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THE IMPORTANCE OF CONTROLLERSHIP IN THE MANAGEMENT OF RIVER TRANSPORTATION COMPANIES IN THE AMAZON

A IMPORTÂNCIA DA CONTROLADORIA NA GESTÃO DE EMPRESAS DE TRANSPORTE FLUVIAL NO AMAZONAS

LA IMPORTANCIA DE LA CONTRALORÍA EN LA GESTIÓN DE LAS EMPRESAS DE TRANSPORTE FLUVIAL EN AMAZONAS

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ABSTRACT

This article aims to analyze the application of controllership as an essential tool for process optimization, cost control, and strategic decision-making support in river transport companies in the Northern Region of Brazil, focusing on the state of Amazonas. In this region, river transport is the main means of moving people and goods, playing a vital role in territorial integration and socioeconomic development. Considering controllership as a management support area responsible for ensuring the transparency and reliability of accounting and managerial information, this study seeks to verify how controllership is applied in river transport companies in Amazonas and to identify how its implementation contributes to the efficiency and sustainability of business operations. To this end, a qualitative, descriptive, and exploratory approach was adopted, based on bibliographic and documentary research, as well as a case study applied to a company in the sector. The research, qualitative in nature and descriptive-exploratory in character, was developed based on bibliographic and documentary review and a case study conducted in a company from the sector. The results show that the absence of structured controllership practices leads to administrative and financial deficiencies, while the implementation of an integrated management system, combined with employee training and process digitalization, resulted in significant improvements in efficiency, control, and reliability of information. It is concluded that controllership is a strategic and indispensable instrument for the sustainability and competitiveness of river transport companies in the Amazon region.

Keywords: Controllership. Business Management. River Transport.

RESUMO

O presente artigo tem como objetivo analisar a aplicação da controladoria como ferramenta essencial para a otimização de processos, o controle de custos e o suporte à tomada de decisões estratégicas nas empresas de transporte fluvial da Região Norte, com foco no estado do Amazonas. Nessa localidade, o transporte fluvial constitui o principal meio de deslocamento de pessoas e cargas, sendo vital para a integração territorial e o desenvolvimento socioeconômico. Considerando a controladoria como área de apoio à

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gestão, responsável por assegurar a transparência e a confiabilidade das informações contábeis e gerenciais, este estudo busca verificar como a controladoria é aplicada nas empresas de transporte fluvial no Amazonas e identificar de que forma sua implantação contribui para a eficiência e sustentabilidade das operações empresariais. Para tanto, adotou-se uma abordagem qualitativa, de caráter descritivo e exploratório, baseada em pesquisa bibliográfica, documental e em um estudo de caso aplicado a uma empresa do setor. A pesquisa, de natureza qualitativa e caráter descritivo-exploratório, foi desenvolvida com base em revisão bibliográfica, documental e em um estudo de caso aplicado a uma empresa do setor. Os resultados evidenciam que a ausência de práticas estruturadas de controladoria gera deficiências administrativas e financeiras, enquanto a implementação de um sistema de gestão integrado, aliada à capacitação dos colaboradores e à informatização dos processos, proporcionou melhorias significativas na eficiência, no controle e na confiabilidade das informações. Conclui-se que a controladoria é um instrumento estratégico indispensável à sustentabilidade e à competitividade das empresas de transporte fluvial na Amazônia.

Palavras-chave: Controladoria. Gestão Empresarial. Transporte Fluvial.

RESUMEN

Este artículo tiene como objetivo analizar la aplicación de la contraloría como herramienta esencial para la optimización de procesos, el control de costos y el apoyo a la toma de decisiones estratégicas en las empresas de transporte fluvial de la Región Norte, con enfoque en el estado de Amazonas. En esta localidad, el transporte fluvial es el principal medio de desplazamiento de personas y carga, siendo vital para la integración territorial y el desarrollo socioeconómico. Considerando la contraloría como un área de apoyo a la gestión, responsable de garantizar la transparencia y confiabilidad de la información contable y de gestión, este estudio busca verificar cómo se aplica la contraloría en las empresas de transporte fluvial en Amazonas e identificar cómo su implementación contribuye a la eficiencia y sostenibilidad de las operaciones comerciales. Para ello, se adoptó un enfoque cualitativo, de carácter descriptivo y exploratorio, basado en una investigación bibliográfica y documental y en un estudio de caso aplicado a una empresa del sector. La investigación, de carácter cualitativo y de carácter descriptivo-exploratorio, se desarrolló a partir de una revisión bibliográfica y documental y un estudio de caso aplicado a una empresa del sector. Los resultados muestran que la ausencia de prácticas estructuradas de contraloría genera deficiencias administrativas y financieras, mientras que la implementación de un sistema integrado de gestión, combinado con la capacitación de los empleados y la informatización de los procesos, proporcionó mejoras significativas en la eficiencia, control y confiabilidad de la información. Se concluye que la contraloría es un instrumento estratégico indispensable para la sostenibilidad y competitividad de las empresas de transporte fluvial en la Amazonía.

Palabras clave: Contraloría. Gestión Empresarial. Transporte Fluvial.

1 INTRODUCTION

River transport is one of the main means of transport in the Amazon region, playing an essential role in territorial integration, in the supply of riverside communities and in the flow of products. However, this system faces significant challenges, such as the precariousness of the port infrastructure, low accessibility, lack of investments, limited mobility, lack of adequate routes for the flow of production, and the incompatibility of the logistics system with the characteristics of regional production. Studies by Rodrigues et al. (2014) and Cardoso (2013) point out that these structural and operational limitations compromise the efficiency of the modal and restrict its potential to contribute to the economic development of the Amazon.

In view of this, added to the geographical and operational particularities of the Amazon, such as dependence on rivers, seasonality of waters, and limited infrastructure, it is essential to adopt management practices that ensure efficiency, sustainability, and control. In this scenario, controllership stands out as a fundamental strategic tool for the management of river transport companies.

Thus, this article seeks to verify the importance of the application of controllership in river transport companies in the state of Amazonas and to evaluate how its implementation contributes to strategic decision-making, governance, sustainability and operational efficiency.

For this, the application, through a case study, of a controllership in a company in the sector will be presented in order to highlight the improvements obtained with the implementation of such instrument in the organization.

2 THEORETICAL FRAMEWORK

2.1 WATERWAY TRANSPORT IN BRAZIL

Waterway transport comprises the movement of cargo and passengers through rivers, lakes and seas, using various vessels, such as ships, ferries and boats. It is one of the oldest and most efficient modes of transport in history, fundamental for trade and territorial integration. Its main advantages are the ability to move large volumes at a lower cost and with less environmental impact, especially over long distances and for low value-added products (Ballou, 2006).

From an environmental perspective, the modal has reduced emissions of pollutants and lower rates of loss and damage when compared to other means of transport (CNT, 2019). However, compared to road and rail modes, infrastructure limitations and lack of intermodal

integration restrict their full use in the country (ANTAQ, 2025).

According to official data from the National Waterway Transport Agency (ANTAQ, 2025), Brazil has approximately 20 thousand kilometers of economically navigable waterways, distributed between large and small ports. Even so, only 30.9% of the waterway network is effectively used (CNT, 2019), with emphasis on the Madeira, Paraná-Tietê, Paraguay, Solimões-Amazonas, and Tocantins-Araguaia waterways, responsible for significant movement of agricultural, mineral, and fuel cargo, according to ANTAQ's TKU 2021 report (2022). The Amazon and Tocantins-Araguaia basins accounted for approximately 76% of the total volume of cargo handled in 2022 (ANTAQ, 2023), which highlights the relevance of the Amazon in the national waterway context.

2.2 RIVER TRANSPORT IN THE AMAZON REGION

In the Amazon Region, river transport plays a vital role in the integration and supply of communities. Of the 62 municipalities in Amazonas (IBGE, 2022), only six have a land connection, which makes waterway transport the main means of mobility and regional logistics (ARSEPAM, 2024). Air transport acts in a complementary way, but limited by high costs and restricted infrastructure.

The Amazon waterway network adds up to more than 16 thousand kilometers of navigable rivers, representing about 80% of the Brazilian network (ANTAQ, 2022). The system interconnects cities and riverside communities in isolated areas, moving millions of passengers and tons of cargo annually, which reinforces its essential economic and social character (ANTAQ, 2018).

In the state of Amazonas, intercity waterway transport registered a flow of 808,462 passengers in 2023, representing an increase of 8.63% compared to the previous year, when 744,209 passengers were recorded. Even in the face of severe droughts, this increase demonstrates the resilience of the modal and its social and economic importance for the State (ARSEPAM, 2024).

Even with its relevance, the modal faces structural deficiencies. DNIT (2018) points out that most Amazon routes do not meet the technical standards of a waterway, as they lack adequate signaling, dredging and maintenance. In addition, there is a mismatch between the obsolete fleet used by communities and the modern vessels employed by large companies, which reflects operational inequalities. Studies by ANTAQ and UFPA (2018) classified the quality of passenger terminals as "poor", with a General Quality Index of 0.17, and this

number varies from zero to one.

In summary, although Amazonian river transport is a vital component for the mobility, economy, and territorial integration of the region, its full potential is still limited by structural deficiencies, the seasonality of rivers, and the lack of continuous investments in infrastructure and management.

2.3 THE EVOLUTION AND IMPORTANCE OF CONTROLLERSHIP IN THE BUSINESS MANAGEMENT PROCESS

Controllership emerged in the United States at the beginning of the twentieth century as an instrument of control and administrative coordination in large corporations (Schmidt, 2002). In Brazil, its development was driven by North American multinationals, which introduced management accounting methods and information systems aimed at organizational efficiency (Beuren; Borgoni; Fernandes, 2008).

For Mosimann (1999), controllership is an interdisciplinary science that combines principles of administration, economics and accounting, with the objective of guiding economic management and supporting decision-making. Oliveira (1998) points out that its effectiveness depends on the ability to transform accounting data into strategic information, promoting greater security and agility in decisions.

According to Alves, Fisch and Mosimann (1993), controllership acts as an integrating link between organizational sectors, providing information that favors the alignment between planning and execution. Bruni and Gomes (2010) and Padoveze (2014) expand this conception by highlighting its strategic functions: planning, control, coordination, evaluation and monitoring, all of which are indispensable to business performance.

Recent studies reinforce the evolutionary character of the area, Lunkes (2010) identified that Brazilian controllership practices focus on planning and cost control, while Guedes and Costa (2019) highlight the need for theoretical and methodological deepening in the field. Tavares (2022) observes that the controllership professional has been assuming strategic functions, aimed at generating value and organizational sustainability. Thus, controllership is consolidated as an essential tool for business competitiveness, integrating information, control and performance.

2.4 THE IMPORTANCE OF CONTROLLERSHIP IN THE MANAGEMENT OF RIVER TRANSPORT COMPANIES IN AMAZONAS

Studies by Tavares (2024) show that for companies in the river transport sector in Amazonas, the definition and control of vessel operating costs represent constant challenges, considering factors such as the oscillation of river levels, the absence of consistent financial records, market competition, and the quality of the services offered. These companies deal with complex and variable expenses, with fuel and fixed costs accounting for more than half of these expenses.

According to Datamarnews (2024) and Pereira, Roberto and Almeida (2025). The annual variation in the water level in the Amazon, marked by severe droughts, compromises navigability, affecting mobility, supply and increasing operating costs. In addition to natural adversities, the absence of consolidated information systems and consistent accounting records still limits the internal control of organizations (Lobato; Araújo Júnior, 2025). Research by Queiroz (2019) and Lacerda and Situba (2020) also highlights structural and institutional failures in the sector, which impact the efficiency and reliability of operations.

In this way, the application of controllership in the Amazon context goes beyond the accounting dimension and assumes a strategic and adaptive role, allowing river companies to minimize risks, optimize resources and strengthen their competitiveness in the face of a challenging logistics environment.

3 METHODOLOGY

The research is characterized as qualitative, descriptive and exploratory, since it seeks to understand how controllership is applied in river transport companies in the state of Amazonas, analyzing its impacts on operational efficiency and decision making. According to Gil (2017), this type of approach is appropriate when it is intended to deepen the understanding of complex phenomena in specific contexts, allowing for more detailed and contextualized interpretations. According to Gerhardt and Silveira (2009), qualitative studies privilege direct observation and interpretative analysis, and are appropriate for understanding practices and perceptions in the organizational environment.

The method used was the case study, chosen because it allows an in-depth analysis of a specific organization in the river transport sector. According to Yin (2015), the case study is a method of empirical investigation that allows one to examine contemporary phenomena in their real context, especially when the boundaries between the phenomenon and the

context are not clearly defined.

Data collection was carried out through direct observations and semi-structured interviews with managers and employees of Company R, which chose anonymity for confidentiality reasons. The interviews sought to understand the control practices adopted, the use of accounting and management information in the decision-making process and the difficulties faced in management. In addition, internal documents and administrative records were analyzed. The use of different data collection techniques, such as interviews, observations, and document analysis, contribute to strengthening the validity and consistency of the findings (Yin, 2015).

4 RESULTS AND DISCUSSIONS

During the data collection, problems of an administrative, technological and operational nature were observed. The sales of tickets and orders were carried out predominantly manually or at the counters located in the ports of Manaus and Parintins, with fees ranging from 5% to 10% on the value of the tickets. The absence of this control generated risks of selling fake tickets, undue charges and loss of revenue, in addition to potential legal liabilities for embarrassment to passengers and moral damages

It was also found that the management system used by the company did not present centralization or integration of information, being restricted to the issuance of Electronic Bill of Lading (CT-e), a digital tax document used to register cargo transport services. However, this system does not allow efficient control of sales, shipments or monitoring of income and expenses per trip.

In the parcel sector, there was a lack of standardization in the identification of senders and recipients, which caused loss of volumes and difficulty in tracking goods. In addition to the absence of correct identification of the goods, it was also observed that they were improperly handled during loading and unloading, which contributes to physical damage and possible loss of packages.

In the restaurant and in the boat's cafeteria, sales control was carried out through receipts and manual carbon paper sheets, without integration with the financial sector, resulting in divergences between the number of meals produced and the total amount calculated in the cashier.

Another critical point refers to the lack of internet connection during trips, which made it impossible to use real-time management systems during trips, making it difficult to control income and expenses per trip.

The aforementioned diagnosis revealed challenges common to the sector, such as the lack of technological integration and limited control of costs and revenues. Recent studies by Moura (2024) on the river transport of passengers between Manaus and Barcelos point out that about 58% of the operating costs of these companies are variable, with emphasis on fuel, maintenance and passenger food. This data reinforces the need for control tools capable of monitoring spending in real time and supporting decision-making.

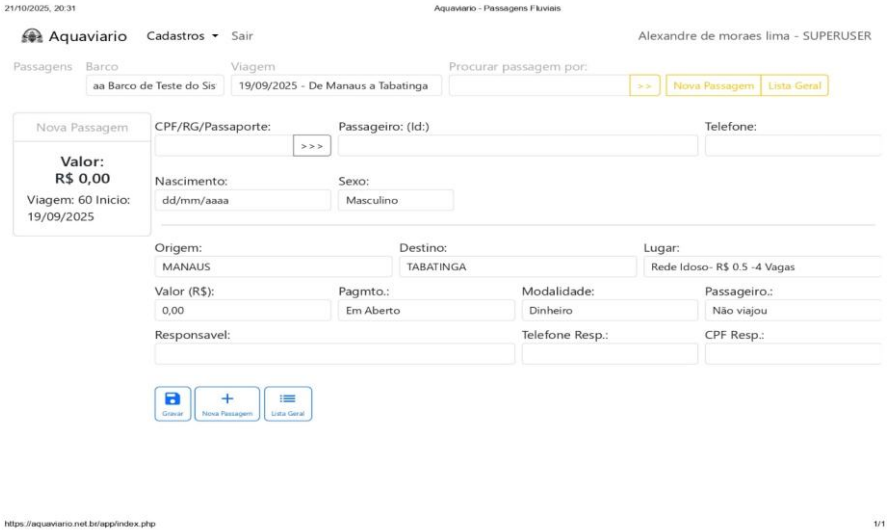
Based on this, the creation of a controllership in the company was proposed and implemented, structured in four main stages:

First step: implementation of an integrated management software, with digital control of receipts through automatic PIX, applicable to the sales of tickets, parcels and food products on board.

Figure 1 shows the new flow of ticket purchase after the implementation of the integrated management software. The system automated steps previously carried out manually, allowing the real-time registration of ticket sales, orders and restaurant orders. In addition, it has expanded the payment options available to customers, making transactions more agile, secure, and efficient.

Figure 1

Purchase of tickets



Source: Prepared by the authors themselves.

Second stage: training of employees and business partners, including self-employed salespeople, with the objective of promoting adaptation to new work routines and overcoming resistance to organizational changes

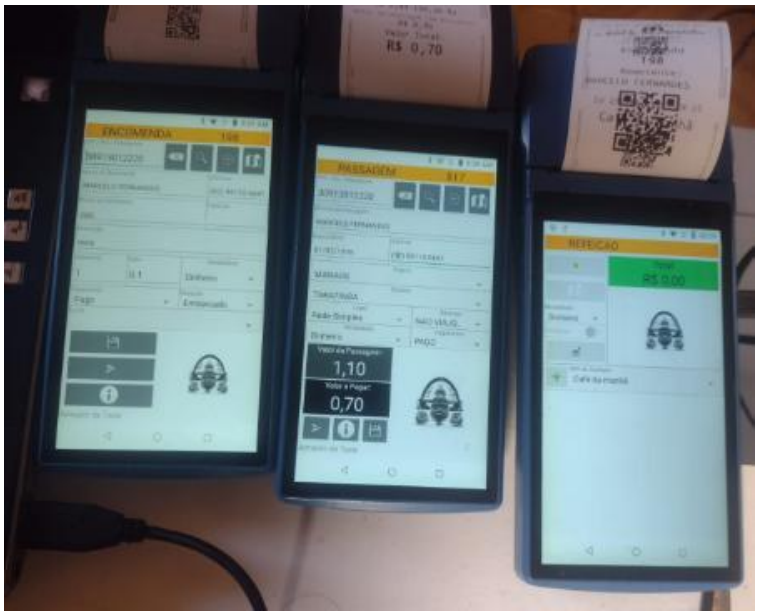
Third stage: implementation of satellite internet to enable the use of the system in real time, also expanding the sources of revenue with the commercialization of network access for passengers.

Fourth stage: modernization of the process of selling tickets, parcels and cargo through applications connected to the internet, ensuring greater security, agility and reliability in financial and legal operations, in addition to generating accurate management reports.

Figure 2 demonstrates the process of integrating the system after sales have been made. With each purchase of tickets, food or packages, the software automatically generates the receipt on the company's machine, ensuring greater effectiveness, control and traceability of transactions.

Figure 2

Software Integration



Source: Prepared by the authors themselves.

Table 1 represents the sales report of September 25, 2025 generated by the software and allows you to visualize the restaurant's integration with the financial sector, presenting information such as quantity sold, period, type of meal, unit value, and total value at the end

of the day. Thus ensuring an accurate and real-time report, allowing for more efficient and effective control by managers.

Table 1

Sales Report of 09/25/2025 (Integration of sectors)

DATE	MEAL	MODE	QUANT.	VALUE (R$)	TRAVEL
25/09/2025	FULL COFFEE	Covenant	28	560,00	62
25/09/2025	COFFEE	Covenant	2	10,00	62
25/09/2025	CAKE	Covenant	9	180,00	62
25/09/2025	MIXED SANDWICH	Covenant	10	200,00	62
TOTAL AGREEMENT			**49**	**950,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	COFFEE	Credit	2	10,00	62
25/09/2025	FULL COFFEE	Credit	12	120,00	62
TOTAL CREDIT			**14**	**130,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	CAKE	Debit	1	5,00	62
25/09/2025	COFFEE	Debit	4	20,00	62
25/09/2025	FULL COFFEE	Debit	15	150,00	62
TOTAL DEBIT			**20**	**175,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	FULL COFFEE	Money	22	440,00	62
25/09/2025	CAKE	Money	7	49,00	62
25/09/2025	COFFEE	Money	167	3.340,00	62
TOTAL MONEY			**196**	**3.829,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	MIXED SANDWICH	Pix	1	7,00	62
25/09/2025	COFFEE	Pix	1	5,00	62
25/09/2025	FULL COFFEE	Pix	24	240,00	62
TOTAL PIX			**26**	**252,00**	
TOTAL MORNING			**305**	**5.336,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	STEAK	Credit	14	280,00	62
25/09/2025	OVEN CHICKEN	Credit	1	20,00	62
25/09/2025	GRILLED CHICKEN	Credit	10	200,00	62
TOTAL CREDIT			**25**	**500,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**

25/09/2025	GRILLED CHICKEN	Debit	31	620,00	62
25/09/2025	OVEN CHICKEN	Debit	4	80,00	62
25/09/2025	STEAK	Debit	54	1.080,00	62
TOTAL DEBIT			**89**	**1.780,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	COFFEE	Money	28	140,00	62
25/09/2025	GRILLED CHICKEN	Money	128	2.560,00	62
25/09/2025	FULL COFFEE	Money	68	680,00	62
25/09/2025	STEAK	Money	155	3.100,00	62
TOTAL MONEY			**379**	**6.480,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	STEAK	Pix	57	1.140,00	62
25/09/2025	GRILLED CHICKEN	Pix	34	680,00	62
25/09/2025	OVEN CHICKEN	Pix	9	180,00	62
TOTAL PIX			**100**	**2.000,00**	
TOTAL AFTERNOON			**682**	**10.760,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	SOUP	Credit	8	160,00	62
25/09/2025	POT MEAT	Credit	12	240,00	62
TOTAL CREDIT			**20**	**400,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	POT MEAT	Debit	98	1.960,00	62
25/09/2025	SOUP	Debit	10	200,00	62
TOTAL DEBIT			**108**	**2.160,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	SOUP	Covenant	49	980,00	62
TOTAL AGREEMENT			**49**	**980,00**	
DATE	**MEAL**	**MODE**	**QUANT.**	**VALUE (R$)**	**TRAVEL**
25/09/2025	SOUP	Pix	9	180,00	62
25/09/2025	POT MEAT	Pix	56	1.120,00	62
TOTAL PIX			**65**	**1.300,00**	
TOTAL NIGHT			**242**	**4.840,00**	
TOTAL ON THE TRIP			**1.229**	**20.936,00**	

The implementation of controllership in Company R provided a series of significant improvements in administrative, operational and financial processes. The adoption of more

structured management practices, combined with the implementation of appropriate technologies, contributed to the modernization of internal control and increased efficiency of operations.

Among the main changes, the implementation of an integrated management software, with digital control of receipts by automatic PIX, stands out. The system now covers all areas of operation — ticket sales, parcels, restaurant and snack bar — offering greater security in transactions and transparency in financial transactions.

To consolidate this stage, training was promoted with employees and business partners, including self-employed salespeople. The training involved both the use of the system and the adaptation to new work routines, seeking to reduce resistance to change and increase operational efficiency. In addition, the company paid for basic computer courses, considering that part of the team had a low level of familiarity with digital tools.

Another relevant improvement was the implementation of satellite internet, which started to meet both the administrative needs of the company and passengers during trips. This action also generated a new source of revenue, with the sale of internet access on board.

The way services are marketed has also undergone significant transformations. The sales of tickets, parcels, cargo and food were integrated with online management applications, providing greater agility, security and legal reliability in operations. As a result, there was an improvement in the traceability of transactions and the integrity of financial information.

The results of the first trips after the implementation of the controllership have already shown gains in efficiency, agility and reliability in waterway transport activities. Among the benefits observed, the following stand out:

a) Qualification of revenues, costs and expenses, allowing better management analysis and decision making;
b) Possibility of scheduling cargo, parcels and tickets in advance, avoiding overbooking and ensuring logistical organization;
c) Creation of new sales channels over the internet, expanding the company's commercial reach;
d) Convenience to the customer, who started to make purchases remotely, with greater practicality;
e) Reduction of operating costs, due to the elimination of commissions to intermediaries and the use of automated payments via PIX;

f) Reliability in financial reports, which are now generated automatically, replacing manual controls susceptible to failures;
g) Automated sending of messages through the WhatsApp application, confirming tickets and orders and increasing efficiency in service;
h) Increased cash flow, with the possibility of reselling advance tickets, reducing dependence on third-party capital and strengthening the financial sustainability of the business.

In general, the adoption of controllership proved to be fundamental for the improvement of the management of Company R, promoting integration between sectors, the standardization of processes and the strategic use of accounting and management information.

5 CONCLUSION

River transport represents one of the pillars of mobility and socioeconomic development in the Amazon region, especially in the state of Amazonas, where land routes are scarce and rivers are the main axes of regional integration (Cardoso, 2013). Despite this natural vocation, the sector still faces significant limitations due to the seasonality of the rivers, the precariousness of the port infrastructure and the low technological integration, factors that compromise logistics efficiency and business competitiveness.

Based on the case study carried out, it was possible to identify how the control and management processes are conducted in river transport companies, finding that the absence of structured controllership practices results in administrative, financial and operational deficiencies. The controls observed were largely manual and decentralized, which made it difficult to systematically monitor revenues, expenses, and performance indicators.

From the theoretical and empirical analysis, controllership practices capable of improving management and decision-making in the sector were identified, especially those related to the integration of accounting and management information, the automation of processes and the standardization of operational routines. The implementation of an integrated management system proved to be decisive in ensuring greater security in transactions, data reliability and agility in the planning of operations.

During the course of the survey, the main difficulties faced by companies in the river sector were also raised, among which the shortage of qualified labor, the absence of

adequate connectivity in navigable stretches and cultural resistance to the adoption of new technologies stand out. These factors constitute significant barriers to the implementation of modern management practices and highlight the need for continuous investments in training and technological infrastructure.

Finally, the practical demonstration of the application of a controllership plan in the analyzed company confirmed the hypothesis that this instrument is essential for strengthening management and organizational sustainability. The adoption of an integrated management system, combined with team training and the computerization of processes, resulted in significant improvements in the reliability of financial information, operational efficiency, and strategic planning capacity. Controllership has therefore proved to be a decisive element for the balance between control, performance and decision-making.

It is concluded, therefore, that controllership should be permanently incorporated into the organizational structure of companies in the river sector, not only as a control instrument, but as a strategic management element. Its integrated performance with the administrative, financial and operational areas strengthens corporate governance, increases the transparency of processes and contributes to the economic sustainability of the sector.

As a limitation of the study, the fact that the research was conducted in a single company stands out, which restricts the generalization of the results. It is recommended, for future research, to expand the investigation to other organizations in the sector and regions of the Amazon, in order to compare different controllership models and identify the best practices applicable to the management of river transport in different contexts.

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APPENDIX

SEMI-STRUCTURED INTERVIEW

Block 1 – Characterization of the Interviewee

Table 2

1. Current position or function	2. Industry or department	3. Length of time working in the company
Operations Manager	3 years	Administration

Block 2 – Management and control practices

4. What are the main administrative and financial controls used in the company?

A: The control of orders is carried out through protocol books, in which the sender writes down the name of the recipient who will receive the package, without any additional documentation or traceability system. Financial controls are based on bank statements and order protocol records when payments are made in cash.

5. How is income and expenses monitored?

A: The monitoring of income and expenses practically does not exist. It is done through passenger relationships, number of food tokens sold, order protocols and cargo invoices. Expenses are controlled by receipts and invoices for purchases, and employee payments are made in cash.

6. Are there routines for checking or internal auditing of financial information?

A: There is no type of internal audit. Practically all controls are done manually.

Block 3 – Operational and technological processes

7. What system (software) is used to control operations?

A: The company uses Sebrae software only to issue the Electronic Bill of Lading (CT-e), in order to meet the tax requirements of mandatory cargoes, such as crude oil and its derivatives, natural gas, alcoholic beverages, soft drinks, cement, minerals, wood and transportation of valuables, according to Article 110, paragraph 7 of Decree No. 20,686, of December 28, 1999, of the ICMS Regulation of the State of Amazonas.

8. Is this system integrated between sectors (e.g., sales, finance, inventory)?

A: The company does not have an integrated management system. All processes are carried out manually.

9. What difficulties or limitations do you observe in using this system?

A: The main difficulty for the implementation of a management system is the lack of qualified labor. Most employees have a low level of familiarity with technological tools, being considered digitally illiterate, which makes it difficult to use computers and software.

Block 4 – Use of accounting and management information

10. Is accounting information used by managers in strategic decisions?

A: No. The company's accountant only closes the payroll and calculates the Simples Nacional based on an estimated revenue.

11. How do accounting reports help in day-to-day decisions?

A: There are no accounting reports available. The absence of reliable data makes it impossible to use this information in decision-making.

12. What types of information would be most useful to improve management?

A: It would be essential to implement a complete accounting and an integrated management system, including the sales, financial and input inventory modules. The system should allow the centralization of cost centers by activity — such as tickets, packages, food and cargo — and enable apportionment according to operational needs.

Block 5 – Perceptions about controllership

13. Do you have knowledge about the role of controllership in a company?

A: I had no knowledge about the controllership's role until I contacted the company Aquaviários Net, responsible for the proposal to implement a management system.

14. In your opinion, what would be the main benefits of implementing a controllership in Company R?

A: The main benefit would be to know the real profitability of the company, enabling the planning of solid and sustainable growth, in addition to making the business more competitive.

15. What barriers or challenges could hinder this implementation?

A: The main barriers are the deficiency of internet connection, which makes it difficult to use a 100% online system in real time, and the lack of skilled labor, requiring training from the basic level.

Final remark

This script was applied in person to the operations manager of Company R, during the second stage of the field research. The answers were recorded manually and faithfully transcribed, preserving the original content, with minimal language adjustments for academic adequacy.