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**Probabilistic study of ship capsizing using monte carlo simulation: A vision towards safe and Smart ships for Bangladesh**

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A Smart Bangladesh envisions a technologically advanced and sustainable nation, leveraging innovation for economic growth, efficient governance, and improved quality of life. It emphasises empowering citizens in the digital era with intelligent technologies. In this connection, this research presents a new technique for probabilistic prediction of ship capsizing using Monte Carlo simulation. This mathematical model for ship capsizing integrates various factors, including ship parameters, loading conditions, operating conditions, and human factors, to understand the likelihood and potential severity of capsizing incidents comprehensively. The research also utilises historical accident data of Bangladesh's inland waterways. A computer program is developed to study the probabilistic nature of ship capsizing. The results obtained in this study suggest that ship capsizing may be prevented if operators utilise innovative techniques such as this research before any voyage. By exploring the intricate interplay of various factors influencing ship stability, this study provides a robust foundation for developing and implementing more effective safety measures within maritime operations, thereby contributing to improving maritime safety and risk management practices for Smart Bangladesh.

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**Artificial intelligence in Bangladesh: Assessing the public sector's readiness to ensure Smart governance**

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Bangladesh strives to utilize advanced technologies for the sake of economic and social progress, with a primary focus on ensuring smart governance. Imitating the developed countries for this regard, the Bangladesh's public sector is also embracing Artificial Intelligence (AI) technologies to ensure equitable digital transformation of this sector which raises the question of how they currently resolve the unique challenges and opportunities presented by AI adoption. The focus of this paper is to explore the complex contextual factors inside Bangladesh's socio-economic environment, with a particular emphasis on analyzing the intersection between policy and technical breakthroughs. Through a comprehensive examination of the existing landscape, this study aims to elucidate any existing deficiencies that impede the deployment of artificial intelligence (AI) tools and to identify specific areas of efficacy that promote and facilitate innovation. Employing a comprehensive review of scholarly literature, policy papers, and empirical data, the present study investigated the primary determinants, which highlighted several significant dimensions, including technological infrastructure, policy frameworks, regulatory competence, institutional capacity, the government's willingness and public acceptance. By assessing AI readiness from a holistic and forward-looking perspective, the results of the study are anticipated to provide comprehensive guidance to policymakers, government agencies and stakeholders about specific areas that demand attention and investment in order to facilitate the seamless incorporation of AI technologies in public services. This will eventually contribute to the achievement of smart governance in Bangladesh.