Marine administration systems in transportation and the performance of logistics companies in Tanzania

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ABSTRACT

The transport and logistics industries play a vital role in a country's economic development and stability, and are essential for supporting international trade. Transportation is closely linked to logistics, which forms a core component of the supply chain. Increasing expectations for high service quality and minimal tolerance for poor performance have created a highly competitive environment in marine operations, placing significant pressure on marine managers to ensure both reliability and cost-effectiveness. MerKab Logistics Company Limited has been facing difficulties in how its managers, who are stationed at the head office in Dar es Salaam, can effectively oversee marine operations when trucks are operating across international borders. This case study aimed to provide a solution to this issue through the implementation of a marine management system. The research was guided by two theoretical frameworks: The Diffusion of Technology and the Theory of Replacement. The study concentrated on the Dar es Salaam area, and a descriptive research design was deemed appropriate given the qualitative nature of the data. A purposive sampling method, which is a type of non-random sampling, was used. The targeted population of 106 employees from MerKab Logistics Company Limited was used. The sample size was 84 employees from MerKab Logistics Company Limited, calculated from the Yamane formula**.** Information was gathered through interviews and document analysis, and the findings were interpreted using narrative analysis. The research identified several issues, including difficulties in integrating data into the system, excessive information overload, and concerns about system security. To address these problems, the study recommended the development of reliable digital tools, elimination of manual paperwork, automation of data entry and reporting processes, enhancement of communication systems, and upgrades to the company's maintenance operations.

Keywords: Administration Systems, Marine, Performance, Transportation Logistics, Tanzania

I. INTRODUCTION

The transport and logistics industries are essential pillars for a country’s economic development and stability. They play a significant role in enabling both domestic and international trade by ensuring the availability of reliable and efficient transport networks and services. Furthermore, transportation contributes to national integration by improving access to markets, employment opportunities, healthcare, education, and other vital social services. Tanzania's transport sector has been adapting to the opportunities and challenges introduced by globalisation. However, the country’s infrastructure has been strained by the growing volumes of traffic on railways and roads. At the same time, inadequate maritime infrastructure and poorly developed inland transport systems are under significant stress due to a dramatic rise in imports and exports (Barasa & Purba, 2024).

The purpose of marine management systems is to equip businesses with advanced technology that lowers operating costs, increases productivity, and ensures compliance with legal standards. Marine managers are tasked with overseeing fleet activities, managing dispatch and routing, ensuring driver safety, and maintaining regulatory compliance. These systems improve operational transparency and efficiency while supporting adherence to the rules set by government authorities. By managing vehicle fleets on a day-to-day basis and enabling real-time data access regarding vehicle location and status, these systems streamline operations and help decision-makers address challenges promptly and cost-effectively. MerKab Logistics Company Limited is a forward-thinking logistics and transportation service provider based in Tanzania. The company aims to integrate modern technology to deliver high-quality and cost-effective logistics and transportation services to clients across Eastern and Southern Africa. Its core offerings include road freight solutions, contract logistics, supply chain services, and the application of IT in logistics management. Despite this technological focus, the company still faces challenges in managing its marine operations, which affects overall performance and efficiency (Majid et al., 2024).

Some of these issues include uncontrollable driver behaviour, such as reckless driving or turning off safety features. Additional concerns involve security risks, rising fuel costs, and the financial burden of vehicle digitalisation.

With a highly skilled team of professionals, MerKab Logistics is well-positioned to serve both regional and international markets in Eastern and Southern Africa. The company offers tailored and rapid truckload services, supported by one of the fastest-growing fleets in Tanzania and a large network of subcontractors. With a focus on cost-efficiency, timeliness, and quality of service, MerKab identifies the best combination of transportation services to meet client demands (Ni & Irannezhad, 2024).

Their transportation technologies offer better visibility and command over logistics operations, helping to optimise routes, manage goods movement efficiently, and negotiate effectively with external carriers. The transportation management services offered aim to enhance efficiency across all transport modes, maximise returns from logistics partners, and simplify complex operations. In addition to transport services, MerKab Logistics also provides a range of logistics solutions, including warehousing, delivering customised storage and distribution services across various sectors and goods types. The company also coordinates all logistics functions and supplier activities, performs analysis and makes recommendations on transport modes, identifies opportunities for freight consolidation, and evaluates customer service performance. Finally, their freight forwarding services ensure shipments are handled regardless of destination, including customs clearance, space allocation, transport arrangements, and providing timely updates on the most cost-effective and dependable routes and schedules for cargo (Andrei & Scarlat, 2024).

1.1 Statement of the Problem

Existing logistics operations and by extension, transportation firms face pressure from issues such as port congestion, decreasing reliability, limited road transport capacity, and the rail system's inability to handle rising demand. In today's competitive market environment, businesses are required to operate seamlessly and efficiently. To stay ahead, they must enhance service delivery in terms of flexibility, speed of response, flow of information, and logistics strategies (Andrei & Scarlat, 2024). As a result, many companies are being driven to reassess their core operational approaches and adopt more advanced systems. One such solution is the implementation of marine management systems, which have become a key element in overseeing transportation processes along the entire route. According to Barasa and Purba (2024), marine management systems boost operational efficiency by lowering operational and inventory maintenance costs while enhancing safety. Further supporting this view, Majid et al. (2024), argue that Fleet Management Systems (FMS) contribute to better operational control through improved traffic safety, fewer accidents, lower fuel expenses, and reduced vehicle damage, even when monitored remotely. Incorporating Information and Communication Technology (ICT) into these systems allows for real-time tracking of vehicles, their speeds, and on-site data helping to identify issues in delivery execution and reduce overall operational expenses (Andrei and Scarlat, 2024). For a marine operation to function effectively and safely, structured marine management strategies must be in place, typically through the use of marine management systems. These systems are designed to ensure vehicle fleets are coordinated, efficiently run, and cost-controlled. Organizations operating more than five vehicles such as distribution companies, emergency services, security firms, public transportation, and food delivery services can benefit greatly from these tools.

1.2 Research Objectives

To determine the role of Marine Management systems in transportation and performance of logistics companies in Tanzania

II. LITERATURE REVIEW

2.1 Theoretical Review

Technology diffusion theory and the theory of replacement are the theories that underpinned the study.

2.1.1 Technology Diffusion Theory

The Technology Diffusion Theory, explained by Waters (2019), focuses on understanding how innovations and technologies spread within a social structure and the pace at which they are adopted. Instead of focusing on pushing people to change, it emphasizes that the key to change lies in the development or enhancement of products and behaviors that meet users' needs. According to this theory, it's not the individuals who must adapt, but rather the innovations themselves that evolve (Waters, 2019). Diffusion, in this context, refers to the process by which new ideas and technologies are communicated through specific channels over time within a social system (Waters, 2019). Waters (2019), describes diffusion as the manner in which technology permeates through a society or organization. Therefore, diffusion implies the spread of ideas, and in the case of vehicle management, it highlights the advantages of technologies like GPS, which enable easy vehicle tracking. In marine management systems, the acceptance of new ideas, processes, products, or services whether developed internally or sourced externally is essential for efficient service delivery and operational cost optimization. However, the adoption of innovations depends on an organization's collection of technical, administrative, and strategic capabilities (Waters, 2019). Marine management systems represent innovative

solutions that provide marine managers with the necessary tools to meet strict deadlines, optimize deliveries, and monitor the entire fleet's activities (Waters, 2019). Key components of such systems include tracking devices for marine vehicles and a central computer at the dispatch center.

2.1.2 Theory of Replacement

The theory of replacement deals with the optimal lifespan of capital assets. The optimal life refers to the time span between when an asset begins service and when it needs to be replaced for continued productive use. Determining the optimal life and replacement policy is essential for managing capital assets, including marine vehicles (Melnyk et al., 2025). As assets age, their operational costs typically increase. Eventually, the cost of maintaining outdated equipment exceeds the cost of investing in new equipment, which forms the foundation of effective Fleet Management Systems (FMS). Replacement analysis often evaluates trends in operating costs and the point of replacement, which is the difference between the cost of a new asset and the remaining value of the old one (Melnyk et al., 2025). In some cases, replacement evaluations also take into account the asset's resale value at various stages of its lifecycle (Melnyk et al., 2025). Critics of the replacement theory argue that vehicle replacement models require detailed historical and forecasted data regarding marine operations and their components, which can be challenging for many companies, particularly in developing nations (Melnyk et al., 2025). This data needs to be gathered, updated, and processed using modern database systems. Additionally, companies often struggle with managing fluctuations in marine replacement expenditures, as the budget for new vehicle purchases can vary significantly each year.

Replacement decisions are influenced by several factors, including technological advancements that reduce costs or enhance efficiency. To make accurate estimates of future capital and operating costs, the theory suggests that managers should consider changes in equipment design, performance, as well as capital and labor (Melnyk et al., 2025. In the context of marine operations, the theory helps define the optimal replacement strategies for an organization's vehicles. According to the economic theory of vehicle replacement, assets should be replaced when the total operating costs are at their lowest historical point. A well-structured vehicle replacement strategy allows transportation companies to determine the ideal time to replace aging fleet vehicles, minimizing costs and improving the economic and technical performance of the fleet.

2.2 Empirical Review

This part explained the previous literature reviews conducted in different countries as per study objective which is assessing the role of marine management systems in transportation and performance of logistics companies in Tanzania**.**

2.2.1 Role of Marine Management Systems in Transportation and Performance of Logistics Companies in Tanzania

Control can be maintained by training drivers on safe driving habits and promoting fuel-efficient practices. Ensuring that vehicles undergo regular maintenance and setting speed limits for the fleet can significantly impact overall operational costs. Fleet management systems provide the ability to monitor driver behavior through GPS tracking, enabling real-time alerts when drivers exceed speed limits in designated areas, allowing for prompt corrective action. For MerKab Logistics Company Limited, which operates a fleet of large trucks, fuel consumption tends to be high, making fuel management a top priority (Andrei & Scarlat, 2024). When fleet managers at MerKab track vehicle movements and observe that a vehicle is stationary for any reason, they are responsible for instructing the driver to turn off the engine. This is crucial, as the larger the vehicle, the more fuel is wasted while idling. The marine management application, enhanced by artificial intelligence, can provide even greater value. As mentioned earlier, the system collects and analyzes data related to repairs and scheduled services. AI can forecast when specific parts will need maintenance or replacement, sending alerts in advance to prevent unexpected downtime, premature wear, and costly repairs. Factors such as mileage, usage time, load capacity, driving habits, and road conditions can be linked to maintenance schedules for the vehicles. This process is automated, with reminders sent to the marine manager and maintenance activities scheduled ahead of time, all within seconds. The marine manager can always be confident that the fleet is running efficiently and that deliveries are completed on time, thanks to vehicle diagnostics and proactive maintenance (Wu et al., 2024).

Each truck generates a substantial amount of data on a daily basis. With a fleet management system, you can stay informed and track key indicators in real-time, such as the current location of a truck and the status of any loading or deliveries. To streamline the flow of data and provide access to crucial information for authorized personnel, organizations typically need to integrate multiple systems into one cohesive digital platform. This is especially vital for fleet-based businesses, as profit-generating vehicles produce vast amounts of telematics data, which can offer a competitive advantage. Reporting tools enable high-level visibility, allowing fleet managers to drill down into the details of each vehicle and order, assess delays, and identify potential areas for improvement (Zhou *et al.*, 2024). Core

competence in marine management involves using systems that monitor driver behavior. A driver behavior tracking system can be integrated into a fleet management system. This system can events occur. MerKab Logistics Company Limited has implemented a system for tracking driving behavior, which has significantly improved control over drivers' speed. Additionally, the company evaluated the overall quality of driver conduct and assessed why experienced drivers sometimes engaged in reckless driving. It was found that poor road conditions in certain areas of the route were contributing to aggressive driving behavior. By rerouting, the company was able to enhance both driver and fleet safety, reduce maintenance needs, lower fuel consumption, and maintain the same dispatch schedules.

Marine management systems can also intelligently plan routes, offering another way to reduce costs, optimize operations, and maintain environmental sustainability by lowering fuel consumption. By adopting fleet monitoring software, the company gains greater flexibility in decision-making and can quickly adjust routes as needed. Through smart automation and advanced machine learning technologies, scheduling and rescheduling become much simpler in response to changes in customer orders. Without such a system, managing these tasks manually would be inefficient. These capabilities within the fleet management system allow MerKab Logistics Company Limited not only to meet delivery schedules but also to enhance their efficiency and persuade customers to increase their order volumes. MerKab Logistics Company Limited is confident that its drivers are well-trained and trustworthy; however, driver fraud is a common issue in the logistics industry. Whether the fraudulent behavior is due to negligence or intentional wrongdoing, it is always wise to remain vigilant, monitor, assess, mitigate, and eliminate the possibility of such actions. A fleet management system powered by Artificial Intelligence can detect these irregularities and make data-driven decisions about the credibility or likelihood of specific claims (Wu et al., 2024). A marine management system that focuses on monitoring and accurately evaluating drivers' behavior can significantly reduce accidents and avoidable losses by addressing road safety violations. Strictly managing such infractions can have a major impact on improving overall safety (Zhou *et al.*, 2024).

III. METHODOLOGY

This study opted for a case study research design because it's better for evaluating the deep analysis. The targeted population of 106 employees from MerKab Logistics Company Limited was used. The sample size was 84 employees from MerKab Logistics Company Limited, calculated from the Yamane formula**.** The case study utilized two distinct theories: technology diffusion and the theory of replacement. The research focused on the Dar es Salaam region, and descriptive research was chosen as it was well-suited to the qualitative nature of the data. For this purpose, a purposive sampling method, which is a non-probability sampling technique, was employed. Data was gathered through interviews and a review of documents, and the analysis was conducted using narrative analysis.

IV. FINDINGS & DISCUSSION

4.1 Role of Marine Management systems in transportation and performance of logistics companies in Tanzania

Transport companies face increasing pressure to be reliable, deliver faster, and provide affordable services through cost-effectiveness. This demand has created the need for a marine management system within businesses (Lopes et al., 2025). Currently, marine management systems are primarily used for monitoring, and while this functionality has yielded significant achievements, the systems still face several challenges. Issues such as integrating marine data with existing software, managing a geographically distributed team, dealing with information overload, and ensuring the system's safety and security have proven to be key challenges for marine management systems. Additionally, a marine management system helps minimize unnecessary risks and improves employee welfare. The system enhances real-time tracking of various factors such as location, speed, and field data to identify bottlenecks in deliveries, thereby reducing operational costs (Majid et al., 2024). The use of ICT in marine management provides strong logistical support that ensures efficiency and effectiveness in the transportation process. An Effective Fleet Management System (FMS) guarantees that transport companies achieve operational success through lower transportation costs, process improvements, and better customer service (Barasa & Purba, 2024).

MerKab Logistics Company Limited has taken several organizational steps to address the identified challenges, such as avoiding information overload, improving routing optimization, and managing the collected data more efficiently. For years, marine managers relied on paper forms and invoices for vehicle inspections, as well as complex spreadsheets and cluttered whiteboards to track their fleet, each presenting its own set of challenges. Paper forms, such as vehicle inspection sheets, required manual delivery by drivers and were prone to errors or incomplete information. While spreadsheets can be valuable for certain aspects of fleet management, they become cumbersome and inefficient when managing large datasets. Whiteboards are useful for quick notes and visual flow charts but are inadequate for recording and updating extensive data (Ni & Irannezhad, 2024).

Despite the advantages of the marine management system in place at MerKab Logistics Company Limited, there has been no significant reduction in operational costs or overall improvement in the efficiency of transportation operations. Likewise, the company's returns have not substantially increased. The management team regularly holds meetings to discuss solutions to these ongoing issues. The ICT manager has proposed solutions, either by modifying and developing the existing software or outsourcing the software system from CARTRACK Company. If outsourcing is considered, the feasibility of using an external digital service at MerKab Logistics Company Limited must be evaluated. If implemented, what would be the implications and consequences on the logistics services provided? These questions could lead to various outcomes and decisions regarding the current dilemma (Andrei and Scarlat, (2024). To enhance the ongoing effectiveness of marine management and the adoption of modern technology in transit processes, it is crucial to:

4.1.1 Development of Software and Mobile Apps

Improving the efficiency of operations, ensuring safety, and maintaining productive marine operations can be achieved by ensuring visibility and automation. This includes managing both human and vehicle resources, as well as controlling other marine-related expenses, while ensuring drivers are equipped with the necessary vehicles and tools to complete their tasks. Ideally, being a marine manager can often feel like a thankless role, yet it is a crucial function within organizations. The most effective way to tackle marine management challenges is by utilizing technology to oversee an entire fleet of assets. Trying to manage without technology will only lead to frustration, overburdening, and constant struggles. These results contradict with study done by Matveev (2025) in Nigeria concluded that there is relationship between development of software, mobile apps and performance of logistics companies. These notifications can be automated, allowing you to receive them directly in your inbox at the right time to take necessary action and plan for maintenance. When you have the chance to enhance operational efficiency, you can achieve peace of mind and smoother processes. As per managers and directors interviewed, stated that

> *"Both human and vehicle resources must be managed, as well as other marine-related expenditures, to ensure that drivers have the appropriate vehicles and tools to fulfil their jobs. Ideally, being a marine manager might feel like a thankless job, but it is an important position inside businesses. The most effective approach to addressing maritime management difficulties is to use technology to monitor a full fleet of assets. Attempting to manage without technology can only result in irritation, overburdening, and ongoing challenges"*

4.1.2 Replace Antiquated Processes such as Paper Processes

The fourth industrial revolution has ushered in the digital era, where its innovations pose less of a threat to marine management and more of an opportunity to thrive in the digital age. Your marine management solutions should reflect this progress. The methods you adopt for managing your fleet often play a key role in determining success. For years, marine managers relied on paper forms, invoices, complex spreadsheets, and cluttered whiteboards to track their fleets. You might still be using these methods today, but each comes with its own set of challenges. Paper-based processes, like vehicle inspection forms, take time to be physically delivered by drivers and are prone to errors or incomplete entries. While spreadsheets have value for certain aspects of marine management, they become inefficient and unwieldy when handling large volumes of data. These outdated practices are nowhere near as effective or efficient as modern software and mobile applications. A reliable marine management software is not only scalable and user-friendly but also provides a solid return on your investment. The result is similarly with Gbako et al. (2025) in United Kingdom (UK) found that marine transport influences the performance UK logistics companies. The study conducted in Ghana reveled that marine transport does not influence performance Ghanian logistics companies (Peng et al., 2025). As per managers and directors interviewed, stated that

> *"Fleets frequently play a critical role in deciding success. For many years, marine managers tracked their fleets using paper forms, invoices, sophisticated spreadsheets, and crowded whiteboards. You may still be utilising these approaches today, but each presents unique obstacles."*

4.1.3 Streamline the Company Maintenance Process

Maintenance is crucial to extending the lifespan of company assets, and utilizing marine software can significantly improve the ability to track when and how much the company will invest in maintenance. With marine management software, you can monitor the service history of each asset in detail and generate reports to identify cost patterns. However, merely tracking maintenance costs isn't sufficient. It's also vital to establish and implement preventive maintenance schedules to ensure the continued performance of your assets. Service reminders can be set based on the manufacturer's recommended intervals (mileage, kilometers, or time) or a schedule that suits your preferences. These results contradict with study done by Matveev (2025) in Nigeria concluded that there is relationship between company maintenance process and performance of logistics companies. These notifications can be automated,

allowing you to receive them directly in your inbox at the right time to take necessary action and plan for maintenance. As per managers and directors interviewed, stated that

> *"Establishing and implementing preventative maintenance plans is also critical to ensuring that your assets continue to function properly. Service reminders can be programmed to follow the manufacturer's suggested intervals (miles, kilometres, or time) or a plan that matches your needs. Challenges."*

4.1.4 Automate Data Entry and Reporting

The advancement of technology has transformed how we carry out our daily tasks and operations. Spending valuable time entering data manually is an inefficient use of resources. While it may not be feasible for the company to fully automate every aspect of data collection, marine management software can bring you very close to that goal. To improve sustainability and efficiency, the company must understand how integrations can quickly gather data and how the software can automatically calculate costs to assess ownership expenses on a per-vehicle basis. Reporting is another key feature to consider. After collecting the data, the company needs a solution to organize and present the metrics in a clear and understandable format. Customizable reports consolidate all your metrics, making it easier to analyze and share insights with other stakeholders. The result is similarly to the study done by China reveled which concluded that automate data entry and reporting influence performance of logistics companies (Zhang et al., 2025). As per managers and directors interviewed, stated that

> *"To increase sustainability and efficiency, the organisation must understand how integrations can swiftly collect data and how software can automatically compute prices to estimate ownership charges per car. Reporting is another important factor to consider."*

4.1.5 Improving Communication to avoid Bottlenecks

The study evaluated the ongoing effects of COVID-19, it is clear that it has accelerated the shift towards remote work. Marine managers, among others, have had to adjust to working from home or adopting a hybrid work style. Many have faced challenges in maintaining focus amid various distractions. However, success in remote work is achievable as long as there is effective communication. The operations team is spread out throughout the day, and some are responsible for managing a fleet across different regions. It is essential to have reliable communication channels for the team to report issues to you efficiently. Without a doubt, a mobile phone plays a crucial role in communication within and outside the company, regardless of location. Additionally, mobile applications provide solutions for managing the fleet remotely, allowing the team to upload necessary information as needed. The result contradicts with the study conducted by Hajar (2025) who concluded that there is no relationship between improving communication and performance of logistics. as per managers and directors interviewed, stated that

> *"The operations crew is spread out throughout the day, with some handling a fleet across many areas. It is critical to have dependable communication channels in place so that the team can effectively communicate difficulties to you".*

4.1.6 Implement and Enforce Policies

The company should implement clear policies to ensure a balanced approach to managing both assets and teams, as this requires careful oversight. The consequences of not following these policies will directly affect expectations and the transparency of updates. Safety protocols should be prominently displayed, such as through placards and posters, making it easy for drivers and those on transit to view important information. Standardizing and enforcing these policies ensures that the fleet is protected and complies with regulatory requirements. Furthermore, the benefits of adhering to these policies will become evident during vehicle inspections. Consider using electronic driver vehicle inspection reports, where the device can track and review inspections, requiring details like photos to identify any potential issues. The result is similarly Hajar (2025) who concluded that there is no relationship between implement and enforce policies and performance of logistics. by Lastly, having clear policies in place enables quick action on disciplinary matters, allowing for immediate resolution of any problems. As per managers and directors interviewed, stated that

> *"Noncompliance with these standards will have a direct impact on expectations and update transparency. Safety protocols should be widely posted, such as on signs and banners, so that drivers and commuters may easily access critical information. Standardising and implementing these standards ensure that the fleet is safe and meets regulatory criteria. Furthermore, the benefits of sticking to these standards will be apparent during vehicle inspections."*

4.1.7 Stay Current on marine Industry Trends and Best Practices

Marine technology and transportation have experienced a significant transformation. Being able to grasp emerging technological innovations and incorporate them into your operations will ensure you're well-prepared. Key areas of focus include the development of autonomous vehicles, cyber security, and electric trucks, among others. The company also needs access to resources, guides, and industry best practices relevant to their marine operations, helping them stay informed about the latest trends and strategies to enhance their performance. These results contradict with study done by Matveev (2025) in Nigeria concluded that there is relational between stay current on marine industry trends and best practices and performance of logistics companies. As per managers and directors interviewed, stated that

> *"Understanding upcoming technology breakthroughs and incorporating them into your operations can keep you well-prepared. Key areas of concentration include autonomous vehicle development, cyber security, and electric trucks, among others."*

4.1.8 The Company should adhere to Budgets by Calculating the Total Cost of Ownership

For the company to operate profitably, it's crucial to stick to a budget, regardless of the industry. While capital constraints may limit marine managers, having a clear understanding of the financials enables the company to make cost-efficient choices. Furthermore, navigating the budget and controlling expenses can be challenging, especially with the numerous factors to account for. Therefore, for the company to achieve optimal performance, it must identify its mobile assets by considering both fixed and variable costs, including key elements such as the following. Variable costs (fuel, parts and labor, tolls, maintenance). Fixed costs (taxes and fees, licenses/permits, loan/lease payments, insurance/registration and depreciation). Marine management systems can calculate the cost of each trip, including the cost per kilometer, which is crucial for assessing the efficiency of all utilized assets, such as vehicles and equipment. The company can leverage the cost per kilometer for all operational assets to develop the right strategy and achieve the highest possible Return on Investment (ROI) for its assets. The result is similarly to the study done by China reveled which concluded that budgets by calculating the total cost of ownership influence performance of logistics companies (Zhang et al., 2025). As per managers and directors interviewed, stated that

> *"To achieve optimal performance, the organisation must identify its mobile assets, taking into account both fixed and variable expenses"*

4.1.9 Human Resource Capacity

Before implementing road projects, it is important to conduct both technical and financial feasibility studies to prevent the project from halting midway. This ensures that there are enough funds and adequate personnel available to complete the project successfully. These results contradict with study done by Matveev (2025) in Nigeria concluded that there are relations between human resource capacity and performance of logistics companies.

> *"To avoid the project being interrupted in the middle, both technical and financial feasibility evaluations must be performed before to construction of roads. This ensures that there are adequate funds and personnel available to complete the project successfully."*

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

Understanding the whereabouts of vehicles, monitoring driver activities, and tracking every event in real-time are crucial aspects of effective decision -making in fleet management. The proposed system aims to display the exact location of a selected vehicle on various maps and generate detailed reports on the journey, including the route taken, fuel consumption, speed limits, and any other information requested by the customer. Key advantages of this system include its wide geographical coverage, precise positioning accuracy, user-friendly operation from any location, and efficient incident management. This study offers valuable theoretical insights, highlighting the importance of marine management in the logistics sector. The findings clearly indicate that marine management practices play a critical role in enhancing a company's competitive edge. The research provides valuable guidance for executives on which marine management practices or combinations thereof can drive profitability. However, while this study focused on one industry, it is acknowledged that the results may vary slightly when applied to other sectors.

5.2 Recommendations

To address these problems, the study recommended the development of reliable digital tools, elimination of manual paperwork, automation of data entry and reporting processes, enhancement of communication systems, and upgrades to the company's maintenance operations.

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