

Re-Evaluation of Resource Dependence in AI Enabled SME Financing

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Abstract

SMEs are suffering from various financial constraints, mostly relying heavily on traditional financial institutions for their survival (Kadzima et al., 2025). Usage of Resource Dependence Theory (RDT), this paper is examining how AI is transforming small business funding by optimizing their internal resources and transitioning the firms from these immediate and short-term loans (Pérez-Campdesuñer et al., 2026; Wu & Liao, 2025). Advanced AI replaces the intuition-based decisions with precise and robust data, resulting in a significant increase in the firm's bargaining power while having credit negotiations and enabling their access to long term capital (Hamdouni, 2025; Sanga & Aziakpono, 2023). However, this work also highlights a paradox. While achieving towards financial autonomy, firms are also getting exposed to new constraints by shifting their reliance on the third-party software, technological infrastructures and opaque algorithms (Gaviyau & Godi, 2025; Suhrab et al., 2026). Digitization is also reshaping the structures of RDT instead of eliminating it completely (Yordanova & Hristozov, 2025). For a successful navigation of this whole shift, this paper is emphasizing that digital financial literacy and proper managerial competence is critical for a proper transition of AI outputs into strategic decisions, resulting into a robust governance and regulatory framework for sustainable development (Schränk & Kijkasiwat, 2025, p. 202; Tandilino et al., 2025).

keywords: Resource Dependence Theory (RDT), Artificial Intelligence (AI), SME, SME Financing, Fintech, Digital Finance

1. Introduction

1.1 SME Financing Vulnerabilities

Small and Medium Enterprises (SMEs) persistently faces issues of internal financing via capital, limiting their development and expansion in the economy (Thottoli et al., 2024). For sustaining their business and expansion of their firm, they rely greatly on external financing sources, like bank loans, debt financing, leasing or credit from suppliers. This situation can be deeply understood via the Resource Dependence Theory (RDT), that says that firms and organizations are not standalone sustaining their business, but are interdependent on multiple complex stakeholders and external resource providers. As these SME's growth and continuity depend on these external financing, they are often placed in asymmetrical positions within the existing financial orders. Due to their dependency on such traditional financial intermediaries, they are being exposed to grave vulnerabilities such as macroeconomic shocks and liquidity crisis. This lack of internal assets and capital, these firms cannot properly defend themselves against rigorous uncertainties, making these situations relying on external help.

1.2 Issues of Information Asymmetry

Various asymmetries are further elaborated via the issues of information asymmetry that is already prevailing in the traditional banking structures (Sanga & Aziakpono, 2023). Unlike large enterprises, SMEs generally suffers from lack of information, not having enough financial statements or the hard data that the formal financial institutions rely on for assessing borrowers credit image (Berger & Udell, 2006). This gap puts SME in a very disadvantageous position that leads to high costs, compulsory physical collateral security and huge credit rationing (Stiglitz & Weiss, 1981). Traditional institutions and old methods mostly fails to truly access the firm's credit worthiness and their risk profile, leading to the denial of even the eligible and SMEs credit from these financial institutions (Wang et al., 2025). Furthermore, the inability of these SMEs to provide verified, high quality hard data creates a cycle of dependence where these SMEs are penalized via higher interest and rigid loan terms (Larios-Hernández, 2017). These various issues limits the SMEs growth and expansion and prevent them to diversify their financing sources, making them rely only on the formal asymmetric relationship with only the financial institutions (Phan et al., 2024a). These problems not only buffer the costs, but also intensifies the power of traditional financiers in such SME systems (Safiullah & Paramati, 2024).

1.3 Disruptions via AI driven Fintech

Synergy of Artificial Intelligence (AI), Machine Learning (ML), and big data analytics, in the finance sector, also can be called as Financial Technology (Fintech) is deeply disrupting how SMEs access capital and manages it for their growth and expansion (Gomber et al., 2018). Fintech enables lenders to override traditional process of credit scoring and screening via using modern methods such as digital footprints, spend and behavioural analytics for AI based credit scoring (Sanga & Aziakpono, 2023). Such a digital change decreases the information asymmetry caused via the traditional methods, enabling the fintech platforms to provide a rather very fast and more personalized access to finance without the need of any physical collateral (Thakor, 2020). Moreover, the usage of AI based tools helps these SMEs to estimate their credit flow shortages, optimization of their internal resources and manage their financial health forecasting with great accuracy (Yordanova & Hristozov, 2025). By using massive data sets, AI enables the financing schemes such as peer to peer (P2P) lending, supply chain finance more effectivel, expanding financial access (Song et al., 2025), that results into financial inclusion as well. Such modern technologies helps to restrict the usage of the traditional rigid methods, allowing these SMEs to have access to more flexible, automatic, and customized financing options (Lee & Shin, 2018). Via these innovations the control of traditional structures are shaken, allowing the SMEs to explore new avenues and to overcome their traditional constraints (BIS, 2018).

1.4 Research Objectives

Primary objective of this paper is to use Resource Dependence Theory (RDT) to explore how AI is acting as a strategic agent that is shifting the SMEs power and changes it's dependency on traditional financing options (Hillman et al., 2009). While present literature focuses AI's role in improving credit access, this study is exploring how the digital finance is changing the nature of reliance on resources, changing these SMEs from a passive borrowing stakeholders to a financially involved entities (Karademir, 2025a). However these technological improvement brings with it a critical paradox, that is that while these new technology decreases the reliance on the traditional institutions, it also at the same time introduces new vulnerabilities and data-based dependencies (Abwa et al., 2024). SMEs are increasingly depending on such AI transparency, third party applications, that is actively governing the users platforms (Yordanova & Hristozov, 2025). Thus, this paper is aiming to model the dynamic nature of AI, understanding it both as an dependency reducing agent from the traditional structures of financial institutions and also as an enabler for new tech and data-based reliance (Antony et al., 2023). By conceptualizing RDT with digital finance, this paper is looking forward to provide a detailed conceptual framework that captures the changing nature of such paradigms of financing of SMEs in this AI era (Gomber et al., 2018). Lastly this paper will show how such tech-based innovating is restructuring the matrix of power-dependence that will offer vital insights in the growth of SMEs (Sanga & Aziakpono, 2023).

2. Literature Review and Theoretical Architecture

2.1 Resource Dependence Theory

Resource Dependence Theory (RDT) delineates that organizations are inherently limited via the need to depend on external environment for their need to gather vital resources (Hillman et al., 2009). In Corporate Finance, SMEs face constant critical issues because of their constrained internal finance and limited bargaining power (Munongo & Poee, 2025). These firms are inherently being dependent on traditional finance intermediaries such as commercial banks for their short-term financing, leasing, and business credit (Karademir, 2025a). This reliance is creating power imbalance where these traditional intermediaries just declare their terms and even though it being rigid or even unfavourable for these SMEs, with inflexible collateral terms (Berger & Udell, 1998). As SMEs already go through information asymmetry and lacks verifiable audited statements, they face difficulty in proving their credibility to these traditional financial institutions (Berger & Udell, 1998). In this rigid RDT framework this dependence on a particular group of formal financial institutions limits the autonomy of SMEs, making them exposed to economic shocks and credit rationing (Cowling et al., 2026). Thus, this ongoing management of these dependencies remains as an imperative for the survival of SMEs and their long-term growth (Karademir, 2025a).

2.2 Evolutionary Perspectives on Fintech and Digital Financial Inclusion

This rapid movement of fintech is disrupting these formal traditional dependency constraints by the introduction of these decentralized and widely accessible channels for acquiring capital (Awad et al., 2025). Digital financial innovations such as P2P lending, mobile money, and crowdfunding is offering viable alternatives for these traditional intermediation (Sanga & Aziakpono, 2023). By using such advanced technologies like big data, cloud computing, AI and ML, these fintech platforms are reducing the issues of information asymmetry that has constrained SME Financing (He & Fan, 2025). These Fintech platforms are using alternative data platforms such as digital footprints and transactional histories, accurately accessing the creditworthiness of these SMEs without requiring of any physical collateral (Alamsyah et al., 2025). This technological change is now enabling financial access, helping the marginalized and underserved enterprises to have credit availability (Banna, 2025). Adding to this, such digital finance is allowing these SMEs to transform from a constrained borrowers accepting every rigid terms to an active financial participant, enabling them to diversify their credit source with better bargaining power (Wu & Liao, 2025). This diversification is acting as a critical buffer that is directly reducing the inherent dependence on the traditional formal institutions (Wu & Liao, 2025).

2.3 Synergy between RDT, Digital Finance and AI

The integration of AI into the financial system necessitates a theoretical expansion of RDT to properly capture the SME's dynamics (Karademir, 2025b). AI led analytical tools like algorithmic credit scoring, predictive cash flow modelling and dynamic pricing that allows SMEs to properly mitigate risks and structurally optimize internal resource allocation (Hamdouni, 2025). By using such AI systems, such enterprise can predict their cashflow and liquidity needs for financing, which reduces their immediate dependence on short term loan from formal financial institutions (Karademir, 2025b). Still, this digital structures brings with it a paradox in the RDT framework; While these AI based technologies reduces the dependencies on the formal financial institutions, they create new type of dependency based on the digital and technological infrastructures. SMEs are also constrained towards the usage of third-party software or vendors, decision making models giving opaque answers, and external data providing agencies for the maintenance of their financial agility (Dzhereleyko et al., 2025). This shift is transforming from human led credit decision making to algorithmic governance for credit decisions with massive digital platforms, exposing these SMEs to multiple new vulnerabilities like cyber risk, data privacy, and platform monopoly (Feng et al., 2023; Suhrab et al., 2026). At the end, these technology led innovations is not totally eliminating the dependencies but only moulding their nature, that requires active competence to manage the new data driven constraints (Karademir, 2025b; Rehman et al., 2026).

3. Underlying Mechanisms of AI driven changes in SMEs power dynamics

3.1 Decreasing Traditional Financial Dependencies

Integration of AI in Finance is greatly changing the dependencies of SMEs by optimising the utilization of internal resources (Karademir, 2025b; Rehman et al., 2026). Earlier firms were relying heavily on bank loans and suppliers credit, making them exposed and vulnerable to economic shocks and liquidity issues (Cowling et al., 2026; Li & Xie, 2025a). These AI led predictive models are analytically allowing managers to infer cash flow shortages with precision, making them able to retain internal capital rather than relying on external finance and reactive borrowing (Karademir, 2025b; Yordanova & Hristozov, 2025). Utilization of real time liquidity analytics and supply chain finance is allowing the enterprise to have great control over their inventory turnover rate and operational expenditures (Dzhereleyko et al., 2025; Wu & Liao, 2025). This technological space is also extending their control by optimizing energy consumption by lowering overhead costs and preserve internal reserves (Karademir, 2025b; Rehman et al., 2026). By transforming these soft information into hard data, digital finance is facilitating greatly improved financial autonomy and significant cost reduction (Akhtar et al., 2024; Sanga & Aziakpono, 2023). Additionally, the algorithmic precision of predicting the enterprise's needs is serving as a safety buffer enabling the business to greatly reduce their responsive and immediate need to depend on traditional bank loan (Karademir, 2025b; Li & Xie, 2025a). Over and above this short-term credit management, AIs are fundamentally changing the financing landscape of SMEs from a volatile short-term loans to a long term and developmental financing (Sanga & Aziakpono, 2023). Advanced models having predictive capabilities are accurately calculating the long-term return on physical assets, allowing the enterprises to also extend leasing agreement that is aligning perfectly with their business cycles (Hamdouni, 2025). AI also enables green investment loans via analysing corporate carbon footprints and impact metrics (Karademir, 2025b; Rehman et al., 2026). In this context, machine learning models are reducing biases in green loan financing, making it viable and easy for sustainable oriented SMEs (Chien et al., 2025; Yordanova & Hristozov, 2025). With highly accurate data and scenario-based forecasting, AI has enabled companies to coordinate with their long-term liabilities with their business revenues, reducing their dependency on short term costly and rigid structure loans (Karademir, 2025b; Wu & Liao, 2025). Ultimately, these shifts are transforming the structures of SME's debt, providing with a greater financial stability, sustained growth, and long-term safety against market ups and down (Li & Xie, 2025a; Sanga & Aziakpono, 2023).

3.2 Reconfiguring SME roles: From passive borrowers to Proactive financial managers

AI adoption is enabling SMEs with the power to transform from their traditional roles as passive credit borrowers, and transforming them to a proactive negotiator with great bargaining powers (Bailusy et al., 2025; Wu & Liao, 2025). By using AI to generate complicated, multi approach cash flow statement, firm can prepare and present robust verifiable data to formal financial institutions where such hard data is proving them as credible and highly institutional entities (Hamdouni, 2025; Karademir, 2025b). This power and ability to produce real time payment data plans is allowing financial managers to negotiate more terms in favor of their own firms, flexible terms, and enhanced credit lines (Sanga & Aziakpono, 2023). Moreover, this digital footprint is generated by AI based liquidity management that serves as an auditable level trust capital which is effectively replacing the traditional physical collateral requirements which previously excluded the SMEs from formal credit market (Li & Xie, 2025a; Wu & Liao, 2025). Additionally, these creditors are seeing this data-based estimates as a strong proof of operational integrity, a new paradigm that is mitigating counterparty risks (Li & Xie, 2025b; Suhrab et al., 2026). Via the usage of such predictive analysis and digital creditworthiness, SME are constantly restructuring their relationships with formal financial institutions, showing great influence over their external finance needs (Bailusy et al., 2025; Dzhereleyko et al., 2025). Addition to the strengthening of the external negotiations, AI also restructures how an SME does risk management in their supply chains and customer services (Dzhereleyko et al., 2025; Karademir, 2025b). AI can automatically analyse payment histories and allow managers to schedule their operations accordingly (Yordanova & Hristozov, 2025). This predictor capability is allowing the business to replace intuition based, error prone human judgement with robust, data backed simulations, preventing any losses before they occur (Hamdouni, 2025; Yordanova & Hristozov, 2025). By the automation of credit worthiness, and continuously tracking customer data, these SMEs can find and reduce the external credit risk before they rise to severe liquidity issues. This shift from human led decision to AI based decision

making is representing a great professionalization of financial behavior and ensuring that these resources are properly allocated without relying on any other connections. This capacity to predict defaults ensures that these firms that are maintaining this autonomy strategy, mitigating the need to borrow immediate finance from institutions to cover shortfalls (Akhtar et al., 2024).

3.3 AI-Induced Technological Dependencies

The critical paradox of integration of AI into the operations of SMEs is that while it is allowing the firms to liberate themselves from the historic dependencies from the traditional financial intermediaries, it is creating new tech-based dependencies at the same time (Khan et al., 2024). Looking through the perspective of RDT, the reduction of financial constraints for these SMEs are just the SMEs vulnerabilities from traditional to a digital infrastructure and third party-based systems (Gaviyau & Godi, 2025). For the hosting of sufficient and required AI systems with securing operational efficiency of these firms, SMEs must largely depend on tech companies that is providing various services like cloud computing and data analytics service platforms (Bódi et al., 2023). This transition creates exposure to various risks and systemic failures to these SMEs, as the failure or disruptions from these third-party service providers can create domino effect on the operational efficiency of SMEs among interconnected networks (Khan et al., 2024). This pursuit of digital empowerment instead creates technological lock in for the firms as they are just simply replacing the traditional subordinates like commercial banks to a technology provider (Jellouli, 2025). The integration of complex computational systems drastically changes the nature of dependence for these SMEs, increasing operational and infrastructural risk inside the enterprise (Alshouha et al., 2025). Above this infrastructural reliance, the implementation of intelligent systems also creates a cognitive and information dependency coming from the algorithmic opacity (Jellouli, 2025). Severe complexities from the deep learning models is transforming the financial predictions and credit scoring into black box process where the core rationale for vital decisions are left largely obscured from the firm who deploys them (Yordanova & Hristozov, 2025). This deficit of transparency is critically compromising managerial autonomy and making it very difficult to manage, trust or guarantee the ethical integrity of AI based financial decision making (Dzhereleyko et al., 2025). Over and above these AI mechanisms are relying on, continuous and massive amount of data, also introducing an element known as oracle risk. If these third-party players provide inaccurate or manipulated data into the firm's system, the automation of decisions can severe miscalculations (Harvey & Rabetti, 2024). Global expansion of these data-based technologies can multiply ethical and operational risks, as these algorithms may create historical biases or use flawed strategies without human intervention (Carè et al., 2025). Lastly, the huge data requirements of these digital ecosystems are exposing these SMEs to a great level of cyber security risks and other vulnerabilities (Foguesatto et al., 2024). As these firms are integrating with AI to optimize their operations, the extensive usage and sharing of sensitive information with third party providers can also attract cyber-attacks and data corruption (Preziuso et al., 2023). Looking at the perspective of Agency Theory, these new risks can also create new opportunity for opportunistic behaviors or negligence by firm's dealing with cyber security protocols (Ahmed et al., 2024). These profound transitions to the digital financial services are greatly forcing the firms to an expanded landscape of operational risks (Zobi et al., 2025). This rapid digitization is critical for these AI based platforms to amplify systemic risks and financial volatility., making it vital for the firms to implement necessary cyber security architectures to protect their firm (Dzhereleyko et al., 2025). Thus, while these AI based technology is acting as a great tool for financial inclusion, it is also requiring great deal of internal governance and risk management to stop the firms from moving towards the darker side of digital dependencies (Ahmed et al., 2024).

4. Managerial Competence as a moderating role

4.1 Human Capital for Strategic Capability

Inside the conceptual limits of Resource Based view and Resource Dependence Theory, physical technology infrastructure should be coupled via intangible human capital for achieving autonomy strategically (Akhtar et al., 2024; Schrank & Kijkasiwat, 2025). Just the acquisition and ownership of AI infrastructure is not sufficient for financial resilience, instead it is the capacity of the firm managers to properly interpret the algorithmic generated results and helps in integrating them into cross functional decisions that is vital for success (Wu & Liao, 2025). Managers who possess higher digital financial

literacy can properly leverage predictive analysis for optimal capital allocation, which helps in shifting from just a passive adoption of technology to a n active resource management (Munongo & Pooe, 2025; Tandilino et al., 2025). For reference, strategic lenders can guide complex green loans via calculating and analyzing raw carbon footprint data and AI based metrics into proper signals (Chien et al., 2025). Moreover, Skilled persons can also manually change the system parameters and interact with them seamlessly with flexible algorithms to secure favorable credit terms (Chien et al., 2025). By bridging this gap of power and proper execution of it, human capital is acting as an enabler, drastically reducing the over dependence on external finance and reducing operational risks (Qureshi & Khan, n.d.; Ulupui et al., 2025).

4.2 Bridging the Divide

Organizations that are suffering from a deficit in managerial competence can be a victim to this digital divide, resulting in their investment in advanced financial technologies being ineffective (Pérez-Campdesuñer et al., 2026; Phan et al., 2024b). Firms that lacks AI competent management frequently experience excessive cognitive barriers, resulting into failure to accurately interpret predictive data that is generated via the algorithmic systems (Bailusy et al., 2025; Zamani, 2022). In these situations, decision makers are being paralyzed by algorithmic opacity and having a lack of digital financial literacy, it is causing them to precise these AI tools just as a visualization tools than strategic instruments (Tandilino et al., 2025; Yordanova & Hristozov, 2025). Additionally, these managers who tends to use traditional methods for critical negotiations with formal lenders (Akhtar et al., 2024; Karademir, 2025b). Using of such traditional technologies hampers with the institutions credibility, which causes these firms to miss vital opportunities like credit lines or green loans that require digital footprints (Schrank & Kijkasiwat, 2025; Wu & Liao, 2025). Without a proper alignment oh human decision and technological adoption, SMEs risk increases which resulting in deepening their dependency on traditional borrowing mechanisms (Munongo & Pooe, 2025).

5. Proposed Methodology for Empirical Validation

For the empirical validation of the conceptual claims related to the changing paradigms of SMEs with AI based ecosystems, a rather very robust framework is required (Pérez-Campdesuñer et al., 2026). Researchers must focus on the capturing of the complex interplay among adoption of technology, financial literacy, and powers requires a very detailed research design (Cassola et al., 2025; Nagy et al., n.d.). A mixed approach theory that combines conceptual depth as well as rigorously tests empirical data provides us with us a very easy pathway for analyzing how these instruments increases traditional financial constraints while creating new technological dependencies (Karademir, 2025b). Integrating these methodological paradigms, researchers can also precisely access the statistical significance and context specific realities of AI based management (Bailusy et al., 2025; Hurani & Abdel-Haq, 2025). This mixed strategy validates that the application of RDT is grounded in verifiable enterprise behaviour (Sanga & Aziakpono, 2023).

5.1 Qualitative Approach

Qualitative component of the proposed methodology focuses on the in-depth structured interviews with the firm's managers who are actively utilizing AI tools (Cassola et al., 2025; Karademir, 2025b). This perspective is specifically constructed to gather the experiences, cognitive heuristics and biases, and context-based decision-making process that explains how firm leaders are negotiating with traditional institutions compared to the digital lending platforms (Pérez-Campdesuñer et al., 2026; Preziuso et al., 2023). Via thematic analysis, a researcher can structurally know the patterns that are related to the AI opacity, the trusts in the digital channels, and the shift from the organizational dependency (Hillman et al., 2009; Karademir, 2025b). Moreover, these qualitative approaches enables a deep level exploration of the situations where the firms detaches itself from the bank dependency, only being dependent again on the third-party platforms and data centres (Preziuso et al., 2023). Lastly, to capture these perspectives is providing us with a critical layer that statistical modelling is mostly ignored, grounding the assumptions of RDT in routine operational life of SMEs management (Buschle et al., 2021; Cassola et al., 2025).

5.2 Quantitative Approach

For more solidification of the qualitative results, a rather very empirical approach using Structural Equation Modelling (SEM) is proposed by this paper to statistically measuring the multi-facet variables that influences technology adoption by the SMEs (Suhrab et al., 2026; Ulupui et al., 2025). This technique is well suited for calculating the mediating and moderating effects of digital financial literacy, competence of managers, and accessibility of the firm's financial performance (Mishra et al., 2024; Pérez-Campdesuñer et al., 2026). By using survey across large sample of SME units, research can be conducted to construct path coefficient that can be used to calculate the precise impact of financial technologies on the access to credit (Hurani & Abdel-Haq, 2025; Munongo & Poee, 2025). SEM properly handles multiple causal relationships and making it a great tool for testing how human element can bridge the gap between availability of technology and its execution strategically (Bailusy et al., 2025; Ulupui et al., 2025). This validation provides us with the empirical proof required to confirm whether these digital platforms are actually reducing the structural dependencies (Mishra et al., 2024; Sultana et al., 2025).

Moreover, Cross sectional designs, panel data analysis can also provide the perspectives necessary for the observation of evolution of resource dependencies (Alraja et al., 2023; UI Hassan et al., 2025). Also, the utilization of the fixed models and generalized methods of moments estimators can also enable the researchers to control for the unobserved firm characteristics when addressing the critical issues that already exists in the technology adoption theories (Li & Xie, 2025b; UI-Durar et al., 2025). Such a macro level strategy is critical for tracking how this integration of AI changes the debt credit structures, liquidity, and economic resilience over longer periods (Li & Xie, 2025b; Suhrab et al., 2026). Cross reference of firm level financial dynamics with regional digital infrastructural proxies, these longitudinal models can isolate the impact of digital access on traditional institutions autonomy (Alraja et al., 2023; UI Hassan et al., 2025). Integration of these techniques ensures that theoretical positions that are surrounding the architectures of SMEs are subject to critical empirical testing (Suhrab et al., 2026; UI-Durar et al., 2025).

6. Discussions

6.1 Re-evaluation of SME Strategy

The transformation from traditional finance reliance to digital platform integration enables a vital re-evaluation of strategy for SMEs (Karademir, 2025b). From the perspective of Resource Based View and Resource Dependence Theory, firms should inculcate proper internal compliance in order to reduce the new risks and vulnerabilities that are related with AI based decision making and usage of third-party software (Ulupui et al., 2025). In order to avoid just the substitution of financial help with tech-based captivity, firms are compelled to prepare dynamic capabilities and strategy in order to transcend the basic technology adoption (Zamani, 2022). Introduction of digital financial literacy is serving as an irreplaceable resource, that is helping in enabling the firms to achieve properly manage their interactions with fintech structures rather than just being a passive borrowers of finance (Tandilino et al., 2025). Moreover, putting effort and training and upskilling human resource ensures that the firm can also predict, interpret the risks inherited in the automated systems (Schrank & Kijkasiwat, 2025). Firms must execute a detailed understanding of digital finance among the managerial teams to blend technological implementation with long term strategy (Ling & Ling, 2025). Lastly, for building these capacities is vital for SMEs to enable their disruptive power of AI while also keeping their operational powers in these volatile markets (Munongo & Poee, 2025).

6.2 Recommendations

Responding to the changes caused by digital finance, regulators should design and implement adaptive regulations that can balance the tech-based innovation with systemic stability (Carè et al., 2025). Critical urgency for regulators is the formulation of sophisticated mandates that ensures AI accountability, specifically understanding the unclear nature of AI based systems that is used in the places like accessing credit worthiness and assessment of risks (Yordanova & Hristozov, 2025). Without such regulatory safeguards, the rapid increase in digital finance exposes enterprises to various data asymmetries, green washing and monopolistic lock-ins (Jellouli, 2025). Moreover, Robust data privacy and cyber measures

are vital for the protection of sensitive data of SMEs from the unauthorized access from various cyber-attacks and misuse of such important data (Gaviyau & Godi, 2025). This requires a shift from traditional entry supervision to an ever-changing activity-based regulation that is capable of addressing the complex intersections of data protection, consumer rights, and laws across multiple networks (Bódi et al., 2023). Lastly, formulation of new ethical guidelines and frameworks that can govern AI usage ensures that this digitization of services is actually promoting proper access rather than just reinforcing the biases and creating unclear blind spots (Harvey & Rabetti, 2024). By inculcating these measures, the regulators can foster a rather very safe and secure structure where these digital instruments operates inside the transparency and with integrity (Shkodinsky et al., 2025).

7. Conclusion

AI is operating as a double-edged sword in the financial ecosystem of SMEs (Sharma et al., 2024). Properly integrated tools are actually reducing the dependencies on traditional financial institutions by using internal resource at their optimum level and also enabling alternative lending channels (Akhtar et al., 2024; Rehman et al., 2026). Via Machine Learning (ML) and big data analytics, firms are able to transform their traditional information, replacing the inflexible and rigid requirements of collateral with flexible data-based evaluation of creditworthiness (Sanga & Aziakpono, 2023). However, this transition to digital environment a (Suhraab et al., 2026; Zobi et al., 2025) also introduces various vulnerabilities and risks, that shifts the aim of organizational reliance to other risks rather than abolishing it completely (Altaytas, 2025). While these firms reduces their dependencies on traditional institutions, they also develops a new dependencies based on external technological infrastructures, third party data providers and black box models (Gaviyau & Godi, 2025). Additionally, the goal to achieve AI efficiency is establishing a very higher interconnected ecosystem that is demanding robust and continuous governance in order to prevent operational failures and systemic risks (Suhraab et al., 2026; Zobi et al., 2025). From a conceptual perspective, this papers is extending the boundaries of RDT by properly embedding it inside the digital finance structure (Karademir, 2025b). Traditional models claims that firms survival is dependent on managing their direct dependencies on traditional financial institutions, this study talks about the technology innovation that is critical to reshape the structural of nature of this financial dependence (Hamdouni, 2025). By using RDT, with Resource Based View, it is becoming important that digital financial literacy and other intangible assets are now the important resources that is required for achieving autonomy (Kurniasari et al., 2023; Ulupui et al., 2025). These contributions are providing with some actionable insights that is vital for fostering sustainable growth, mentioning that firm leaders should continuously take part to properly cultivate human capital for interpreting complicated AI based outputs (Schrank & Kijkasiwat, 2025). Additionally, regulators should use adaptive framework that will ensure AI accountability and securely keep the sensitive data of these SMEs from getting exploited (Guo et al., 2024; Munongo & Poee, 2025). Lastly, these firms can also use the potential of digital finance by smoothing the adoption of technology with robust strategy (Biryuk et al., 2024).

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