



A Study on the Operational and Documentation Challenges Faced by Freight Forwarders in India: A Quantitative Investigation of an Integrated Failure Architecture

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Abstract – Freight forwarding is the backbone of India’s international trade ecosystem. Despite the National Logistics Policy 2022 and PM GatiShakti framework establishing ambitious modernisation targets, the sector continues to exhibit persistent documentation inaccuracies, coordination failures, and workforce capability deficits that inflate shipment cycle times and expose shippers to regulatory risk. This study investigates the nature, frequency, and statistical interdependencies of operational and documentation challenges across four functional domains — Transportation, Documentation, Field Operations, and Core Competencies at iSpeed Freight India Private Limited, Chennai. A structured questionnaire was administered to 70 freight forwarding professionals across different departments during February–March 2026. Data were analysed using IBM SPSS Statistics. CHA coordination inefficiencies, cargo damage or mishandling, and non-availability of transport emerge as the highest- prevalence challenges. The study delivers statistically grounded evidence base and an actionable improvement framework for logistics managers and policymakers.



1. INTRODUCTION

The freight forwarding industry performs a pivotal intermediary function within the global trade logistics ecosystem, orchestrating the movement of goods across transport modes, regulatory jurisdictions, and organisational boundaries on behalf of shippers. A freight forwarder does not physically transport cargo; rather, it coordinates carrier selection, documentation preparation, customs clearance management, and stakeholder communication across the entire shipment lifecycle. In contemporary practice, this orchestration role has expanded substantially to encompass supply chain consulting, warehousing, insurance arrangement, and data management, transforming freight forwarders from transactional intermediaries into strategic logistics solution providers. India's freight forwarding industry, valued at approximately USD 250 billion with an estimated compound annual growth rate of 8–10%, operates at the intersection of accelerating trade volume growth, ambitious policy-level infrastructure investment, and persistent structural inefficiencies. The National Logistics Policy and the PM GatiShakti National Master Plan articulate a governmental ambition to reduce India's logistics cost-to-GDP ratio from approximately 13–14% to globally competitive benchmarks of 8–10%. Despite the sector's strategic importance, academic research quantitatively mapping the operational challenge landscape of Indian freight forwarding is limited. Existing studies have examined service quality dimensions, regional port logistics, and challenge profiles at specific trade gateways, but multi-domain investigations employing inferential statistical methods to identify challenge interdependencies remain rare. This gap is consequential: freight forwarding operational failures impose measurable costs not only on forwarders but on the entire export–import ecosystem they serve, including missed delivery commitments, letter-of-credit discrepancies, demurrage charges, and customs penalty exposure. The study addresses this gap through a structured, quantitative empirical investigation conducted at iSpeed Freight. The study's analytical architecture combining frequency distributions, one-way ANOVA, Pearson correlation, and chi-square tests across four functional domains and 70 respondents enables both a prevalence mapping of individual challenges and a statistical characterisation of their cross-domain interdependencies.

2. LITERATURE REVIEW

The freight forwarding industry has been extensively studied, with Murphy et al. (1989) establishing that administrative documentation is the leading cause of operational delay. Özsoy et al. (1993) and Murphy & Daley (1996) noted the strategic shift from transactional vendors to integrated supply chain partners offering customs, IT, and warehousing services. Wang et al. (2004) and Krajewska & Kopfer (2006) demonstrated that collaborative and unified transport planning can reduce costs by 12–23%. From a service quality perspective, Kokkinis et al. (2006) and Subhashini & Preetha (2018) confirmed that reliability and responsiveness outweigh price as customer priorities. Cheng & Yeh (2007) identified customs knowledge, network quality, and technology adoption as core competitive competencies, while Puettmann & Stadler (2010) showed that information asymmetry among logistics stakeholders drives significant cost inefficiencies. Nayak (2016) highlighted that e-AWB adoption can cut document processing time by over 60%, and Anggorowati (2017) argued that service innovation is more sustainable than cost competition against digital platforms. Indian-specific studies by Vasantha & Meena (2019) and Sivakumar et al. (2020) identified regulatory complexity, customs delays, limited digitisation, and infrastructure gaps as persistent barriers, particularly in secondary port regions like Tuticorin. These studies reveal that operational and documentation failures in freight forwarding form an interconnected system of workforce, digital, and governance deficiencies that reinforce one another.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study adopts a descriptive research design to systematically portray the operational and documentation challenges faced by freight forwarders using a structured questionnaire as the primary data collection instrument. The design is cross-sectional in nature, capturing a snapshot of challenges at a single point in time, and incorporates elements of analytical research through statistical tools such as Pearson correlation, chi-square tests, and one-way ANOVA to explore relationships between variables. A quantitative approach forms the primary mode of inquiry, supplemented by secondary qualitative data drawn from existing literature, industry reports, and published research to provide contextual depth. This combination of descriptive and analytical orientations ensures that the findings are both empirically grounded and actionable for management decision-making.



3.2 Sources of Data

The study draws on both primary and secondary data to ensure empirical rigor and contextual depth. Primary data were collected through a structured, close-ended questionnaire administered to employees of iSpeed Freight, covering operational challenges across transportation, documentation, field operations, and core competencies. Secondary data was sourced from published academic journals, FIATA industry reports, government policy documents, and company records to provide theoretical grounding, contextual benchmarks, and support for hypothesis formulation. Together, these complementary data sources ensure that the findings are both empirically grounded in organizational reality and situated within the broader freight forwarding research discourse.

3.3 Sampling and Population

The study population comprised all employees at iSpeed Freight at the time of the study, distributed across four departments: Air Import, Air Export, Sea Export, and Sea Import. Simple random sampling was employed, providing each employee an equal and independent probability of selection and minimising selection bias. The total study population comprised 80 employees, of whom 70 returned valid responses, yielding a response rate of 87.5%. The sample size of 70 satisfies the minimum requirements for one-way ANOVA (recommended $n > 20$ per group), Pearson correlation (recommended $n \geq 50$ for moderate effect sizes at $\alpha = 0.05$), and chi-square tests.

3.4 Analytical Framework

All quantitative analyses were performed using IBM SPSS Statistics. Four analytical methods were employed: frequency analysis and descriptive statistics for all categorical and Likert-scale variables; one-way ANOVA to test whether mean frequency scores differ significantly across items within each operational domain and whether improvement priority scores differ across service verticals; Pearson correlation for all 171 pairwise combinations of the 19 Likert-scale items, tested two-tailed at $\alpha = 0.05$; and chi-square goodness-of-fit tests to evaluate distributional equality across challenge categories.

4. DATA ANALYSIS AND RESULTS

4.1 Socio-Demographic Profile of Respondents

Table 4.1: Socio-Demographic and Professional Profile of Respondents across four variables

Variable	Category	Frequency (n)	Percentage (%)	Cumulative (%)
Gender	Male	32	45.7	45.7
	Female	30	42.9	88.6
	Others/Prefer Not to Say	8	11.4	100.0
Age Group	Below 25	9	12.9	12.9
	25–34	46	65.7	78.6
	35–44	11	15.7	94.3
	45 and above	4	5.7	100.0
Work Experience	Less Than 1 Year	3	4.3	4.3
	1–3 Years	28	40.0	44.3
	3–5 Years	21	30.0	74.3
	More Than 5 Years	18	25.7	100.0
Department	Air Import	19	27.1	27.1
	Air Export	19	27.1	54.3
	Sea Export	17	24.3	78.6
	Sea Import	15	21.4	100.0

The gender distribution is near-equal (Male: 45.7%; Female: 42.9%), representing a notable departure from the historically male-dominated composition of the Indian logistics sector and signalling progressive workforce diversification. The workforce is decisively youthful: 78.6% of respondents are below 35 years of age, with 65.7% in



the 25–34 bracket. Work experience is concentrated in the early-

to-mid career range, with 40.0% reporting 1–3 years' experience and only 25.7% reporting more than five years. The combined air freight department representation (54.3%) is consistent with the organisation's operational profile, where air cargo services constitute the primary revenue segment. The broadly equitable departmental distribution lends cross-functional validity to the findings.

4.2 Operational Challenge Prevalence by Domain

Table 4.2: Operational Challenge Prevalence — All Four Functional Domains

Domain	Challenge	Count	Prevalence (%)
Transportation	CHA Coordination Inefficiencies	45	64.3
	Non-Availability of Transport	40	57.1
	Driver Shortages	39	55.7
	Delay in Delivery Order Issuance	26	37.1
	Port Congestion / Terminal Delays	23	32.9
Documentation	Incorrect AWB / Bill of Lading Details	39	55.7
	Port of Loading / Origin Mismatch	36	51.4
	Incomplete or Missing Documents	32	45.7
	Errors in Invoice / Packing List	31	44.3
	Incorrect Flight / Vessel Details	30	42.9
Field Operations	Cargo Damage or Mishandling	42	60.0
	Customs Clearance Delays	37	52.9
	SL / EL Cargo Discrepancies	37	52.9
	Incorrect Cargo Dimensions Declared	33	47.1
	Gross Weight Mismatch	30	42.9
Core Competencies	Lack of Awareness of Industry Trends	38	54.3
	Inadequate Employee Training	37	52.9
	Poor Adoption of Digital Systems	36	51.4
	Lack of Performance Evaluation Systems	35	50.0
	Limited Innovation / Process Improvement	28	40.0

CHA coordination inefficiencies outpace physical resource constraints, indicating that the regulatory coordination interface constitutes the primary bottleneck rather than vehicle or driver availability. All 5 documentation challenge types exceed 40% prevalence, establishing documentation failure as a near- universal rather than episodic operational feature. Four core competency challenges exceed the 50% majority-prevalence threshold — a finding that elevates these from departmental HR concerns to organisation-wide, structural governance signals.

4.3 Frequency of Problem Occurrence: Consolidated Ranking

Table 4.3 presents the consolidated ranking of all 19 Likert-scale frequency items by mean score, providing a severity-ordered view of the full challenge landscape. Scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always.

Table 4.3: Consolidated Mean Score Ranking of All 19 Operational Frequency Items

Rank	Challenge Item	Domain	Mean	Std Dev	Mode
1	Delay in DO Issuance	Transportation	3.74	0.958	Often
2	Incomplete / Missing Documents	Documentation	3.59	1.014	Often
3	Customs Clearance Delays	Field Operations	3.54	1.017	Often
4	Errors in Invoice / Packing List	Documentation	3.50	1.060	Sometimes
5	Port Congestion / Terminal Delays	Transportation	3.47	0.989	Often
6	Incorrect AWB / BL Details	Documentation	3.44	1.044	Sometimes
7	Difficulty in Tracking Cargo	Core Competencies	3.40	0.939	Often



8	Freight Rate Fluctuations	Core Competencies	3.36	1.143	Often
9	CHA Coordination Inefficiencies	Transportation	3.34	1.128	Often
10	Non-Availability of Transport	Transportation	3.29	0.935	Sometimes
11	Inadequate Employee Training	Core Competencies	3.10	0.965	Sometimes
12	Incorrect Flight / Vessel Details	Documentation	3.07	1.012	Sometimes
13	Cargo Damage or Mishandling	Field Operations	3.06	1.115	Sometimes
14	Gross Weight Mismatch	Field Operations	3.03	1.076	Sometimes
15	SL / EL Cargo Discrepancies	Field Operations	3.01	1.110	Sometimes
16	Port of Loading / Origin Mismatch	Documentation	2.89	0.986	Sometimes
17	Incorrect Cargo Dimensions	Field Operations	2.89	1.097	Sometimes
18	Lack of Perf. Evaluation Systems	Core Competencies	2.63	0.966	Sometimes
19	Driver Shortages	Transportation	2.60	1.027	Sometimes

The top three items — Delay in DO Issuance, Incomplete/Missing Documents, and Customs Clearance Delays carry modal frequencies of ‘Often,’ confirming near-routine rather than episodic occurrence. Seven items achieve High Frequency status, forming a persistent challenge tier demanding priority management attention. Standard deviations are notably higher for Freight Rate Fluctuations and Cargo Damage, reflecting significant respondent variability attributable to differences in cargo type, handling agent quality, and trade lane exposure across the sample. Items at the lower frequency tier — driver shortages and performance evaluation gaps retain high operational significance despite lower average frequency due to the disproportionate downstream consequences they generate when they occur.

4.4 External / Macro-Level Challenges

Table 4.4: External / Macro-Level Challenges: Frequency and Chi-Square Test

External Challenge	Observed (n)	Prevalence (%)	Expected (n)	Residual
Flight / Vessel Delays	49	70.0	45.4	+3.6
Container Shortages	48	68.6	45.4	+2.6
Regulatory Changes / Compliance Requirements	44	62.9	45.4	-1.4
Volatile Freight Rates	44	62.9	45.4	-1.4
Labour Shortages	42	60.0	45.4	-3.4
Total	227	64.9 (avg.)	227.0	—

Chi-Square Test: $\chi^2(4) = 0.775$, $p = 0.942$ (H_0 retained: frequencies are equally distributed across all five challenge types at $\alpha = 0.05$).

External challenges are reported at uniformly high frequencies, with no statistically significant differences in their distributional pattern across the five types. This finding confirms that freight forwarders simultaneously face a multi-front portfolio of external disruptions with equal frequency, rather than being dominated by any single macro-environmental variable. The implication for business resilience planning is that contingency frameworks must address all five disruption categories simultaneously, as concentrating preparedness resources on any single external variable will leave the organisation exposed to equally probable disruptions in other dimensions.



4.5 Air Cargo-Specific Challenge Severity

Table 4.5: Severity Assessment of Air Cargo Operational Challenges

Rank	Air Cargo Challenge	Mean (/5)	Std. Dev.	Severity Level
1	Lack of Skilled Manpower	3.95	0.846	High
2	Inadequate Use of Technology	3.75	1.104	High
3	Lack of Dedicated Terminal Space	3.48	1.261	Moderate–High
4	Inefficiency of Ground Handling Agent	3.40	1.336	Moderate
5	Delay in Documentation and Customs	3.08	1.474	Moderate

Lack of skilled manpower is the highest-severity air cargo challenge within this domain, indicating strong respondent consensus. The convergence of this finding with the core competency domain's simultaneous majority-prevalence exceedances confirms that talent development is the single most strategically important improvement opportunity across all levels of analysis. Inadequate technology use reflects the sector's transition challenge at the intersection of legacy practices and digital logistics platforms. The highest standard deviation is recorded for documentation and customs delays, reflecting the widest variability in respondent experience likely attributable to differences in cargo types, trade lanes, and the AEO certification status of clients managed by different respondents.

5. HYPOTHESIS TESTING RESULTS

Table 5.1: Consolidated Hypothesis Testing Results Summary

No.	Hypothesis (H ₀)	Test	Statistic	p-Value	Decision
HT1	No sig. frequency diff. within Transportation domain	One-Way ANOVA	F = 12.308	< 0.001	Reject H ₀
HT2	No sig. frequency diff. within Documentation domain	One-Way ANOVA	F = 6.111	< 0.001	Reject H ₀
HT3	No sig. frequency diff. within Field Operations domain	One-Way ANOVA	F = 3.817	0.005	Reject H ₀
HT4	No sig. frequency diff. within Core Competencies domain	One-Way ANOVA	F = 8.675	< 0.001	Reject H ₀
HT5	No sig. diff. in priority across 4 service verticals	One-Way ANOVA	F = 0.108	0.955	Retain H ₀
HT6	External challenges are equally distributed	Chi-Square	$\chi^2(4) = 0.775$	0.942	Retain H ₀
HT7	No sig. rel. between wrong flight details and invoice errors	Pearson r	r = 0.358	0.002	Reject H ₀
HT8	No sig. rel. between POL mismatch and AWB/BL errors	Pearson r	r = 0.331	0.005	Reject H ₀
HT9	No sig. rel. between perf. eval. gaps and training inadequacy	Pearson r	r = 0.305	0.010	Reject H ₀
HT10	No sig. rel. between DO delays and cargo tracking difficulties	Pearson r	r = 0.293	0.014	Reject H ₀
HT11	No sig. rel. between training adequacy and CHA inefficiencies	Pearson r	r = -0.245	0.041	Reject H ₀

Nine of the eleven hypothesis tests result in rejection of the null hypothesis, confirming significant patterns of differentiation within domains, cross-domain interdependencies, and domain-specific chi-square non-equality. The two retained null hypotheses — HT5 and HT6 are strategically significant in their own right: HT5 establishes a resource allocation directive for balanced cross-vertical improvement investment, and HT6 establishes that the external macro-challenge landscape is uniformly disruptive, requiring multi-front resilience planning. The negative correlation in HT11 is particularly theoretically significant: it provides direct empirical evidence that training



investment reduces not only internal error rates but also the operational impact of external partner failures, establishing workforce development as a buffer mechanism against CHA dependency.

6. KEY FINDINGS

Table 6.1: Summary of Key Findings

Finding	Description	Supporting Evidence
F1: Integrated Failure Architecture	Operational challenges are not isolated departmental problems but form an interconnected failure system with cross-domain propagation pathways	Pearson correlations and one-way ANOVA tests.
F2: Documentation as Primary Bottleneck	All 5 document types exhibit majority-prevalence challenge rates; documentation errors are the highest-frequency tier of problems	Items 2, 4, 6, 12 in Top-19 ranking; documentation challenges $M > 2.89$
F3: Core Competency Structural Deficit	All 4 core competency challenges simultaneously exceed 50% majority-prevalence threshold — a structural governance signal	Prevalence: Tech awareness 54.3%, Training 52.9%, Digital adoption 51.4%, Perf. eval. 50.0%
F4: CHA Dominance in Transportation	CHA coordination outpaces physical constraints as the primary transportation challenge; trainable buffer exists	HT11: $r = -0.245$ (neg. corr. between training and CHA inefficiency)
F5: Balanced Vertical Priorities	Employees assign statistically equal improvement priority to all 4 service verticals	HT5: $F = 0.108$, $p = 0.955$; mean range 3.49–3.59 across all 4 verticals
F6: Multi-Front External Disruption	5 macro-environmental challenges are reported at statistically equal frequency (60–70% each)	HT6: $\chi^2(4) = 0.775$, $p = 0.942$; no single external factor dominates

7. DISCUSSION

The findings of this study establish that operational and documentation challenges in freight forwarding are not isolated departmental failures but constitute an integrated failure architecture, a system of interdependent, cross-domain failures with identifiable propagation pathways. The correlation between DO issuance delays and cargo tracking difficulties, between invoice/packing list errors and SL/EL cargo discrepancies, and the negative correlation between training adequacy and CHA inefficiencies collectively confirm that documentation weaknesses at the preparation stage cascade into field-level crises, while internal workforce capability gaps amplify external partner failures. Documentation challenge frequencies recorded in this study suggest that the problem has intensified despite advances in digital infrastructure implying that technology availability alone is insufficient without the organisational capability to operationalise it. In the context of India's National Logistics Policy 2022 and PM GatiShakti framework, the simultaneous exceedance of majority-prevalence thresholds by all four core competency challenges indicates that a significant proportion of Indian freight forwarding enterprises lack the internal development infrastructure needed to capitalise on policy-driven logistics improvements, underscoring the need for industry association-led capacity building aligned with IATA and FIATA certification standards. From a service quality and customer retention perspective, each reduction in documentation error rates and improvement in customs clearance cycle time represents a direct competitive advantage, as digital freight platforms increasingly make rate comparisons transparent and firms competing solely on price risk long-term attrition. Furthermore, the regulatory and compliance risk is significant with 45.7% of respondents reporting incomplete documents and 44.3% reporting invoice/packing list errors as recurring challenges, a material proportion of the shipment portfolio is routinely exposed to customs penalties under the Customs Act, 1962, while India's CBIC Risk-Based Examination system creates a self-reinforcing compliance liability for organisations with accumulated documentation error histories.



8. RECOMMENDATIONS

The following 18 recommendations are organised across five thematic categories and are grounded directly in the study's empirical findings. Each recommendation is accompanied by its specific evidential rationale to maintain the analytical discipline of connecting intervention to evidence.

Table 8.1: Consolidated Evidence-Based Recommendations

No.	Category	Recommendation	Empirical Rationale
R1	Operational Process	Formalise written SLAs with all CHA partners specifying maximum response windows for shipping bill filing, query resolution, and OOC issuance; quarterly performance scorecards with volume reallocation triggers	CHA inefficiencies cited by 64.3%; HT11 ($r=-0.245$) confirms training partially buffers CHA failures
R2	Operational Process	Build a layered transport vendor ecosystem: primary pool of pre-empanelled operators with committed capacity, secondary digital aggregator platform access, pre-negotiated emergency rate cards	Transport non-availability (57.1%) and driver shortages (55.7%); driver-weight mismatch correlation ($r=0.273$)
R3	Operational Process	Implement mandatory two-stage pre-submission documentation audit: system-based completeness validation and senior officer cross-verification of HS code, gross weight, consignee, and POL before submission	Documentation failures near-universal; multiple clustering correlations confirm errors co-propagate across doc types
R4	Operational Process	Deploy standardised cargo acceptance checklists: calibrated weighbridge, piece-count vs packing list, dimensional measurement, photographic documentation and link to the shipment file	Gross weight mismatches, incorrect dimensions, SL/EL discrepancies in mid-frequency tier; driver-weight corr.
R5	Documentation & Compliance	Implement integrated Freight Management Software (CargoWise / Magaya) with auto-population of AWB, BL, and customs documents from a single pre-validated master data source	Missing docs ($M=3.59$) and incorrect AWB/BL ($M=3.44$) are top-2 documentation items; manual transcription is primary error mechanism
R6	Documentation & Compliance	Integrate airline cargo portal and ocean carrier booking system APIs to auto-populate flight/vessel schedules and routing data directly into AWBs and BLs at booking confirmation	Wrong flight/vessel details – invoice/PL correlation ($r=0.358$, strongest in study); live API eliminates manual entry error pathway
R7	Documentation & Compliance	Develop commodity-specific documentation requirement matrices: searchable database mapping HS code range, destination, mode, and Incoterms to mandatory documents, fields, regulations, and validity windows	High prevalence of missing documents (45.7%) reflects knowledge failure not just procedural lapse
R8	Documentation & Compliance	Conduct semi-annual documentation awareness workshops for key exporting / importing clients covering mandatory requirements, common error types and their consequences, and submission timelines	Material proportion of errors originate with shipper; educating shipper community reduces source document errors that propagate downstream



R9	Technology Adoption	Execute a phased 3-stage digital transformation roadmap: Stage 1 (0-6 mo.) – digitise document workflows and deploy FMS; Stage 2 (6-18 mo.) – integrate carrier and customs APIs; Stage 3 (18-36 mo.) – customer portals, analytics dashboards	Poor digital adoption (51.4%) is not a tool availability problem but an adoption culture challenge requiring phased change management
R10	Technology Adoption	Subscribe to a multi-carrier real-time cargo visibility platform aggregating tracking data from air carriers, ocean lines, and surface transport into a unified dashboard with customer self-service portal	Cargo tracking difficulties (M=3.40); DO delay-tracking difficulty correlation (HT10: r=0.293)
R11	Technology Adoption	Achieve full EDI, e-AWB, and e-BL compliance: EDI connectivity with ICEGATE; IATA e-AWB as standard for air freight; pilot e-BL platforms for sea freight on major trade lanes	Customs clearance delays (M=3.54) driven partly by manual submission; EDI pre-arrival filing initiates processing before cargo arrives
R12	Workforce Development	Design role-specific training matrices for every operational function specifying mandatory knowledge modules, certification milestones, and proficiency assessments at 3, 6, and 12 months; link to performance appraisal	Training inadequacy-perf. eval. co-dependence (HT9: r=0.305); both must be designed simultaneously
R13	Workforce Development	Partner with IATA, FIATA and NSDC / PMKVY for subsidised access to industry certification programmes covering DGR, customs compliance, digital platforms, and trade documentation	Technology awareness gap (54.3%) and training inadequacy (52.9%) indicate training model has not kept pace with industry evolution
R14	Workforce Development	Implement KPI-driven quarterly performance evaluation framework: documentation error rate (target: <2% per 100 shipments), on-time shipment rate, customs clearance cycle time, cargo damage rate, client satisfaction scores; link appraisal to targeted training	Absent perf. eval. (50.0%) correlates with POL errors (r=0.274), AWB/BL errors (r=0.266), and training gaps (r=0.305) simultaneously



R15	Workforce Development	Establish a centralised internal knowledge management repository: searchable database of country documentation guides, HS code decision trees, carrier-specific standards, customs regulation updates, and past failure case studies	78.6% of workforce under 35 with <3 years' experience; formal training alone cannot close the real-time knowledge gap for complex edge cases
R16	Risk Management	Develop a multi-scenario contingency planning framework documenting response protocol for all 5 external challenge categories: flight/vessel delays, container shortages, regulatory changes, freight rate spikes, and labour disruptions	HT6: $\chi^2(4)=0.775$, $p=0.942$ — all 5 external challenges equally probable; no single variable can be the sole contingency focus
R17	Risk Management	Develop in-house expertise in AEO application preparation and proactively assist top 15–20% of export clients by volume in obtaining AEO status for priority customs processing and reduced examination rates	Customs clearance delays experienced by 52.9% (prevalence) and $M=3.54$; AEO provides institutionalised pathway to priority treatment
R18	Risk Management	Implement a systematic cargo damage prevention programme: photographic documentation at intake/delivery, equipment maintenance schedules, temperature/humidity monitoring for sensitive goods, mandatory root cause analysis for every damage incident	Cargo damage is highest-prevalence field operations challenge (60.0%); multiple SLA and insurance cost implications confirmed by field observations

9. CONCLUSION

This study makes three principal contributions to the freight forwarding literature: a statistically grounded, multi-domain mapping of operational and documentation challenge prevalence in the Indian context; an empirically established interdependency structure demonstrating that these challenges constitute an integrated failure architecture rather than isolated departmental problems; and an 18-point recommendation framework in which each intervention is explicitly linked to the statistical findings that identify its target failure mechanism. The most fundamental strategic implication is that operational excellence in freight forwarding is a people-and-process problem — the simultaneous exceedance of majority-prevalence thresholds by all four core competency challenges signals that organisational investment in training systems, performance management, and digital platforms has not kept pace with commercial growth, creating a strategic risk that no amount of revenue expansion can offset. The non-significant priority ANOVA confirms that improvement investment must be distributed equitably across all four service verticals — air import, air export, sea import, and sea export rather than concentrated on any single operational line. The solutions required are digital documentation workflows, API-based carrier integrations, IATA/FIATA-aligned training programmes, KPI-based performance evaluation, and structured knowledge management systems. The study elevates these from intuitive best practices to empirically necessitated interventions — responses to quantified and interconnected operational failures. In the broader context of India's National Logistics Policy 2022, building this internal operational capability infrastructure is not merely a competitive imperative for individual freight forwarding enterprises but a systemic precondition for the national logistics cost reduction the policy framework targets, as government infrastructure investment creates only the enabling environment while freight forwarding operational excellence is the mechanism through which that environment translates into actual trade performance improvement.



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