. Ethics and Accountability in Artificial Intelligence-Based Managerial Decision Making. *Journal of Social Science Studies*, 2(1), 147–152.
- Gardi, B., Udjari, H., & Darmawan, D. 2021. Understanding the Function of Communication in Building and Sustaining Quality Relationships Across Organizational Boundaries. *Journal of Social Science Studies*, 1(2), 245–252.
- Gefen, D., Karahanna, E., & Straub, D. W. 2003. Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, 27(1), 51.
- Granlund, M. 2011. Extending AIS Research to Management Accounting and Control Issues: A Research Note. *International Journal of Accounting Information Systems*, 12(1), 3–19. <https://doi.org/10.1016/j.accinf.2010.11.001>
- Hall, J. A. 2010. *Accounting Information Systems* (7th ed.). OH: South-Western Cengage Learning.
- Hirschheim, R. 1988. Information Systems and User Resistance: Theory and Practice. *The Computer Journal*, 31(5), 398–408.
- Kaplan, A. M., & Haenlein, M. 2010. Users of the World, Unite! The Challenges and Opportunities of Social Media. *Business Horizons*, 53(1), 59–68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Khairi, M., & Darmawan, D. 2022. Developing HR Capabilities in Data Analysis for More Effective Decision Making in Organizations. *Journal of Social Science Studies*, 2(1), 223–228.
- Kokina, J., & Davenport, T. H. 2017. The Emergence of Artificial Intelligence: How Automation is Changing Auditing. *Journal of Emerging Technologies in Accounting*, 14(1), 115–122.
- Koval, O., & Tomchuk, O. 2024. Accounting in the Conditions of Digitalization. *ECONOMY. FINANCES. MANAGEMENT: Topical Issues of Science and Practical Activity*, 1(67), 23–37.

- Leidner, D. E., & Kayworth, T. 2006. Review: A Review of Culture in Information Systems Research: Toward a Theory of Information Technology Culture Conflict. *MIS Quarterly*, 30(2), 357.
- Locke, E. A., & Latham, G. P. 2002. Building a Practically Useful Theory of Goal Setting and Task Motivation: A 35-Year Odyssey. *American Psychologist*, 57(9), 705–717.
- Mardikaningsih, R., & Darmawan, D. 2022. Ethical Principles in Business Decision Making: Implications for Corporate Sustainability and Relationships with External Stakeholders. *Journal of Social Science Studies*, 2(1), 131–138.
- Marr, B. 2016. *Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results*. Wiley.
- Maruping, L. M., Bala, H., Venkatesh, V., & Brown, S. A. 2017. Going Beyond Intention: Integrating Behavioral Expectation into the Unified Theory of Acceptance and Use of Technology. *Journal of the Association for Information Systems*, 68(3), 623–637.
- Oliveira, R., Silva, L. G. D., Santos, S. M. D., & Souza, R. D. O. 2024. The Impacts of Digital Technology on Contemporary Accounting: Os Impactos Da Tecnologia Digital Na Contabilidade Contemporânea. *Concilium*, 24(17), 628–642.
- Oreg, S. 2006. Personality, Context, and Resistance to Organizational Change. *European Journal of Work and Organizational Psychology*, 15(1), 73–101. <https://doi.org/10.1080/13594320500451247>
- Parasuraman, A., & Colby, C. L. 2015. An Updated and Streamlined Technology Readiness Index: TRI 2.0. *Journal of Service Research*, 18(1), 59–74. <https://doi.org/10.1177/1094670514539730>
- Power, M. 2016. *Riskwork: Essays on the Organizational Life of Risk Management*. Oxford University Press.
- Rogers, E. M. 2003. *Diffusion of Innovations* (5th ed.). Free Press.
- Samuelson, W., & Zeckhauser, R. 1988. Status Quo Bias in Decision Making. *Journal of Risk and Uncertainty*, 1(1), 7–59.
- Snyder, H. 2019. Literature Review as a Research Methodology: An Overview and Guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Spilnyk, P., Zabihailo, V., & Zabihailo, O. 2024. Digital Transformation in Accounting: Trends and Perspectives. *Economic Analysis*, 34(2), 372–384. <https://doi.org/10.35774/econa2024.02.372>
- Surya, B. T. M. 2024. Revolutionizing Accounting through Digital Transformation: The Impact of Technology. *Engineering Science Letter*, 3(01), 6–10. <https://doi.org/10.56741/esl.v3i01.467>
- Tranfield, D., Denyer, D., & Smart, P. 2003. Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- Vărzaru, A. A. 2022. Assessing Artificial Intelligence Technology Acceptance in Managerial Accounting. *Electronics*, 11(14), 2256.
- Vasarhelyi, M. A., Kogan, A., & Tuttle, B. M. 2015. Big Data in Accounting: An Overview. *Accounting Horizons*, 29(2), 381–396.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. 2003. User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>
- Warren, J. D., Moffitt, K. C., & Byrnes, P. 2015. How Big Data Will Change Accounting. *Accounting Horizons*, 29(2), 397–407. <https://doi.org/10.2308/acch-51069>
- Webster, J., & Watson, R. T. 2002. Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS Quarterly*, 26(2), 13–23.
- Zhang, P., Zhao, K., & Kumar, R. L. 2016. Impact of IT Governance and IT Capability on Firm Performance. *Information Systems Management*, 33(4), 357–373. <https://doi.org/10.1080/10580530.2016.1220218>