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APPENDIX A: Demographic profile of experts

Respondents' Domain	S. No.	Experience (Year)	Qualification	Designation
Industry experts	1	11	MS	Senior manager
	2	9	MS	Project manager
	3	8	PhD	Analyst
Academician	4	11	Post Doc	Researcher
	5	11	Post Doc	Researcher
	6	15	PhD	Researcher
	7	10	PhD	Researcher

APPENDIX B: QUESTIONNAIRES

I. Questionnaire for Delphi Method:

Round 1:

Q1. Do blockchain technology take part in sustainable development of maritime freight logistics?

If yes, what are the primary factors that encourage the adoption of blockchain in the pursuit of sustainability in maritime freight enterprises?

In cases where blockchain adoption may not directly lead to sustainable development, what alternative steps and strategies can be applied to promote the sustainable growth of maritime freight enterprises?

Round 2:

Q1. Do the following parameters related to blockchain technology adoption lead to the sustainable development of maritime freight enterprises?

Sl. No.	Parameters	Yes/No	Sl. No.	Parameters	Yes/No
1	Support from Senior Management		12	Availability of technology-specific tools	
2	Proactive Information Sharing Willingness		13	Ease of testing and observation	
3	Availability of training facilities for sustainability and blockchain technology both		14	Security and privacy	
4	Supplier and Vendor Readiness		15	Functional benefits	
5	Organizational culture		16	Initial investment cost	
6	Reliability and trust		17	Blockchain Standardization	
7	Infrastructural facility		18	Competitive pressure	
8	Data Ownership and Control:		19	Influential Stakeholders pressure	
9	The capability of human resources		20	Government policy and support	
10	Accessibility		21	Market turbulence	
11	Scalability		22	Social Responsibility and Ethics	

If yes, how do they take part in sustainable development?

If not, why? Please support your answer.

Q2. Please mention if there are other parameters that can aid in blockchain technology adoption in maritime freight enterprises.

Round 3:

Q1. Please rank the parameters in the following list in descending order of their contribution to the adoption of blockchain technology in maritime freight enterprises.

Sl. No.	Parameters	Yes/No	Sl. No.	Parameters	Yes/No
1	Support from Senior Management		12	Availability of technology-specific tools	
2	Proactive Information Sharing Willingness		13	Ease of testing and observation	
3	Availability of training facilities for sustainability and blockchain technology both		14	Security and privacy	
4	Supplier and Vendor Readiness		15	Functional benefits	
5	Organizational culture		16	Initial investment cost	
6	Reliability and trust		17	Blockchain Standardization	
7	Infrastructural facility		18	Competitive pressure	
8	Data Ownership and Control:		19	Influential Stakeholders pressure	
9	The capability of human resources		20	Government policy and support	
10	Accessibility		21	Market turbulence	
11	Scalability		22	Social Responsibility and Ethics	

II. Questionnaire sample for FAHP:

1. How significant is the **susceptibility to cyber threats** in influencing the adoption of Big Data and AI technologies within the maritime freight industry?

	1	2	3	4	5	6	7	8	9	
ABSOLUTE LOWEST IMPORTANCE	○	○	○	○	○	○	○	○	○	ABSOLUTE HIGHER IMPORTANCE

LIST OF PUBLICATIONS

Journals:

1. Singh, S., Chakraborty, K., Pratap, S., Singh, M., & Zhou, F. (2024). Analysing factors influencing the adoption of blockchain technology in maritime freight enterprises. *Enterprise Information Systems*, 2326676. https://doi.org/10.1080/17517575.2024.2326676. (**ABDC-A, IF 4.4)**
2. Singh, S., Pratap, S., & Lakshya. (2024). Empirical Study on Driving Blockchain Adoption in Maritime Freight: An Asian Perspective. *Journal of Business and Industrial Marketing*. https://doi.org/10.1108/JBIM-11-2023-0691. (**ABDC-A, IF 3.6)**
3. Singh, S., Dwivedi, A., & Pratap, S. (2023). Sustainable Maritime Freight Transportation: Current Status and Future Directions. *Sustainability*, 15(8), 6996. https://doi.org/10.3390/su15086996 (**SCIE, SSCI, IF 3.3)**
4. Singh, S., Lakshya, Pratap, S., & Jauhar, S. K. (2024). Unveiling barriers to IoT adoption in the maritime freight industry. *International Journal of System Assurance Engineering and Management.* https://doi.org/10.1007/s13198-024-02342-7. (**ESCI, IF 2)**
5. Singh, S., & Pratap, S. (2024). Optimizing Maritime Freight Sustainability through Berth Allocation and Quay Crane Assignment. Maritime Business Review. (Under review)
6. Singh, S., Pratap, S., & Lakshya. (2024). Barriers to the Implementation of Big Data and AI in the Maritime Freight Industry. *Ain Shams Engineering Journal*. (Under review)
7. Singh, S., & Pratap, S. (2024). Blue Carbon Analytics: Predictive Insights into Maritime CO_2 Emissions. *Journal of Forecasting*. (Under review)

Conferences:

1. Singh, S., Pratap, S., & Lakshya. (2024). Assessing Sustainable Energy Consumption in Maritime Freight Logistics Through Industry 5.0. *XXVII Annual International Conference of the Society of Operations Management (SOM 2024).*
2. Singh, S., Pratap, S., & Lakshya. (2024). A Pathway to Decarbonizing Maritime Transport with Alternative Fuels. *4th International Conference on the "Global Innovations in Management and Social Sciences-Imparting Dynamics".*