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| RESEARCH ARTICLE

Future Focused Conceptual Traversing on 'Risk Appetite' in Service-Oriented Ecosystems - An International Perspective

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| ABSTRACT

This review traverses the crucial concept of risk appetite in service-oriented ecosystems (SOEs) in the midst of fast digital change that will impact the future. Conventional risk management frameworks are insufficient for handling dynamic market conditions and platform-based vulnerabilities since businesses are increasingly competing via intangible service offerings rather than tangible assets. The review focus explores how risk appetite acts as both a strategic facilitator and an operational restriction across global service businesses and denotes the critical need for updated governance strategies. The review examines scholarly literature sources related specifically to the topic from the years 2018 to 2025 using methodological lenses that include theoretical underpinnings (resource-based view, dynamic capabilities, and behavioral economics), sector-specific case studies (Airbnb, Microsoft Azure, PayPal, and Delta Airlines), and current debates on artificial intelligence (AI) governance. Markedly, the structured analysis examines risk measurement systems, cultural impacts, and adaptive governance needs in digital service settings. The outcome in the review reveals gaps in existing risk frameworks because many service companies, such as Airbnb, lack metrics for ethical and reputational risks in platform models. In addition, technology teams exhibit a risk tolerance that is greater than that of compliance teams, which causes organizational misalignment. Besides, significant firms' enterprise risk management (ERM) systems are unable to adapt to platform velocity, and conventional tools are unable to address real-time issues. Sectoral analysis reveals that Fintechs have risk tolerance levels that are greater than those of conventional banks, which underlines the necessity for context-specific strategies. The review recommends that future studies explore the creation of hybrid risk models that strike a balance between innovation and stability. Future-focused studies should also examine how to use AI-powered tools for real-time risk calibration and investigate cross-industry norms for assessing intangible risks. For SOEs navigating digital disruption, these innovations would turn risk appetite from a theoretical idea into a real competitive advantage.

| KEYWORDS

Risk appetite, service-oriented ecosystems, dynamic capabilities, intangible risk measurement, AI governance

| ARTICLE INFORMATION

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Introductory Overview

The concept of risk appetite has undergone a paradigm change, moving from a fixed financial limitation to a flexible strategic lever in service-oriented ecosystems (SOEs) in modern organizational governance. Buttriss (2021) defines risk appetite as the amount of risk that an organization is willing to take to achieve its goals. Thus, risk appetite establishes risk-taking limits,

indicating how much uncertainty an entity is willing to take or what potential loss it will suffer before taking steps to minimize it. Recent evidence reveals significant conflicts in the implementation of risk appetite, ranging from measurement problems in reputational risk to behavioral biases in strategic decision-making. However, there is still no methodical synthesis of these discussions throughout the global service industry, which includes information technology (IT), finance, hospitality, and aviation, and this fact continues to blur the pathway for progress in theory and practice. This review acknowledges existing knowledge and bridges the knowledge gap by examining the conceptual development of risk appetite in SOEs, sector-specific examples of risk-reward tradeoffs, and emerging debates in dynamic risk management. The analysis employs a critical lens to integrate recent – 2018 to 2025 - Association of Business Schools-ranked academic research, Enterprise Risk Management (ERM) frameworks, and cross-industry case studies to dissect how risk appetite functions as both a catalyst and a constraint in SOEs.

Theoretical Underpinnings of Risk Appetite in SOEs

The risk appetite paradigm in SOEs reveals opposing and complementary theoretical viewpoints that denote important research gaps. According to Maurer (2023), the resource-based view theory considers risk appetite as a strategic differentiator, which delimits its significance in competitive positioning while failing to account for the necessary dynamic recalibration in digital service environments. Dynamic capabilities theory holds that risk appetite is an enabling mechanism due to the adaptive nature of organizations in recognizing, seizing, and responding to exogenous shocks and an uncertain environment (Bleady et al., 2018; Sidi & Santoso, 2024). The framework captures the fluidity of risk decisions in SOEs but disregards the cognitive and behavioral 'people' and 'organizational' elements that shape how individuals and leadership teams evaluate risk. Notably, the literature analysis reveals theoretical fragmentation that creates and sustains a divide between strategic models and real-time risk judgment and delineates insufficient quantitative methods on behavioral risk constructs. As SOEs become more complex and interdependent, the lack of a unified conceptual model that synthesizes behavioral and cognitive perspectives creates a knowledge gap in theory and practice. Hence, the literature analysis reveals the need for cross-paradigm frameworks that will accommodate the structural, dynamic, and human factors involved in the formation of risk appetite in service ecosystems.

Emerging Quantification Issue

The translation of risk appetite into measurable frameworks presents significant theoretical and practical challenges for service-oriented ecosystems. In a mediation analysis study, Leyeza et al. (2023) discovered that the majority of current risk appetite methodologies still depend on financial indicators, which are unable to reflect the intangible aspect of significant service risks. Such financial constraints emerge when comparing measurable operational risks, such as Delta Airlines' fuel hedging, to more ambiguous exposures, such as Airbnb's reputational vulnerabilities (Kobbernagel & Tangsgaard, 2018; Malazizi et al., 2018). This quantification issue indicates a larger theoretical gap in ERM, in which traditional frameworks, such as the Committee of Sponsoring Organizations of the Treadway Commission (COSO), struggle to adapt to the dynamic risk profiles of digital service models (Ahmad & Teo, 2024). The findings reveal knowledge gaps in the establishment of non-financial risk indicators for service intangibles. Thus, the continued emphasis in the literature on static measuring approaches reveals a fundamental disconnect with the adaptive risk governance requirements of modern SOEs.

Strategic and Cultural Controversies in Risk-Taking

The review highlights controversies regarding how state-owned service enterprises balance the need for innovation with risk management, exposing underlying conflicts between strategic goals and cultural norms. Researchers debate whether risk appetite should enable or obstruct service ecosystems, thus generating a permanent paradox between disruptive innovation and risk minimization (Madanaguli et al., 2023). This risk enabler or barrier theoretical argument is apparent in extremely different practices, as Hijazin (2024) claims that some risk management frameworks emphasize stability via cautious risk thresholds, whereas others support aggressive risk-taking as a crucial part of digital transformation. The split between disruptive innovation and risk mitigation is apparent in the financial industry, whereby Fintech's acceptance of Bitcoin volatility stands in sharp contrast with the institutional risk aversion of traditional banking (Roy et al., 2024). The difference between inventive-driven and risk-averse strategies in SOEs reflects an increasing concern regarding the strategic relevance of risk appetite (Huang et al., 2024). Although industry-specific instances like FinTech and conventional banking exist, the body of knowledge lacks agreement on how companies should operationalize risk tolerance in light of conflicting demands for agility and control. Consequently, risk appetite is still a fractured and erratic notion among SOEs without a single paradigm to help establish the desired operational equilibrium.

The review also conflicts on whether executive directives or changing organizational norms drive risk appetite, confusing its application in the SOE setting. Although Akileswaran and Hutchinson's (2019) study favors "fail fast" cultures for digital services, contradictory data imply that such methods might destabilize systems. The lack of research on hybrid models able to strike a compromise between these extremes suggests a major theoretical gap. Current research emphasizes C-suite decision-making but overlooks subcultural differences, failing to consider how risk appetite varies across organizational levels and job functions. According to Beecham et al. (2021), while compliance departments prioritize strict adherence to legal standards, and frontline

service teams usually employ risk-avoiding behaviors to safeguard customer relationships, international companies' IT departments might favor agile experimentation with more risk tolerance. Wu (2019) contends that such disparity in risk appetite is problematic for global state-owned enterprises, as corporate risk rules frequently clash with regional and departmental subcultural norms. Risk governance demands multidimensional analyses that link strategy aims to cultural implementation in the field.

Risk Appetite in Global Service-Oriented Firms

The contradiction between innovation and ethical risk governance in service-oriented environments is clear in the technology industry. For example, Microsoft Azure's strategy for addressing generative AI risks, particularly in the area of deepfake prevention, exemplifies adaptive governance (Bhopulka et al., 2024). However, the lack of industry-wide standards, such as those for Google Cloud, demonstrates a huge standardization gap, pushing organizations to develop ad hoc solutions rather than leveraging shared ethical principles (Burton et al., 2020). This tension demonstrates that the rush to acquire a first-mover advantage outpaces the construction of credible risk boundaries, and there are no long-term studies in the literature on how these decisions affect platform stability and user confidence. Thus, it is evident that technology scalability often exceeds systemic risk considerations when applying the concept of risk appetite.

An increasing divide is emerging between standard and disruptive risk models in the financial and hospitality industries. For example, PayPal's exploitation of regulatory asymmetries in open banking exemplifies complicated risk arbitrage but also leads to higher fraud rates, highlighting the trade-offs between systemic stability and innovation velocity (Trapanese & Lanotte, 2023). Similarly, Delta Airlines' fuel hedging strategy led to competitive imbalances, while Airbnb's revenue-maximizing algorithms damaged confidence amid crises (Kobbernagel & Tangsgaard, 2018; Malazizi et al., 2018). These incidents reveal a persistent pattern in which short-term operational advantages are prioritized at the expense of long-term reputational capital. This dilemma is not adequately addressed in the literature, particularly for platform-based models in which reputation plays an important role in creating network effects. As more sectors adopt asset-light service models, a critical knowledge gap emerges because neither hospitality nor finance research has produced robust frameworks for quantifying intangible risks (Vander, 2019). This knowledge gap reflects a greater theoretical limitation in reconciling disruptive innovation with long-term risk management in service ecosystems.

Future Research Recommendations and Knowledge Gaps

The review study identifies key knowledge gaps in the understanding and application of risk appetite in SOEs. First, the literature analysis reveals an urgent need for cross-sectoral frameworks that standardize risk appetite measurement across industries. Current models, such as COSO ERM, are unduly focused on financial measures and unable to account for intangible risks, such as reputational damage or ethical concerns in AI adoption (Bone, 2022; Ridzuan et al., 2024). Second, further investigation on the impact of subcultures in determining risk appetite, such as engineering vs. product teams in tech businesses, is needed to bridge the knowledge gap between C-suite directives and frontline execution (Graham et al., 2023; Menon, 2019). Third, the emergence of AI-driven risk models necessitates a study into real-time risk calibration, especially for platform-based firms, such as Airbnb's dynamic algorithms (Dias & Lauretta, 2024). Finally, longitudinal research on how risk appetite decisions affect long-term organizational resilience, particularly in asset-light models where reputation is critical, is limited (Chrisben et al., 2025). These unresolved gaps in measurement, cultural influences, real-time adaptation, and long-term impacts hinder the development of practical risk appetite frameworks for SOEs.

Future research is needed to bridge the identified knowledge gaps. This literature review analysis recommends that future research should do the following:

i. Create quantifiable non-financial indicators for service-specific risks (such as trust erosion in sharing economies).
ii. Investigate hybrid risk cultures that strike an equilibrium between innovation and stability, such as Saudi Arabian service firms (STC Pay and Red Sea Global) which balance Sharia compliance with fintech innovation, and the case of Alibaba's agility and compliance, thereby establishing benchmark references.
iii. Create dynamic risk governance systems, such as cybersecurity or regulatory regimes, that use AI to adapt thresholds in real time.
iv. Conduct comparative cross-industry assessments to discover universal risk appetite guidelines for state-owned enterprises.

Conclusion

This research review underscores that risk appetite in SOEs remains a fragmented concept, divided between competing theoretical frameworks and practical demands. While strategic frameworks stress risk as a competitive lever and behavioral studies indicate cognitive biases in risk-taking, the lack of integrated models leaves firms without practical tools. Critical knowledge gaps persist regarding assessing intangible risks, synchronizing subcultural influences, and enabling real-time risk

calibration which exposes SOEs to operational vulnerabilities. Moving forward, research should explore dynamic frameworks that bridge financial and non-financial risk indicators, AI-powered tools for adaptive threshold-setting, and cross-sector benchmarks that account for cultural and regulatory variation. This study implies that SOEs either adapt risk governance structures and tools to match ecosystem complexity or forfeit competitive advantage to sector rivals.

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References

Ahmad, S. A., & Teo, P. C. (2024). The implementation of enterprise risk management (ERM) frameworks in small and medium enterprises (SMEs): A literature review. *International Journal of Academic Research in Business and Social Sciences*, *14*(9), 290-307. http://dx.doi.org/10.6007/IJARBSS/v14-i9/22353 https://kwpublications.com/papers_submitted/11397/the-implementation-of-enterprise-risk-management-erm-frameworks-in-small-and-medium-enterprises-smes-a-literature-review.pdf

Akileswaran, K., & Hutchinson, G. (2019). Adapting to the 4IR: Africa's development in the age of automation. *Tony Blair Institute for Global Change*. Retrieved from https://www.busiweek.com/files/sites/default/files/articles/adapting-to-the-4ir-africa-s-development-in-the-age-of-automation.pdf

Beecham, S., Clear, T., Lal, R., & Noll, J. (2021). Do scaling agile frameworks address global software development risks? An empirical study. *Journal of Systems and Software*, *171*, 110823. https://doi.org/10.1016/j.jss.2020.110823 https://www.sciencedirect.com/science/article/pii/S0164121220302181

Bhopulka, O., Waghmare, S., Shete, S., & Darawade, P. (2024). The role of cloud in democratizing generative AI access. *International Journal of Advanced Research in Education and Technology, 11*(1). https://philarchive.org/archive/SAKTRO-5 https://ijarety.in/admin/img/41_The%20Role%20of%20Cloud.pdf

Bleady, A., Ali, A. H., & Ibrahim, S. B. (2018). Dynamic capabilities theory: Pinning down a shifting concept. *Academy of Accounting and Financial Studies Journal*, *22*(2), 1-16. https://www.researchgate.net/profile/Siddig-Ibrahim/publication/325257001_Dynamic_capabilities_theory_Pinning_down_a_shifting_concept/links/5fd92991299bf1408811d63d/Dynamic-capabilities-theory-Pinning-down-a-shifting-concept.pdf

Bone, J. (2022). *Why COSO's internal control framework can't give you confidence* [Preprint]. ResearchGate. https://doi.org/10.13140/RG.2.2.29562.57280 https://www.researchgate.net/publication/358247648_Why_COSO%27s_Internal_Control_Framework_Can%27t_Give_You_Confidence?channel=doi&linkId=61f82e091e98d168d7e136e1&showFulltext=true

Burton, S., Habli, I., Lawton, T., McDermid, J., Morgan, P., & Porter, Z. (2020). Mind the gaps: Assuring the safety of autonomous systems from an engineering, ethical, and legal perspective. *Artificial Intelligence*, *279*, 103201. https://doi.org/10.1016/j.artint.2019.103201 https://www.sciencedirect.com/science/article/pii/S0004370219301109

Buttriss, K. (2021). *A framework for assessing organisational risk appetite* [Doctoral dissertation, University of Portsmouth]. https://researchportal.port.ac.uk/files/48885656/butriss_k.pdf

Chrisben, D., Tettey, D. J., Amarachi, S. W., Lawrence, K. O., Samuel, D., & Azumah, N. C. (2025). Entrepreneurial adaptability in cross-border startups: Navigating institutional voids in developing business environments. *World Journal of Advanced Research and Reviews, 25*(03), 2379-2396. https://doi.org/10.30574/wjarr.2025.25.3.1006 https://www.researchgate.net/profile/Jacob-Diameh/publication/390457028_Entrepreneurial_adaptability_in_Cross-border_startups_Navigating_institutional_voids_in_developing_business_environments/links/67f592799b1c6c487784bb10/Entrepreneurial-adaptability-in-Cross-border-startups-Navigating-institutional-voids-in-developing-business-environments.pdf

Dias, F. S., & Lauretta, G. A. (2024). The transformative impact of AI and deep learning in business: A literature review. *arXiv preprint arXiv:2410.23443*. https://arxiv.org/pdf/2410.23443 https://ui.adsabs.harvard.edu/abs/2024arXiv241023443D/abstract

Graham, J. R., Grennan, J., Harvey, C. R., & Rajgopal, S. (2023). Corporate culture in a new era: Views from the C-suite. *Available at SSRN 4714093*. http://dx.doi.org/10.2139/ssrn.4714093 https://people.duke.edu/~charvey/Research/Published_Papers/P168_Corporate_culture_in.pdf

Hijazin, A. F. (2024). *Driving digital transformation: Strategies and innovations in the Jordanian Telecom industry* [Doctoral dissertation, Universidad de Granada]. https://digibug.ugr.es/bitstream/handle/10481/89845/101558.pdf?sequence=4&isAllowed=y https://dialnet.unirioja.es/servlet/tesis?codigo=327478

Huang, K. G., Jing, R., Xia, J., Zhang, C. M., Zhong, W., & Zhu, D. H. (2024). Coevolution of SOES and the Chinese economy: The roles of SOE heterogeneity from the institutional, strategic, and organizational perspectives. *Management and Organization Review*, *20*(5), 704-715. https://doi.org/10.1017/mor.2024.68 https://www.cambridge.org/core/services/aop-cambridge-core/content/view/B0E3D212A19BA950BD9019E1E060DE76/S1740877624000688a.pdf/coevolution-of-soes-and-the-chinese-economy-the-roles-of-soe-heterogeneity-from-the-institutional-strategic-and-organizational-perspectives.pdf

Kobbernagel, F., & Tangsgaard, S. R. (2018). *Fuel hedging in the airline industry: Relations between risk exposure, firm characteristics and hedging practices* [Master's thesis, Copenhagen Business School]. Department of Finance, Copenhagen Business School. https://research.cbs.dk/files/59779398/500785_Fuel_Hedging_in_the_Airline_Industry.pdf

Leyeza, R. S., Boado, M. M., Butacan, O., Moreno, D. E., & Deocariza, L. (2023). The role of loan-related risk appetite in the relationship between financial risk considerations and MSME growth decision: A mediation analysis. *Journal of Risk and Financial Management*, *16*(5), 261. https://doi.org/10.3390/jrfm16050261 https://www.mdpi.com/1911-8074/16/5/261/pdf

Madanaguli, A., Dhir, A., Talwar, S., Clauss, T., Kraus, S., & Kaur, P. (2023). Diving into the uncertainties of open innovation: A systematic review of risks to uncover pertinent typologies and unexplored horizons. *Technovation*, *119*, 102582. https://doi.org/10.1016/j.technovation.2022.102582 https://www.sciencedirect.com/science/article/pii/S0166497222001298

Malazizi, N., Alipour, H., & Olya, H. (2018). Risk perceptions of Airbnb hosts: Evidence from a Mediterranean island. *Sustainability*, *10*(5), 1349. https://doi.org/10.3390/su10051349 https://www.mdpi.com/2071-1050/10/5/1349?_scpsug=crawled

Maurer, T. (2023). *Exploring levers for agility and their inter-relations in the German energy industry via neo-configurational theory.* [Doctoral dissertation, Heriot-Watt University]. https://www.ros.hw.ac.uk/bitstream/handle/10399/4855/MaurerT_0323_ebsSS.pdf?sequence=1

Menon, V. (2019). *Role of C-Suite leaders in shaping a learning culture*. [Doctoral Dissertation, University of Pennsylvania]. https://search.proquest.com/openview/2feb7ed3663f55ec7488ca27969ee3fd/1.pdf?pq-origsite=gscholar&cbl=18750&diss=y

Ridzuan, N. N., Masri, M., Anshari, M., Fitriyani, N. L., & Syafrudin, M. (2024). AI in the financial sector: The line between innovation, regulation and ethical responsibility. *Information*, *15*(8), 432. https://doi.org/10.3390/info15080432 https://www.mdpi.com/2078-2489/15/8/432

Roy, D., Dubey, A., & Tiwary, D. (2024). Conceptualizing an institutional framework to mitigate crypto-assets' operational risk. *Journal of Risk and Financial Management*, *17*(12), 550. https://doi.org/10.3390/jrfm17120550 https://www.mdpi.com/1911-8074/17/12/550

Sidi, A. P., & Santoso, R. (2024). Creative industries' risk appetite in East Java and its impact on dynamic capability and competitive advantage. *Binus Business Review*, *15*(2), 107-117. https://doi.org/10.21512/bbr.v15i2.10429 https://journal.binus.ac.id/index.php/BBR/article/download/10429/5096

Trapanese, M., & Lanotte, M. (2023). Financial intermediation and new technology: Theoretical and regulatory implications of digital financial markets. *Bank of Italy Occasional Paper*, (758). http://dx.doi.org/10.2139/ssrn.4464132 https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4464132

Vander, D. (2019). *How do firms build and sustain strategic competitive advantage in the digital economy? A case study in digital banking* [Doctoral dissertation, Macquarie University]. https://figshare.mq.edu.au/ndownloader/files/34540022

Wu, Y. (2019). *Risk management and risk control for state-owned firms of China* [Doctoral dissertation, University of Reading]. https://centaur.reading.ac.uk/88635/1/17000136_Wu_thesis.pdf https://core.ac.uk/download/pdf/286352836.pdf