



A STUDY ON ANTICIPATED CHALLENGES FACED BY STARTUPS IN PEARL TRANSPORTATION

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Abstract - This project explores the key challenges faced by startups in transporting pearls from Vietnam to India, focusing on air logistics, cost management, and regulatory hurdles. High freight costs, unreliable cargo partners, and customs delays were identified as major issues. Primary and secondary data revealed that experience levels do not significantly reduce these challenges. The study recommends streamlining customs procedures, using advanced tracking systems, and collaborating with established logistics firms. These strategies can help startups improve supply chain efficiency and ensure smoother operations in the pearl import trade.

Keywords: Artificial Intelligence, HR Processes, Recruitment, Performance Management, Job Satisfaction, Trust in AI, Employee Experience.

1. INTRODUCTION

This study explores the key challenges faced by startups involved in the pearl trade between Vietnam and India, focusing on air transport logistics. It highlights how factors such as high freight costs, unstable pricing, and limited cargo space affect the timely and safe delivery of delicate pearls. The research also examines difficulties in building strong partnerships with logistics providers, managing customs compliance, and ensuring inventory stability. While air freight offers speed and safety, it creates financial and operational pressure for startups unfamiliar with global trade practices. The study emphasizes the need for strategic solutions like advanced tracking technologies, partnerships with specialized 3PLs, and peer collaboration for bulk shipping. With the right government support and mentorship, these startups can overcome obstacles, reduce supply chain inefficiencies, and improve their competitive advantage in the growing Indian pearl market.

1.1 Objectives of the Study

Primary Objective:

To analyse key challenges faced by startups in transporting pearls from Vietnam to India, focusing on logistics, costs, and regulations.

Secondary Objectives:

- To analyze the logistical challenges faced in air transport of pearls, including customs clearance delays, handling risks, airline cargo restrictions, and variability in transit times.
- To assess the impact of air transport costs including freight charges, duties, and compliance expenses on startup operations and pricing strategies.

1.2. RESEARCH METHODOLOGY

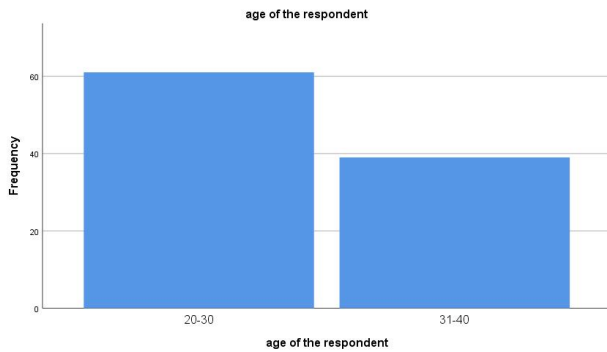
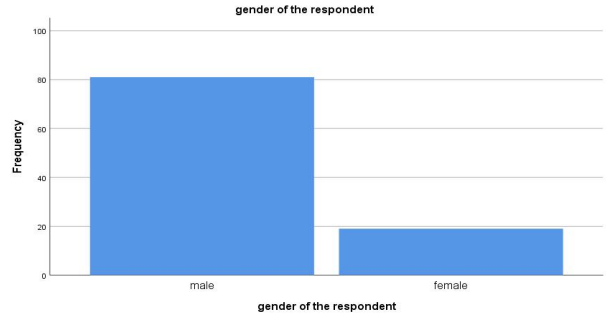
This study uses a descriptive research design with quantitative methods to analyse challenges faced by startups in transporting pearls from Vietnam to India, focusing on logistics, cost, and regulatory issues. A random sampling method was used to select 100 respondents, mainly startups and small business owners in the pearl trade, ensuring unbiased data. Primary data was collected through questionnaires, while secondary data came from online sources, company websites, and research articles. Data analysis tools include the Chi-Square test to examine relationships between variables, percentage analysis to interpret response distributions, and correlation analysis to identify links between factors like transport costs and shipment size.

2. DATA ANALYSIS AND INTERPERTATION

2.1. PERCENTAGE ANALYSIS FOR AGE



age of the respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	61	61.0	61.0	61.0
	31-40	39	39.0	39.0	100.0
	Total	100	100.0	100.0	



INTERPRETATION :

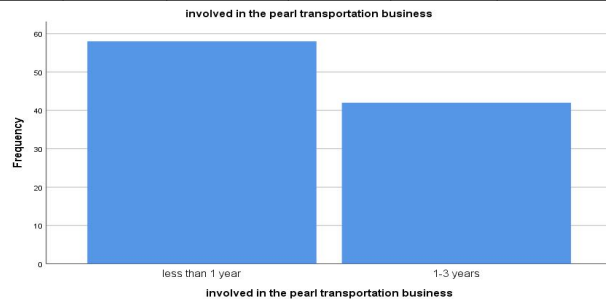
The age distribution reveals that 61% of respondents are between 20–30 years, while 39% fall in the 31–40 age group, indicating a younger majority in the study. This suggests that the pearl transportation business is attracting a new generation of entrepreneurs and professionals.

INTERPRETATION :

The gender distribution shows that 81% of respondents are male and 19% are female, indicating a male-dominated respondent group.

2.3 PERCENTAGE ANALYSIS PEARL TRANSPORT EXPERIENCE

involved in the pearl transportation business					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 year	58	58.0	58.0	58.0
	1-3 years	42	42.0	42.0	100.0
	Total	100	100.0	100.0	



gender of the respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	81	81.0	81.0	81.0
	female	19	19.0	19.0	100.0
	Total	100	100.0	100.0	

2.2 PERCENTAGE ANALYSIS FOR GENDER

INTERPRETATION :

Most individuals in the pearl transport business have less than one year of experience (58%), indicating a growing industry attracting many newcomers.

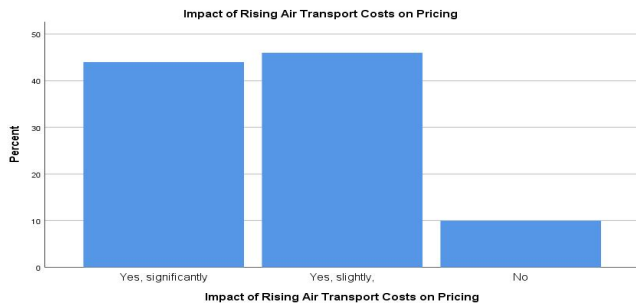
2.4 PERCENTAGE ANALYSIS OF THE IMPACT OF RISING AIR TRANSPORT COSTS ON PRODUCT PRICING

Impact of Rising Air Transport Costs on Pricing				
	Frequenc	Percent	Valid	Cumulative



		y	Percent	Percent
Valid	Yes, significantly	44	44.0	44.0
	Yes, slightly,	46	46.0	90.0
	No	10	10.0	100.0
	Total	100	100.0	

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.864 ^a	6	.181
Likelihood Ratio	9.065	6	.170
Linear-by-Linear Association	5.235	1	.022
N of Valid Cases	100		



INTERPRRETATION :

Rising air transport costs have affected the pricing strategies of 90% of pearl startups 44% significantly and 46% slightly while only 10% reported no impact, showing the widespread influence on the industry.

CHI-SQUARE TEST FOR EXPERIENCE VS SHIPPING CHALLENGES

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.798 ^a	4	.215
Likelihood Ratio	5.940	4	.204
Linear-by-Linear Association	2.218	1	.136
N of Valid Cases	100		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.30.

INFERENCE:

Since the p-value is 0.215, which is greater than 0.05, we fail to reject the null hypothesis, indicating that there is no significant relationship between years in pearl transport and the biggest challenge in air shipping

CHI-SQUARE TEST FOR BIGGEST OBSTACLE VS. PRICING IMPACT

INFERENCE:

There is no significant relationship between the biggest obstacle in air transport and the impact of rising air transport costs on pricing strategy

CHI-SQUARE TEST FOR FACTORS BEHIND HIGH AIR TRANSPORT COSTS VS. PRICING STRATEGY IMPACT

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.442 ^a	6	.207
Likelihood Ratio	10.002	6	.125
Linear-by-Linear Association	.489	1	.484
N of Valid Cases	100		

INFERENCE :

we fail to reject the null hypothesis, indicating that the main factor affecting air transport costs is not significantly associated with the impact on pricing strategy

CORRELATION ANALYSIS FOR EXPERIENCES AND AVERAGE SHIPMENT SIZE

Correlations			Experience in Pearl Transportation	Average Shipment Size in kg
Spearman's rho	Experience in Pearl Transportation	Correlation Coefficient	1.000	.072
		Sig. (1-tailed)		.238



	N	100	100
Average Shipment Size in kg	Correlation Coefficient	.072	1.000
	Sig. (1-tailed)	.238	.
	N	100	100

INFERENCE:

The results show no significant correlation, indicating experience does not impact shipment size.

3. CONCLUSIONS:

The study reveals that air transport costs play a significant role in shaping the pricing strategies of pearl businesses, particularly among startups and newer entrants to the market. While a large majority of respondents reported an impact on their pricing due to rising freight expenses, statistical analysis showed no strong correlation between experience levels, perceived challenges, and pricing decisions. This suggests that the pressures faced by startups are widespread and may be driven by multiple, interrelated factors beyond just experience or operational scale. The complexity of these challenges highlights the need for a more strategic approach in addressing them. Improvements in customs handling, effective cost management techniques, and targeted industry training can provide startups with the tools needed to better manage logistics, reduce financial strain, and enhance overall efficiency. By adopting these strategies, businesses can not only overcome current obstacles but also strengthen their position in the growing and competitive pearl import market.

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