

Charting the Path Forward: Organizational Challenges and Strategic Imperatives of a Philippine Logistics Start-up in the Digital Era

Victor P. Claveria¹ , Jean V. Ramos² 

Author Information:

¹ Operations Department,
Cloud Synergy Logistics, Inc.,
Silang, Cavite, Philippines

² Graduate School, University of Luzon,
Dagupan City, Pangasinan, Philippines

Correspondence:

vpclaveria17@gmail.com

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Abstract. Start-up logistics companies in the Philippines operate in a difficult environment marked by high capital requirements and rapid digital change. Logistics costs account for approximately 27 percent of the country's gross domestic product, and more than 60 percent of start-ups fail within five years. Despite these pressures, limited research explores how early-stage logistics firms encounter digital-era organizational challenges, a gap this study addresses. This study examined the extent and seriousness of challenges faced by the case company across five domains: (1) Access to Capital and Funding, (2) Technological Adoption and Digital Infrastructure, (3) Cybersecurity Threats and Data Privacy, (4) Talent Acquisition and Retention, and (5) Regulatory Compliance and Market Competition. A mixed-method case study design was used, combining a five-point Likert-scale survey of 20 management and operational staff with key informant interviews involving six senior managers. Weighted means measured the level of each challenge, and the survey tool showed good reliability, with an internal consistency coefficient of 0.84. Results revealed that all five domains represent serious organizational challenges, yielding an overall mean of 3.81. Talent Acquisition and Retention emerged as the most critical concern (mean of 4.05)—driven primarily by an inability to offer competitive pay (mean of 4.20). This was followed by Regulatory Compliance and Market Competition (3.83), Access to Capital and Funding (3.78), Technological Adoption and Digital Infrastructure (3.75), and Cybersecurity Threats and Data Privacy (3.63). The findings showed this challenge areas are closely connected, with limited capital access worsening problems in technology adoption, cybersecurity, and talent management. The study recommends diverse financing strategies, gradual digital transformation, stronger cybersecurity practices, focused talent development, and proactive regulatory compliance to build resilience, competitiveness, and long-term sustainability, offering guidance for practitioners and policymakers supporting early-stage enterprises.

Keywords: Cybersecurity; regulatory compliance; talent retention; technology adoption; venture financing

Introduction

The logistics sector occupies a central and indispensable role in the Philippine economy, serving as the connective tissue between producers, distributors, and end consumers across an archipelago of more than 7,641 islands. Accounting for approximately 27% of GDP compared to an ASEAN average of 13% (Tsang, 2024), the Philippine logistics sector represents a paradoxical landscape of high economic significance and severe operational complexity. For start-up companies entering this environment in the digital era, the intersection of high capital requirements, accelerating technological change, regulatory complexity, and fierce competition from established incumbents creates a uniquely demanding landscape.

The digital era, characterized by the pervasive integration of technologies including cloud computing, artificial intelligence, the Internet of Things (IoT), and mobile platforms, has fundamentally altered the competitive dynamics of entrepreneurship. According to Nambisan (2017), digital entrepreneurship encompasses all entrepreneurial activity enabled by or resulting in digital innovation, making a venture's relationship with technology not optional but existential. Yet the same digital forces that create opportunities for efficiency and market reach also raise the competitive bar, impose new cybersecurity vulnerabilities, and accelerate the obsolescence of operational approaches that do not incorporate digital tools.

The statistics on start-up failure in the digital era underscore the severity of the operating environment. Start-up failure remains disproportionately common in the digital era: CB Insights' (2021) analysis of start-up post-mortems identifies the absence of market need (42%) and running out of cash (29%) as the two most commonly cited causes of start-up failure. The technology sector — where digital entrepreneurship is most concentrated — records a failure rate of 63% within the first five years, the highest of any industry sector (Founders Forum Group, 2025). In the Philippine context, while the country's digital economy is projected to reach PHP 1.6 trillion by 2024 and digital transformation has been prioritized under the Philippine Development Plan 2023–2028, start-ups still face major structural constraints: limited digital infrastructure, evolving regulatory requirements, workforce skill gaps, and escalating cybersecurity threats.

This study examines the extent and nature of these challenges as experienced by a start-up integrated logistics company in the Philippines — specifically one that offers customs brokerage, freight forwarding, warehousing, and last-mile distribution services. The company represents the archetype of the Philippine logistics start-up: ambitious in scope, resource-constrained in practice, and navigating a rapidly changing digital and regulatory environment. Understanding the multi-dimensional challenges confronting such companies is essential for practitioners, policymakers, and scholars concerned with the development of a resilient and competitive logistics sector in the Philippine digital economy.

Research Questions

This study aimed to determine the extent and nature of digital-era challenges faced by a start-up integrated logistics company in the Philippines. Specifically, it sought to answer the following questions:

1. What is the extent of organizational challenges experienced by a start-up integrated logistics company in terms of:
 - 1.1 Access to Capital and Funding,
 - 1.2 Technological Adoption and Digital Infrastructure,
 - 1.3 Cybersecurity Threats and Data Privacy,
 - 1.4 Talent Acquisition and Retention, and
 - 1.5 Regulatory Compliance and Market Competition.
2. What is the relationship and compounding dynamics among the organizational challenge domains?
3. Based on the findings, what evidence-informed strategies can be proposed to strengthen the company's competitive positioning and operational sustainability?

Scope and Delimitation of the Study

This study is scoped to a single start-up integrated logistics company operating in Pasig City, Philippines, examined during the 2026 study period. Several delimitations define the boundaries of the research. First, the study is delimited to one case organization and does not extend to other start-up logistics firms, established competitors, or the broader Philippine logistics industry; findings are therefore illustrative of this company's experience rather than statistically generalizable across the sector. Second, the investigation is confined to five pre-defined challenge domains — Access to Capital and Funding, Technological Adoption and Digital Infrastructure, Cybersecurity Threats and Data Privacy, Talent Acquisition and Retention, and Regulatory Compliance and Market Competition — identified through the literature review; organizational challenges outside these domains were not assessed. Third, participation was delimited to twenty (20) management and operational personnel for the survey and six (6) senior managers for the key informant interviews, selected through purposive sampling; the perspectives of clients, external regulators, investors, and staff outside these functional areas were not directly captured. Fourth, the study excludes financial statements, proprietary commercial data, and client-identifiable information, relying instead on perception-based ratings and qualitative accounts of challenge severity rather than objective financial or performance indicators. Finally, the study is cross-sectional, capturing perceptions at a single point in time rather than tracking how challenges evolve over the company's growth trajectory. Given these delimitations, the findings are contextualized within the Philippine logistics and digital economy environment and may not be directly generalizable to logistics start-ups in substantially different regulatory, economic, or organizational contexts.

Literature Review

Access to Capital

Block, Brohman, and Steininger (2020) theorize venture financing as a complex interplay between information asymmetries, risk perceptions, and institutional frameworks, arguing that early-stage ventures face a structural 'liability of newness' in capital markets. This liability is particularly pronounced for capital-intensive logistics businesses, which require physical asset investment that is structurally less attractive to

equity investors than digital platform businesses. In the Philippine context, Mia, Habaradas, and Jimenez (2023) document the concentration of venture capital in Manila-based technology companies, with logistics and other asset-heavy sectors systematically underserved by institutional investors.

Technological Adoption

Davis's (1989) Technology Acceptance Model (TAM) posits that perceived usefulness and perceived ease of use are the primary determinants of technology uptake — a framework that helps explain why resource-constrained start-ups with limited IT capacity may defer technology adoption even when they recognize its strategic value. Masongsong, Ulep, Abante, Cagang, and Vigonte (2024) found that while basic digital tool adoption is relatively widespread among Philippine MSMEs, adoption of advanced technologies — including AI, IoT, and cloud analytics — remains limited. The University of the Philippines Institute for Small-Scale Industries (UPISI, 2024) notes that transition costs associated with digital transformation represent a significant barrier for asset-intensive businesses with limited capital.

Cybersecurity

The Philippines ranked fourth globally among countries most targeted by online threats in 2023, according to Kaspersky Security Network data (San Juan, 2024). For logistics companies handling cargo manifests, customs documentation, and financial transaction data, a cybersecurity breach carries both operational and reputational consequences that can be existential for early-stage ventures. Research by the Tech for Good Institute (2024) shows that most start-ups lack dedicated security teams and defer proactive security investment in favor of revenue-generating activities, creating elevated and unacknowledged risk exposure.

Talent Acquisition and Retention

Becker's (1964) human capital theory establishes workforce competencies as a primary source of competitive advantage, predicting that companies unable to attract and retain skilled workers will face systematic competitive disadvantage. Sorenson, Dahl, Canales, and Burton (2021) empirically confirm that start-up employees earn substantially less than their counterparts at established firms over the long run, evidence of a structural disadvantage in compensation competition that non-monetary benefits alone may not fully offset. CB Insights (2024) identifies team composition as among the three most cited causes of start-up failure, underscoring the centrality of talent in venture success. Intuit QuickBooks (2024) proposes organizational culture and career development pathways as viable alternative competitive dimensions for talent attraction that do not require capital-intensive compensation increases.

Regulatory Compliance

Chinnaswamy (2022) observes that regulatory frameworks tend to lag technological change, creating a zone of uncertainty in which digital businesses must navigate rules designed for pre-digital operating environments. For Philippine logistics companies, the regulatory environment encompasses Bureau of Customs accreditation, MARINA and CAB licensing, National Privacy Commission requirements under the Data Privacy Act of 2012, DOLE labor law compliance, and more recently, the Internet Transactions Act of 2023 for digital commerce platforms. Tsang (2024) notes that the compliance burden associated with these requirements falls disproportionately on start-ups, which lack the dedicated legal and compliance staff that established firms maintain.

Across the five strands of literature reviewed, there is broad consensus that early-stage ventures experience a structural 'liability of newness' compared with established firms — a disadvantage that the Philippine setting intensifies through venture capital's concentration in Manila-based technology firms (Mia, Habaradas, & Jimenez, 2023), uneven digital infrastructure (UPISI, 2024), and high cyberattack exposure (San Juan, 2024). The literature is less unified, however, on how start-ups should respond: some strands treat resource constraints as largely fixed, arguing that disadvantages in compensation (Sorenson, Dahl, Canales, & Burton, 2021) or capital access (Block, Brohman, & Steininger, 2020) cannot be fully offset by non-monetary or alternative measures, while others take a more agentic view, proposing that culture and career development can substitute for competitive pay (Intuit QuickBooks, 2024) or that phased adoption can substitute for capital investment (Davis, 1989) — a tension between structural determinism and managerial agency that remains untested for capital-intensive, physical-asset businesses such as logistics start-ups. A more consequential gap is that this literature almost uniformly examines the five domains in isolation, with little attention to how constraints in one compound difficulties in another, and empirical evidence specific to Philippine start-up logistics firms — as distinct from Philippine MSMEs or start-ups in general — remains scarce, relying predominantly on single-method survey or secondary-data studies rather than integrated mixed-method case designs. This study addresses that gap by examining all five challenge

domains concurrently within a single Philippine logistics start-up, combining quantitative severity ratings with qualitative key informant accounts to characterize not only the individual domains but also their compounding interrelationships, an integrative perspective largely absent from the literature reviewed.

Methodology

Research Design

This study employs a mixed-method case study design (Yin, 2014) that integrates quantitative survey data with qualitative interview findings and a systematic literature review. Yin's (2014) case study framework was applied in its original form, without structural modification, to guide the integration of the quantitative and qualitative components. The case study approach was selected for its capacity to generate deep, contextually rich insights into complex organizational phenomena — particularly appropriate for examining multi-domain challenge dynamics that cannot be adequately captured by single-instrument, cross-sectional surveys alone. The subject organization is a start-up integrated logistics company in the Philippines offering customs brokerage, freight forwarding, warehousing, and last-mile distribution services. The quantitative component employs a structured five-point Likert scale survey to systematically measure the perceived severity of 17 challenge indicators across five domains. The qualitative component employs semi-structured key informant interviews to provide depth, context, and explanation for the quantitative ratings. The systematic literature review component (Tranfield, Denyer, & Smart, 2003) synthesizes existing research to contextualize and triangulate the primary data findings.

Sampling Design

This study employed a purposive sampling design to identify participants who possessed relevant knowledge, experience, and direct involvement in the operations and strategic decision-making processes of the start-up integrated logistics company in Pasig City, Philippines. The respondents were selected based on their ability to provide meaningful insights into the digital-era challenges experienced by the organization. The study involved twenty (20) respondents who participated in the structured survey questionnaire and six (6) senior management respondents who served as key informants for the semi-structured interviews. The survey respondents represented various functional areas within the organization to capture diverse perspectives across the identified challenge domains, while the key informants were selected based on their leadership roles and operational expertise. This sampling approach was considered appropriate as it enabled the researcher to gather both quantitative assessments and qualitative insights from individuals with direct knowledge of the company's challenges, strategies, and operational context.

Research Locale

The study was conducted at the principal place of business of the subject organization in Pasig City, with operations spanning the National Capital Region, Luzon, and select provincial delivery zones. This geographic spread is significant because it encompasses both well-connected urban logistics corridors and secondary zones with less reliable digital infrastructure — a distinction that is analytically relevant to the technology adoption challenge domain.

Research Participants

The respondents of the study comprised of twenty (20) management and operational personnel of the case company, selected through purposive sampling to ensure representation of all functional areas relevant to the five challenge domains. Key informants for the interview component included the CEO/Managing Director, Operations Manager, Finance and Administration Manager, Information Technology Officer, Human Resources Officer, and Compliance and Regulatory Affairs Officer. Survey respondents encompassed the broader management team and selected operational staff, including operations supervisors, customer service officers, warehouse coordinators, and logistics coordinators.

Research Instrument

Two primary data collection instruments were employed in this study: a semi-structured interview guide and a structured survey questionnaire. Both instruments were originally developed by the researcher specifically for this study, grounded in the five challenge domains identified through the literature review, rather than adapted from a previously published or externally validated instrument. The interview guide, which covered each of the five challenge domains, was developed and validated by an expert panel prior to use, and no further modifications were made to it following this validation. Interviews were conducted either in person or via video conference and lasted approximately 45 to 60 minutes. The survey questionnaire consisted of 17 items designed to assess the perceived severity of challenges across the five domains using a

five-point Likert scale (1 = Not Serious at All, 2 = Slightly Serious, 3 = Moderately Serious, 4 = Serious, and 5 = Very Serious). Prior to the actual data collection, the questionnaire was pilot-tested with five logistics industry practitioners, yielding an overall Cronbach's alpha coefficient of 0.84, indicating good internal consistency (Nunnally, 1978). Based on feedback from the pilot test, minor wording revisions were made to two items to improve clarity; no further changes were made to the instrument following this refinement, and it was administered in its finalized form for the main data collection.

Data Gathering Procedure

The data gathering process was conducted systematically to ensure the integrity and credibility of the study. First, approval to conduct the study was secured from the University of Luzon Graduate School. Once this approval was obtained, informed consent was secured from all participants prior to their involvement in the research. The five-point Likert scale survey was then administered to twenty (20) respondents over a two-week period to assess the perceived severity of digital-era challenges across the identified domains. Subsequently, key informant interviews were conducted with six senior management respondents to obtain in-depth insights into the challenges experienced by the company. The interview recordings were transcribed verbatim and analyzed using thematic analysis following the framework of Braun and Clarke (2006). Meanwhile, the survey data were encoded, cleaned, and subjected to statistical analysis. Finally, the quantitative and qualitative findings were integrated and synthesized to develop a comprehensive analysis and formulate evidence-informed recommendations for strengthening the company's competitive positioning and operational sustainability.

Results and Discussions

Research Question 1: What is the extent of organizational challenges experienced by a start-up integrated logistics company in terms of access to capital and funding, technological adoption and digital infrastructure, cybersecurity threats and data privacy, talent acquisition and retention, and regulatory compliance and market competition?

Table 1. Extent of Organizational Challenges in terms of Access to Capital and Funding

Indicators	Mean	Verbal Description	Interpretation
1. Difficulty accessing venture capital or angel investment for logistics operations.	4.00	Serious	High Severity
2. Limited eligibility for formal bank credit due to short operating history.	3.80	Serious	High Severity
3. Insufficient working capital to fund operational expansion.	3.70	Serious	High Severity
4. Challenges in accessing government financing programs for MSMEs.	3.60	Serious	High Severity
Over-all Mean	3.78	Serious	High Severity

The consistently high ratings across all four indicators in Table 1 corroborate global evidence identifying funding shortfall as the primary driver of start-up failure. CB Insights' (2021) analysis found that running out of cash is among the most commonly cited causes of start-up failure — a pattern reflected in respondents' rating of venture capital inaccessibility (Item 1.1) as the domain's most severe sub-challenge. This aligns with Block, Brohman, and Steininger's (2020) theoretical framing of the 'liability of newness,' wherein early-stage ventures are systematically disadvantaged in capital markets due to information asymmetries between entrepreneurs and investors. In the Philippine context, the concentration of venture capital in Manila-based technology ventures — documented by Mia, Habaradas, and Jimenez (2023) — compounds this disadvantage for logistics start-ups, which require physical asset investment structurally less attractive to equity investors than digital platform businesses. The comparatively moderate rating of government financing access (Item 1.4) suggests respondents are aware of alternative financing channels but encounter practical barriers to access, consistent with the Asian Development Bank's (2023) finding that regulatory complexity and documentary requirements limit MSME uptake of government financing programs. Critically, capital constraints in this study function as a foundational inhibitor: they cascade into every other challenge domain by restricting investment in technology, cybersecurity, and talent — the interventions that would otherwise enable the company to address those secondary challenges.

Table 2. Extent of Organizational Challenges in terms of Technological Adoption and Digital Infrastructure

	Indicators	Mean	Verbal Description	Interpretation
1.	Reliance on manual processes for key logistics operations.	3.90	Serious	High Severity
2.	Insufficient IT staff capacity to implement and maintain technology systems.	3.70	Serious	High Severity
3.	Connectivity limitations in secondary delivery zones outside Metro Manila.	3.45	Serious	High Severity
4.	Widening technology gap relative to established logistics competitors.	3.95	Serious	High Severity
	Over-all Mean	3.75	Serious	High Severity

Within the Technological Adoption and Digital Infrastructure domain, Item 2.3 (connectivity limitations in secondary delivery zones) recorded the lowest mean of any individual item in the entire survey. This domain reflects the dual challenge identified by Masongsong et al. (2024): internal capacity constraints and external infrastructure limitations. The highest-rated sub-challenge — technology gap relative to competitors (Item 2.4) — suggests respondents are acutely aware of the competitive disadvantage created by technology deficits, consistent with Binowo and Hidayanto's (2023) identification of technological capability as a key success factor for digital start-ups navigating their pioneering stage. This finding is particularly notable because it indicates that the challenge is not one of awareness or intent, but of capacity: respondents understand the need for technology investment but face resource constraints that prevent adoption. The connectivity limitations noted above reflect the geographic dimension of the technology challenge in the Philippines, where digital infrastructure quality varies markedly between the National Capital Region and provincial delivery zones (UPI SI, 2024). Davis's (1989) Technology Acceptance Model predicts that perceived ease of use is a critical adoption determinant — and the combination of resource constraints, geographic connectivity gaps, and limited IT staff capacity collectively reduce perceived ease of adoption, further depressing technology uptake rates below what would otherwise be rational given the business case for investment.

Table 3. Extent of Organizational Challenges in terms of Cybersecurity Threats and Data Privacy

	Indicators	Mean	Verbal Description	Interpretation
1.	Absence of dedicated cybersecurity personnel within the organization.	3.55	Serious	High Severity
2.	Incomplete compliance with the requirements of the Data Privacy Act of 2012.	3.45	Serious	High Severity
3.	Risk of client data breach adversely impacting company reputation and trust.	3.90	Serious	High Severity
	Over-all Mean	3.63	Serious	High Severity

The Cybersecurity Threats and Data Privacy domain recorded the lowest overall mean in the study, a finding that should be interpreted with caution: the ratings reflect respondents' current subjective experience of cybersecurity as a challenge, which is muted by the absence of a significant cybersecurity incident to date. The actual risk exposure of logistics companies handling sensitive commercial data in the Philippines — among the most frequently attacked countries globally (San Juan, 2024) — is substantially higher than the severity ratings in this study imply. The highest-rated item, risk of client data breach impacting company reputation (Item 3.3), indicates that respondents understand the reputational stakes of a security incident. The comparatively lower ratings for absence of dedicated cybersecurity personnel (Item 3.1) and incomplete Data Privacy Act compliance (Item 3.2) may reflect an organizational blind spot: the challenges are acknowledged, but not yet felt as urgently as capital and talent constraints that have immediate operational manifestations. Consistent with Tech for Good Institute's (2024) research, cybersecurity investment is typically deprioritized in favor of revenue-generating activities in early-stage ventures — a pattern that creates a latent risk that may materialize rapidly and catastrophically if exploited.

Table 4: Extent of Organizational Challenges in terms of Talent Acquisition and Retention

	Indicators	Mean	Verbal Description	Interpretation
1.	Difficulty recruiting experienced logistics and supply chain professionals.	4.00	Serious	High Severity
2.	Inability to match compensation packages offered by larger competitors.	4.20	Serious	High Severity
3.	High workload concentration and burnout risk among key personnel.	3.95	Serious	High Severity
	Over-all Mean	4.05	Serious	High Severity

Within the Talent Acquisition and Retention domain — which recorded the highest overall mean in the study — Item 4.2 (inability to match competitor compensation) registered the highest individual item mean of the entire survey — sitting at the upper boundary of the serious range. This is consistent with CB Insights' (2024) finding that team composition is among the three most cited causes of start-up failure. The near-Very Serious rating for compensation competitiveness confirms Sorenson, Dahl, Canales, and Burton's (2021) empirical finding that start-up employees earn substantially less than their counterparts at established firms over the long run, a structural disadvantage in compensation competition that non-monetary benefits alone may not fully offset in the near term. Becker's (1964) human capital theory predicts that companies unable to attract and retain skilled workers will experience systematic competitive disadvantage — a dynamic that is particularly acute in logistics, where the convergence of physical operations management with digital technologies has created demand for hybrid competencies that are scarce in the Philippine labor market. The elevated rating for workload and burnout risk (Item 4.3) reflects the operational consequence of talent scarcity: when insufficient staff is available, existing personnel absorb disproportionate workloads, creating a self-reinforcing cycle of attrition and further scarcity. Intuit QuickBooks (2024) identifies organizational culture and career development pathways as viable alternative competitive dimensions for talent attraction — a strategic lever that does not require capital-intensive compensation increases, making it particularly relevant for resource-constrained start-ups.

Table 5. Extent of Organizational Challenges in terms of Regulatory Compliance and Market Competition

	Indicators	Mean	Verbal Description	Interpretation
1.	Complexity and administrative burden of multi-regulatory compliance requirements.	3.75	Serious	High Severity
2.	Regulatory uncertainty arising from rapidly evolving digital commerce legislation.	3.70	Serious	High Severity
3.	Difficulty competing with established logistics companies on scale and resources.	4.05	Serious	High Severity
	Over-all Mean	3.83	Serious	High Severity

The Regulatory Compliance and Market Competition domain registered the second-highest severity of the five domains, driven primarily by the market competition sub-challenge, item 5.3 (difficulty competing with established logistics companies). This pattern — where competitive pressure is rated more severely than regulatory compliance — is consistent with Tsang's (2024) analysis suggesting that Philippine logistics start-ups view established incumbents as more immediately threatening than regulatory bodies, which, while burdensome, are seen as navigable through systematic compliance investment. Chinnaswamy's (2022) observation that regulatory frameworks lag technological change is particularly salient in the context of the Internet Transactions Act of 2023 — a relatively new legislative instrument that adds digital commerce compliance requirements to an already complex regulatory environment. The comparatively lower rating for regulatory uncertainty (Item 5.2) relative to competitive difficulty (Item 5.3) suggests respondents view market competition as a more dynamic and less controllable challenge than the regulatory environment — consistent with the locus-of-control attribution patterns observed in entrepreneurship research (Hisrich, Peters, & Shepherd, 2010). The strategic implication is that competitive differentiation — rather than regulatory avoidance — is the more tractable intervention for this domain.

Research Question 2: What is the relationship and compounding dynamics among the organizational challenge domains?

Table 6. Compounding Dynamics Among the Organizational Challenges Domain

	Indicators	Mean	Verbal Description	Interpretation
1.	Access to Capital and Funding	3.78	Serious	High Severity
2.	Technological Adoption and Digital Infrastructure	3.75	Serious	High Severity
3.	Cybersecurity Threats and Data Privacy	3.63	Serious	High Severity
4.	Talent Acquisition and Retention	4.05	Serious	High Severity
5.	Regulatory Compliance and Market Competition	3.83	Serious	High Severity
	Over-all Mean	3.81	Serious	High Severity

Table 6 consolidates the weighted means across all five organizational challenges. This aggregate figure, however, cannot be adequately interpreted based solely on the ratings of the individual challenge domains shown above. The compounding dynamics between domains produce system-level effects that amplify the aggregate challenge beyond the arithmetic mean of its components. Specifically: capital constraints directly limit investment in technology, cybersecurity, and talent development; technology gaps reduce operational efficiency and competitive differentiation; cybersecurity deficiencies create reputational and operational risks that undermine client confidence; talent shortfalls reduce compliance capacity and service quality; and competitive pressure creates urgency around the very investments that resource constraints make difficult to fund. This systemic dynamic is consistent with Nambisan's (2017) theoretical framework of digital entrepreneurship, which posits that digital-era ventures face interdependent challenges across all operational dimensions simultaneously. The implication is that incremental, domain-by-domain responses will be insufficient: only a systems-oriented strategic response that addresses the most leveraged intervention points — capital access and talent strategy — will create the resource conditions needed to address secondary domains. Capital access emerges as the most leveraged intervention not because it is the highest-rated domain, but because resolving it unlocks the resources needed to address technology, cybersecurity, and talent challenges concurrently — breaking the compounding cycle at its source.

Ethical Considerations

This study adhered to established ethical principles throughout the research process to safeguard the dignity and rights of all participants. Ethical clearance was obtained from the University of Luzon Research Ethics Committee prior to data collection, after which informed consent was secured from all respondents, who received clear information about the study's purpose, the nature of their participation, and their right to voluntarily participate or withdraw at any stage without penalty. Confidentiality and anonymity were maintained by ensuring that personal identifiers and sensitive organizational information remained protected and were used solely for academic purposes. All collected data, including survey responses and interview transcripts, were securely stored and accessed only by the researcher. The study further ensured that participants faced no physical, psychological, or professional risks from their involvement, while the researcher-maintained objectivity, integrity, and transparency in collecting, analyzing, and interpreting data to minimize bias and uphold the credibility and reliability of the findings.

Conclusion

This study concluded that a start-up integrated logistics company in Pasig City, Philippines faces serious and interconnected digital-era challenges requiring an integrated strategic response. Among the five challenge domains, Talent Acquisition and Retention emerged as the most critical, while Access to Capital and Funding remained a key enabler influencing investments in technology, cybersecurity, and workforce development. The relatively lower cybersecurity rating may reflect limited awareness rather than lower actual risk. The findings demonstrate that weaknesses across the five domains reinforce one another, highlighting the need for coordinated rather than isolated interventions. The study contributes to the literature by providing a systems-level analysis of these interconnected challenges within a Philippine logistics start-up and offers practical guidance for managers and policymakers in prioritizing strategic actions and resource allocation. Future research should validate and extend these findings through multi-case and cross-sectoral comparisons, longitudinal studies tracking how challenges evolve over time, quantitative modeling such as structural equation modeling to test the interrelationships among the five domains, incorporation of objective financial performance metrics alongside perception-based

assessments, examination of the gap between perceived and actual cybersecurity risks, and inclusion of the perspectives of external stakeholders such as clients, regulators, and investors.

Recommendations

Based on the findings, discussion, and conclusions, several evidence-based recommendations are proposed to strengthen the organization's financial sustainability, technological readiness, cybersecurity, human-resource capacity, regulatory compliance, and competitive positioning. Regarding access to capital and funding, the organization should diversify its financing sources through revenue-based financing arrangements, strategic investor partnerships, and government MSME support programs, including DTI grants and SBCorp financing schemes, while reducing dependence on founder equity. Establishing a formal financial track record through audited financial statements and documented client contracts is also recommended to improve bankability and eligibility for institutional financing as operations mature. In addition, adopting asset-light operational models, such as third-party warehouse partnerships and contracted fleet arrangements, may reduce capital intensity while maintaining service coverage and allowing greater investment in technology and talent. For technological adoption and digital infrastructure, the organization should implement a phased technology roadmap that initially prioritizes subscription-based cloud transportation management systems (TMS) and warehouse management systems (WMS), while deferring capital-intensive platforms until adequate funding is secured. The organization should also explore government digitalization support programs under the DTI MSME Digitalization Plan and establish offline-capable operational protocols for secondary delivery areas with limited connectivity to ensure continuity of service. With respect to cybersecurity and data privacy, immediate implementation of foundational cybersecurity measures, including data encryption, multi-factor authentication, access controls, and an incident response plan, is recommended. The organization should likewise strengthen compliance with the Data Privacy Act of 2012 by appropriately registering applicable data-processing systems with the National Privacy Commission and developing a formal Privacy Management Program, while integrating cybersecurity awareness into regular employee training to address human-factor vulnerabilities. For talent acquisition and retention, the organization should develop a differentiated employee value proposition emphasizing organizational culture, career development, meaningful work, and flexible working arrangements. Structured internship and graduate training programs in partnership with Philippine universities offering logistics, business administration, and related programs should also be established to create a sustainable talent pipeline. Continuous employee development through cross-training, industry certifications, and supported continuing education should further be pursued to strengthen organizational capabilities and improve retention. Finally, regarding regulatory compliance and market competition, the organization should designate a compliance officer or formally assign compliance responsibilities to a qualified management team member to ensure systematic monitoring of regulatory requirements. Participation in relevant industry associations, such as the Customs Brokers Association of the Philippines and the Logistics Association of the Philippines, may provide access to regulatory intelligence, professional networks, and collective advocacy resources. To strengthen its competitive position, the organization should adopt a focused differentiation strategy by targeting specialized logistics niches, such as e-commerce last-mile delivery, cold-chain logistics, or hazardous-materials handling, rather than competing primarily on scale with larger and more established industry players. Collectively, these recommendations provide a practical framework for strengthening organizational resilience, improving operational efficiency, enhancing compliance and data security, developing human capital, and establishing a sustainable competitive advantage.

References

- Asian Development Bank. (2023). *How the Philippines is helping tech startups*. BIMP-EAGA Cooperation Initiative. <https://seads.adb.org/articles/how-philippines-helping-tech-startups>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. National Bureau of Economic Research.
- Binowo, K., & Hidayanto, A. N. (2023). Discovering success factors in the pioneering stage of a digital startup. *Organizacija*, 56(1), 3–17. <https://doi.org/10.2478/orga-2023-0001>
- Block, J. H., Brohman, K., & Steininger, D. M. (2020). Digital entrepreneurship: Opportunities, challenges, and impacts. *Business & Information Systems Engineering*, 63(1), 1–6. <https://doi.org/10.1007/s12599-020-00651-2>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- CB Insights. (2021). *The top 20 reasons startups fail*. <https://www.cbinsights.com/research/startup-failure-reasons-top/>

- CB Insights. (2024). 483 startup failure post-mortems. <https://www.cbinsights.com/research/startup-failure-post-mortem/>
- Chinnaswamy, B. (2022). Entrepreneurship: Opportunities and challenges in the digital era. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4217949>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Founders Forum Group. (2025). *The ultimate startup guide with statistics (2024–2025)*. <https://ff.co/startup-statistics-guide/>
- Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2010). *Entrepreneurship* (8th ed.). McGraw-Hill/Irwin.
- Intuit QuickBooks. (2024). *Entrepreneurship in 2024: Small business trends for the year ahead*. <https://quickbooks.intuit.com/r/small-business-data/entrepreneurship-in-2024/>
- Masongsong, A. C., Ulep, S. J., Abante, M. V., Cagang, M. L., & Vigonte, F. (2024). Digital transformation of international trade for SMEs in developing countries. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4740033>
- Mia, I. B. R., Habaradas, R. B., & Jimenez, S. V. (2023). Digital innovation and entrepreneurial success in the Philippine MSME sector. *Economics*, 11(2), 2267748. <https://doi.org/10.1080/23322039.2023.2267748>
- Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 41(6), 1029–1055. <https://doi.org/10.1111/etap.12254>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- San Juan, J. R. (2024, February 5). Kaspersky: PHL slides to Top 4 in global ranking of nations most targeted by online threats in '23. *BusinessMirror*. <https://businessmirror.com.ph/2024/02/06/kaspersky-phl-slides-to-top-4-in-global-ranking-of-nations-most-targeted-by-online-threats-in-23/>
- Sorenson, O., Dahl, M. S., Canales, R., & Burton, M. D. (2021). Do startup employees earn more in the long run? *Organization Science*, 32(3), 587–604. <https://doi.org/10.1287/orsc.2020.1371>
- Tech for Good Institute. (2024). *Strengthening the Philippine digital innovation ecosystem*. <https://techforgoodinstitute.org>
- 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>
- Tsang, A. (2024). The challenges and opportunities of the Philippines' economic digitalization. ASEAN+3 Macroeconomic Research Office. <https://amro-asia.org/the-challenges-and-opportunities-of-the-philippines-economic-digitalization>
- University of the Philippines Institute for Small-Scale Industries. (2024). *Empowering Philippine MSMEs through digital transformation*. <https://beta.entrepreneurship.org.ph>
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). SAGE Publications.