

CLOUD COMPUTING ENABLED BUSINESS MODEL INNOVATION FOR RETAIL SMES: A DIFFUSION OF INNOVATION BASED SYSTEMATIC LITERATURE REVIEW

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Abstract

Cloud computing has become a transformative driver of Business Model Innovation (BMI), yet its strategic role in retail small and medium-sized enterprises (SMEs) in developing economies remains underexplored. This study addresses this gap by applying the Diffusion of Innovation (DOI) theory to examine how cloud adoption enables BMI within Sri Lankan retail SMEs, a context characterised by infrastructural constraints, policy gaps, and varying managerial readiness. Through a systematic literature review of peer-reviewed studies, six enabling factors are identified: relative advantage, organisational readiness, cost, top management support, government support, and trialability. The study extends DOI theory by situating these adoption drivers within a developing-economy setting, highlighting how environmental and institutional factors reshape classical DOI attributes. Practically, the framework offers guidance for SME managers seeking digital transformation and for policymakers designing targeted incentives and infrastructure development to foster cloud-enabled innovation.

Keywords: Business model Innovation, cloud computing, diffusion of innovation, retail sector, small and medium enterprises

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DOI:

Introduction

In today's global business environment, rapid technological advancement has emerged as a decisive factor influencing competitiveness, agility, and innovation (Salleh & Hussin, 2016). Firms across industries face constant pressure to adapt and evolve in response to shifting market dynamics and increasing customer-driven expectations (Ayoobkhan & Asirvatham, 2017). Among the many digital technologies shaping this transformation, cloud computing has gained prominence as a key enabler of strategic innovation (Ayoobkhan, 2019). It offers benefits such as cost reduction, scalability, and improved operational efficiency, enabling organisations to remain agile and competitive in volatile market conditions (Salleh & Hussin, 2016; Shetty & Panda, 2021). The impact of cloud computing is particularly evident in retail, where it supports real-time inventory management, personalised marketing, data-driven pricing, and omnichannel customer engagement (Suciu et al., 2014). These applications enhance operational flexibility and enable firms to innovate their business processes and customer interactions.

To respond to such evolving conditions, organisations increasingly turn to Business Model Innovation, which involves reconfiguring how value is created, delivered, and captured, often through shifts in structure, processes, and stakeholder engagement (Chesbrough, 2010). In retail, Business Model Innovation (BMI) strategies powered by cloud technologies integrate mobile commerce, personalisation, and analytics to meet the needs of digitally empowered consumers (Dutta & Sandhane, 2022; Jocevski, 2020). Despite these global advancements, small and medium-sized enterprises (SMEs) in Sri Lanka lag in digital transformation (Kapurubandara & Lawson, 2006). Small and medium-sized enterprises contribute approximately 45% to total employment and 52% to Gross Domestic Product (GDP) (Nawaz & Thelijjagoda, 2025) but face constraints such as limited infrastructure, insufficient government support, low digital literacy, financial barriers, and weak organisational readiness (Ayoobkhan, 2019; Gunawardana & Wedasinghe, 2021). Only 31% of online-business SMEs regularly use cloud computing, with most relying on in-house systems or local outsourcing (Ayoobkhan, 2019).

The adoption of cloud computing in SMEs can be examined using established models such as the Technology Acceptance Model (TAM) and the Technology-Organisation-Environment (TOE) framework, which highlight factors such as organisational support, readiness, and environmental influences (Skafi et al., 2017). This systematic literature review adopts the Diffusion of Innovation (DOI) theory alongside the BMI perspective to identify enabling and inhibiting factors influencing cloud adoption in retail SMEs. While prior studies have explored cloud adoption in general SME contexts, there remains a limited understanding of how cloud computing specifically drives business model innovation in retail SMEs within developing economies such as Sri Lanka. Addressing this gap, the study examines how DOI attributes shape the relationship between cloud adoption and business model innovation, offering both theoretical clarification and practical insights for digitally lagging retail sectors. Therefore, this study investigates how cloud computing adoption, guided by DOI attributes, enables business model innovation in Sri Lankan retail SMEs.

This study is significant because it provides a structured understanding of how cloud computing can drive business model innovation in Sri Lankan retail SMEs a sector that forms the backbone of the national economy yet remains digitally under-leveraged. The insights generated can help SME owners and policymakers formulate evidence-based strategies to enhance digital readiness and competitiveness. By contextualising the DOI theory within a developing-economy setting, the study also advances theoretical understanding of innovation diffusion under infrastructural and institutional constraints.

Theoretical foundation

The DOI theory, developed by Rogers (2003), provides a robust framework for understanding how innovations such as cloud computing are adopted and how this adoption supports BMI in retail SMEs. DOI conceptualises adoption as a process involving awareness, persuasion, decision-making, implementation, and confirmation. Its applicability is particularly relevant in emerging market contexts, where adoption dynamics are shaped by both technological potential and local constraints. DOI identifies five key innovation characteristics influencing adoption: relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). In Sri Lankan retail SMEs, relative advantage includes cost savings, operational efficiency gains, and improved customer service capabilities (Nuskiya, 2017), often linked to reduced infrastructure costs and better data access (Nawaz & Thelijjagoda, 2025). Compatibility with existing business practices is essential to avoid disrupting established customer relationships. Complexity remains a challenge, as many SME owners lack the technical expertise required for seamless adoption. Trialability enables experimentation with limited features before full-scale adoption.

DOI also categorises adopters into innovators, early adopters, early majority, late majority, and laggards (Rogers, 2003). In Sri Lanka, innovators are typically tech-savvy entrepreneurs in urban areas adopting point-of-sale and e-commerce solutions, while early adopters are forward-thinking SME owners with the resources to implement new systems. The early majority adopts after observing proven benefits and reduced risk, often influenced by peer networks and government initiatives (Nawaz & Thelijjagoda, 2025). The late majority adopts under competitive or economic pressures, and laggards remain resistant to change. Communication channels and social systems are central to the DOI's application. In Sri Lanka, personal networks, industry associations, and government programs facilitate knowledge sharing (Amaradiwakara, 2016), while digital media increasingly reach younger entrepreneurs. Cultural tendencies toward relationship-based trust and risk aversion influence adoption, with opinion leaders and early adopters serving as change agents (Nawaz & Thelijjagoda, 2025).

DOI's integration with the TOE framework captures the role of technological, organisational, and environmental influences on adoption (Nawaz & Thelijjagoda, 2025). Similarly, the TAM aligns with DOI's relative advantage and complexity dimensions by emphasising perceived usefulness and ease of use. Together, these perspectives provide a comprehensive lens for examining how cloud-enabled BMI adoption in Sri Lankan retail SMEs is shaped by innovation attributes, organisational capacities, and user perceptions (Amaradiwakara, 2016).

Methodology

This study adopts a theory-driven Systematic Literature Review (SLR) approach to examine the enabling aspects of cloud computing that support BMI in retail SMEs, using the DOI theory as the guiding framework. The review addresses the research question: What potential aspects of DOI theory enable cloud computing to support business model innovation? The methodology follows a six-phase process adapted from established innovation and information systems research frameworks (Cong-Lem et al., 2025; Urquhart et al., 2025).

Phase 1: Mapping the field through a scoping review

A preliminary scoping review was conducted to understand the research landscape on cloud computing adoption and its role in enabling BMI in SMEs. This involved identifying key publications, frequently cited frameworks such as the DOI, TOE, and TAM, and recurring themes such as scalability, cost efficiency, and innovation capability. The insights gained informed the search string, keyword refinement, and the development of inclusion/exclusion criteria.

Article inclusion criteria

Table 1

Article inclusion criteria

No table of figures entries found.	Inclusion Criteria
Type of Publication	Peer-reviewed Journal Articles indexed in Scopus
Language(s)	English
Research Design	Conceptual and Empirical
Content	Studies related to Cloud Computing and SMEs
Source	Scopus Database

(Source: Developed by authors based on literature (2025))

Phase 2: Comprehensive search

Only peer-reviewed journal articles indexed in SCOPUS were accepted, consistent with recommendations by the author Pranckutė, who identifies SCOPUS and Web of Science as the most comprehensive databases for bibliometric reviews. The initial search term 'Diffusion of Innovation' returned 38,051 records. Refinement to journal articles reduced this to 25,789, and filtering by 'Diffusion of Innovation' as an exact keyword yielded 12,266 records. Applying a domain-specific filter targeting the retail context narrowed the results to 169 articles. The final search string used was: (TITLE-ABS-KEY (diffusion AND of AND innovation)) AND (retail) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (EXACTKEYWORD, "Diffusion of Innovation")). Titles and abstracts were manually screened to identify studies addressing cloud computing, SMEs, and/or BMI in conjunction with DOI constructs, resulting in a shortlist of 39 articles.

Phase 3 and 4 - Quality assessment and data extraction

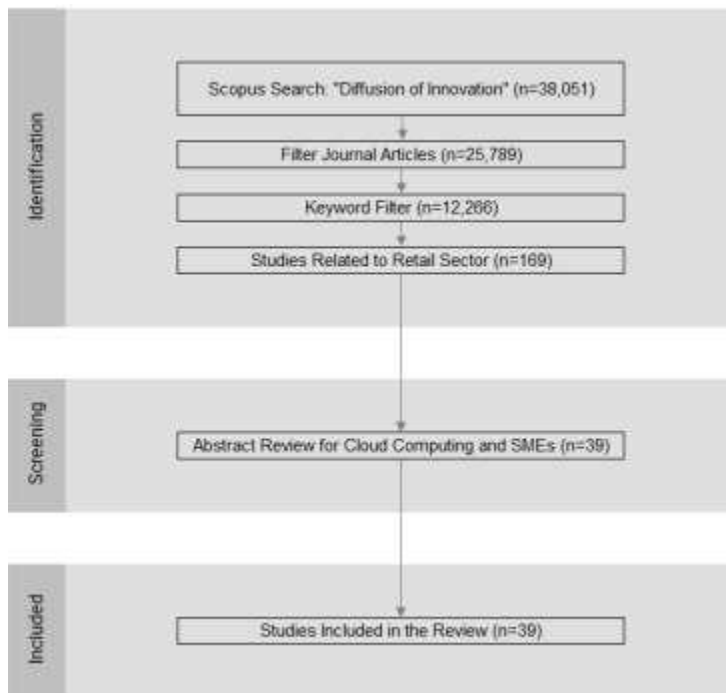
Only peer-reviewed, Scopus-indexed articles were included to ensure methodological quality. Titles and abstracts of the 169 retrieved studies were assessed for alignment with cloud computing, SMEs, and/or BMI in conjunction with the DOI theory. This process resulted in a final dataset of 39 articles deemed methodologically sound and conceptually relevant. Following Braun and Clarke's (2006) thematic approach and Cong-Lem et al. (2025), each article was reviewed to identify factors showing how cloud computing enables SMEs to innovate

their business models. Recurring themes were mapped to DOI attributes, with extraction conducted independently and cross-checked to ensure consistency, reduce bias, and maintain quality.

Phases 5 and 6: Data synthesis and write-up

From the extracted factors, the most appropriate ones were selected through expert opinions obtained from 3 companies generating over LKR 10 million in monthly revenue and providing cloud solutions to Sri Lankan SMEs. Top-level employees, such as owners and managers, were selected as experts. Six key factors were identified: relative advantage, organisational readiness, cost, top management support, government support, and trialability. These were organised according to DOI attributes and used to develop a framework illustrating how cloud computing supports BMI in retail SMEs. The framework was validated through the same expert review for relevance and applicability in the Sri Lankan context, providing both theoretical contributions and practical guidance for SME owners, policymakers, and technology advisors.

Figure 1: Article selection process (PRISMA flow diagram)



(Source: Developed by authors based on literature (2025))

Findings

Relative advantage

Relative advantage, central to DOI theory, measures the degree to which an innovation is perceived as better than the system it replaces (Boonsiritomachai et al., 2016). In the context of cloud computing, benefits include scalability, operational efficiency, broader market access, and enhanced decision-making (Oliveira & Martins, 2010a; Ruivo et al., 2012). SMEs are more likely to adopt when such benefits clearly outweigh perceived risks and costs. For example, Thai SMEs reported faster decision-making and improved information accuracy with cloud-based BI systems, driving full adoption (Boonsiritomachai et al., 2016), while Portuguese and Spanish SMEs valued ERP’s lower initial investment and better data integration (Ruivo et al., 2012). In retail, cloud-enabled tools support omnichannel sales and digital loyalty programs, leading to new revenue channels (Hu & Cao, 2018; Banerjee & Seetharaman, 2022). In developing markets, relative advantage is magnified, as seen in the UK’s rural SMEs adopting pay-per-use cloud models to overcome resource constraints (Alshamaila et al., 2013). For Sri Lankan SMEs, where infrastructure gaps and high competition prevail, perceived advantage must be compelling to justify switching from legacy systems (Peltier et al., 2012). Its repeated empirical validation across sectors strengthens its inclusion in the framework for cloud-enabled business model innovation.

Organisational readiness

Organisational readiness reflects an SME's preparedness in technology, resources, and culture to adopt innovations. Within the DOI theory, it relates strongly to compatibility and complexity, as higher readiness reduces perceived difficulty and ensures smoother integration. In the cloud computing context, readiness includes robust IT infrastructure, sufficient financial and human resources, and openness to change (Ruivo et al., 2012; Oliveira & Martins, 2010a). Studies show SMEs with advanced technological capabilities are more likely to adopt and sustain cloud-based services (Oliveira & Martins, 2010a; Alshamaila et al., 2013). Ruivo et al. (2012) further demonstrated that readiness not only facilitates adoption but also enhances post-adoption performance. In retail, where operations span sales systems, inventory control, and analytics, readiness ensures these components work seamlessly with cloud platforms (Martins et al., 2019). Conversely, low readiness manifested in weak infrastructure or skill gaps can cause partial or failed adoption (Peltier et al., 2009). For Sri Lankan SMEs, readiness is critical due to existing infrastructure limitations and small management teams. Establishing stable internet, secure data practices, and cloud literacy among staff can bridge the gap between cloud potential and realised business model innovation. Empirical evidence across sectors positions readiness as both a precondition and driver for cloud-enabled transformation.

Cost

Cost encompasses all financial commitments for adopting and sustaining cloud technology, including subscription fees, migration expenses, integration costs, and potential hidden charges (Martins et al., 2019). In terms of DOI, cost influences perceptions of relative advantage and trialability, thereby affecting adoption decisions. While the pay-as-you-go model can reduce upfront investment and appeal to SMEs with limited capital (Ruivo et al., 2012), high or unpredictable costs may deter long-term engagement (Boonsiritomachai et al., 2016). Alshamaila et al. (2013) found that SMEs in the UK often revised expectations when additional costs like training emerged. Similarly, in India, ongoing operational expenses delayed e-commerce adoption in low-income regions (Banerjee & Seetharaman, 2022). In Sri Lanka, SMEs' narrow margins amplify sensitivity to costs, leading some to adopt cloud only in specific operational areas, such as invoicing or marketing, rather than full integration. Conversely, transparent pricing and alignment with budget capacity can make cost a strategic enabler, allowing experimentation without significant capital risk. The dual role of cost, either as a barrier or a catalyst, means it must be considered as a standalone factor to understand adoption dynamics and its influence on cloud-enabled business model innovation in resource-constrained contexts.

Top management support

Top management support refers to leadership's role in advocating, resourcing, and legitimising technology adoption. In SMEs, where decision-making is often centralised, leadership influence can directly shape innovation outcomes (Liang et al., 2007). Within DOI, strong top management backing can lower perceived complexity and enhance observability by setting clear strategic intent. Empirical studies show that leadership commitment significantly improves adoption rates and post-adoption satisfaction (Oliveira & Martins, 2010a; Ruivo et al., 2012). In the retail sector, managers' openness to change is a decisive factor for adopting CRM or omnichannel systems (Peltier et al., 2009). In developing contexts, leadership can offset infrastructural or policy deficiencies by proactively driving innovation (Alshamaila et al., 2013). For Sri Lankan SMEs, where owner-managers often hold both strategic and operational control, support from the top legitimises change, secures resources, and fosters a culture of experimentation. This influence extends beyond adoption, impacting organisational readiness and employee confidence in new systems. Given its consistent presence as a predictor of successful adoption in both developed and developing contexts, top management support is critical for enabling cloud computing to deliver business model innovation in Sri Lankan retail SMEs.

Government support

Government support includes policy initiatives, fiscal incentives, infrastructure investments, and promotional campaigns that create a conducive environment for innovation diffusion (Alshamaila et al., 2013). In DOI, it serves as an external enabler influencing trialability and observability. Evidence from multiple contexts shows government action can directly accelerate adoption, for example, broadband expansion in the United Kingdom (UK) improved SME cloud adoption rates (Alshamaila et al., 2013), while targeted logistics investments in India boosted e-commerce uptake (Banerjee & Seetharaman, 2022). In Thailand, policy incentives positively shaped perceptions of energy-sector innovations (Chitchaiheekul et al., 2024). For Sri Lankan SMEs, where internal capacity for digital transformation may be limited, government programs such as the Digital Economy Strategy can address cost and infrastructure barriers. Indirect measures like digital literacy campaigns or cybersecurity standards also help reduce uncertainty and build trust among SMEs. This dual role, lowering

barriers and signalling strategic alignment, makes government support an essential factor in cloud-enabled BMI. Its absence can slow adoption, while well-targeted support can catalyse innovation, particularly in sectors like retail that face rapid competitive and technological shifts.

Trialability

Trialability is the extent to which a new technology can be tested or piloted before full adoption. In the DOI framework, it is defined as ‘the degree to which an innovation may be experimented with on a limited basis’ (Rogers, 2003). In cloud computing, this often takes the form of free trials, sandbox environments, or modular subscription models (Chauhan et al., 2023). Such opportunities allow SMEs to assess technical compatibility, evaluate performance, and build operational familiarity without committing substantial resources (Peltier et al., 2012).

Studies show that trialability reduces adoption risk and accelerates learning. Boonsiritomachai et. al. (2016) found that SMEs with pilot projects achieved higher business intelligence maturity, while Chauhan et. al. (2023) confirmed its significant positive effect on both adoption intention and usage, especially in developing countries. For Sri Lankan retail SMEs, the cloud’s pay-as-you-go model enables gradual experimentation, aligning with their preference for reversible decisions. Including trialability in the conceptual framework is essential, as it bridges the gap between initial interest and transformative business model innovation outcomes.

Conclusion

This systematic literature review identified six key factors influencing cloud-enabled BMI in retail SMEs: relative advantage, organisational readiness, cost, top management support, government support, and trialability. The integration of these factors into a conceptual framework extends DOI’s applicability to SME innovation contexts in developing economies, offering both theoretical and practical insights.

Though this review was conducted within the DOI framework, the analysis revealed a broader range of potential enablers beyond DOI’s original constructs. This prompted further validation through consultation with experts from 3 leading Sri Lankan organisations that provide cloud solutions to SMEs and generate over LKR 10 million in monthly revenue. Based on their industry experience and market knowledge, these experts recommended the most appropriate factors for the Sri Lankan retail SME context.

However, the review is limited by its reliance on the Scopus database and English-language peer-reviewed journal articles, which may exclude relevant studies from other sources or languages. Additionally, while this study focuses on retail SMEs, cross-sectoral variations were not explored in depth.

Future research should empirically test the proposed framework using quantitative methods such as structural equation modelling in the Sri Lankan retail SME sector. Comparative studies between sectors or across countries could provide further insight into how contextual differences shape the interplay between DOI attributes and enabling factors. Longitudinal research could also explore how these factors evolve as SMEs progress from adoption to full integration of cloud solutions in their business models.

References

- Alshamaila, Y., Papagiannidis, S., & Li, F. (2013). Cloud computing adoption by SMEs in the northeast of England: A multi-perspective framework. *Journal of Enterprise Information Management*, 26(3), 250–275.
<https://doi.org/10.1108/17410391311325225>
- Amaradiwakara, A. U. (2016). Factors affecting growth of small and medium enterprises in Sri Lanka. *International Journal of Management and Applied Science*, 2(5), 75–80.
- Ayoobkhan, A. L. M. (2019). A research on cloud computing adoption practices in the context of online business SMEs in Sri Lanka. *International Journal of Advanced Computer Science and Applications*, 10(8), 447–456.
<https://doi.org/10.14569/IJACSA.2019.0100858>
- Ayoobkhan, A. L. M., & Asirvatham, D. (2017). Adoption of cloud computing services in healthcare sectors: Special attention to private hospitals in Colombo district, Sri Lanka. *Current Journal of Applied Science and Technology*, 23(2), 1–10. <https://doi.org/10.9734/BJAST/2017/31576>
- Banerjee, S., & Seetharaman, P. (2022). Digital transformation and small business adoption of cloud-based technologies: Evidence from developing countries. *Information Systems Frontiers*, 24(4), 987–1003.
<https://doi.org/10.1007/s10796-020-10041-y>

- Boonsiritomachai, W., McGrath, G. M., & Burgess, S. (2016). Exploring business intelligence and its depth of use in SMEs. *Journal of Small Business and Enterprise Development*, 23(1), 1–17. <https://doi.org/10.1108/JSBED-04-2013-0057>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Chauhan, R., Varma, G., Yafi, E., & others. (2023). The impact of geo-political socio-economic factors on vaccine dissemination trends: A case study on COVID-19 vaccination strategies. *BMC Public Health*, 23(1), 2142. <https://doi.org/10.1186/s12889-023-17000-z>
- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers. *Long Range Planning*, 43(2–3), 354–363. <https://doi.org/10.1016/j.lrp.2009.07.010>
- Chitchaitheekul, P., Senivongse, T., & Vatanawood, W. (2024). The adoption of demand response systems: An empirical study in Thailand. *Energy Policy*, 179, 113532. <https://doi.org/10.1016/j.enpol.2023.113532>
- Cong-Lem, N., Ali, S., & Tsering, D. (2025). A systematic review of the limitations and associated opportunities of ChatGPT. *Journal of Artificial Intelligence Research*, 41(7), 3851–3866.
- Dutta, S., & Sandhane, R. (2022). Digital transformation in retail industry: A review and research agenda. *International Journal of Management*, 11(7), 37–49.
- Gunawardana, W. J. D. Y., & Wedasinghe, N. (2021). Effective use of retail store management system for small retail stores. *Journal of Information Technology*, 11(2), 65–75.
- Hu, S., & Cao, Y. (2018). The wider, the better? The interaction between IoT diffusion and online retailers' decisions. *Telematics and Informatics*, 35(7), 1850–1861. <https://doi.org/10.1016/j.tele.2018.06.013>
- Jocevski, M. (2020). Blurring the lines between physical and digital: Business model innovation in retailing. *California Management Review*, 62(3), 71–95. <https://doi.org/10.1177/0008125620914698>
- Kapurubandara, M., & Lawson, R. (2006). Barriers to adopting ICT and e-commerce with SMEs in developing countries: An exploratory study in Sri Lanka. *Information Technology for Development*, 12(2), 139–153. <https://doi.org/10.1002/itdj.20022>
- Liang, T. P., You, J. J., & Liu, C. C. (2007). A resource-based perspective on information technology and firm performance: A meta-analysis. *Industrial Management & Data Systems*, 107(7), 1036–1056. <https://doi.org/10.1108/02635570710816727>
- Martins, R., Oliveira, T., & Popovič, A. (2019). Understanding Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management*, 49, 1–14. <https://doi.org/10.1016/j.ijinfomgt.2019.02.013>
- Nawaz, S. S., & Thelijjagoda, S. (2025). Sri Lankan SMEs' performance through cloud computing adoption: An SEM-ANN analysis. *Journal of Small Business and Enterprise Development*.
- Nuskiya, A. F. (2017). Factors influencing cloud computing adoption by SMEs in Eastern Region of Sri Lanka. *Journal of Business and Technology*, 8(3), 193–199. * (Assumed journal)
- Oliveira, T., & Martins, M. F. (2010). Firms' patterns of e-business adoption: Evidence for the European Union-27. *Electronic Commerce Research & Applications*, 13(1), 47–56. <https://doi.org/10.1016/j.elerap.2013.11.002>
- Peltier, J. W., Schibrowsky, J. A., & Zhao, Y. (2009). Technology adoption by small businesses: An exploratory study of the interrelationships of owner and environmental factors. *International Journal of Retail & Distribution Management*, 28(4), 406–431. <https://doi.org/10.1108/09590550910948579>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Ruivo, P., Oliveira, T., & Neto, M. (2012). ERP post-adoption: Value creation through integration. *Industrial Management & Data Systems*, 112(6), 888–906. <https://doi.org/10.1108/02635571211238520>
- Salleh, N. A., & Hussin, H. (2016). A conceptual model on cloud computing and SME performance: Resource-based view. In *2016 6th International Conference on Information and Communication Technology for the Muslim World (ICT4M)* (pp. 105–111). IEEE. <https://doi.org/10.1109/ICT4M.2016.041>
- Shetty, J. P., & Panda, R. (2021). Cloud computing adoption and its impact on business model innovation: A review of the literature. *Technological Forecasting & Social Change*, 57, 102303. <https://doi.org/10.1016/j.techfore.2020.120303>

Skafi, M., Yunis, M., & Zekri, A. (2017). Factors influencing SMEs' adoption of cloud computing services in Lebanon: An empirical analysis using TOE and contextual theory. *IEEE Access*, 8, 79110–79121.
<https://doi.org/10.1109/ACCESS.2017.2780891>

Suciu, G., Dobre, C., Cristea, V., Bâra, A., & Cristea, I. (2014). Cloud computing and big data as convergent technologies for retail pricing strategies of SMEs. *Informatica Economica*, 18(1), 63–73.
<https://doi.org/10.12948/issn14531305/18.1.2014.06>