

Internal and Interorganizational Cost Management and Organizational Performance: Effect of Information Sharing

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Abstract

This investigation aimed to analyze the effect of internal and interorganizational cost management on organizational performance, focusing on understanding the central role of information sharing. To this end, an inferential study was conducted through a survey involving 99 managers and cost coordinators from Brazilian companies. The estimation of variables was performed using a quantitative approach, employing the structural equation modeling method with SmartPLS 4 software. The findings of this investigation demonstrate that companies with internal cost management measures improve their internal processes, thereby generating greater efficiency in the conversion of resources into goods and/or services. When companies apply their internal cost management techniques to their partner companies, firms within the value chain tend to exhibit more efficient interorganizational cost management. Consequently, the need to improve cost management processes leads companies to share their information, resulting in an exchange of information that allows companies to identify market opportunities. Similarly, the sharing of information among companies helps resolve issues, thereby enabling the company to achieve higher organizational performance. This investigation provides insights into information sharing, allowing managers and coordinators to discuss the best market techniques and strategies, thus contributing to the enhancement of company performance.

Keywords: Management involving internal costs. Management involving inter-organizational costs. Information sharing. Organizational Performance.

1 Introduction

Companies are constantly seeking ways to optimize internal work techniques, aiming to reduce the costs associated with processes developed on the production line, realign their work techniques, and seek more detailed information about costs (Fayard et al., 2012; Poffo et al., 2024). In this way, companies have developed internal cost management techniques, resulting in the enhancement of their controls for cost estimation (e.g., raw materials purchased, raw materials consumed, and control over units produced) (Fayard et al., 2012; Ghunaim & Jaaron, 2022).

Internal cost management consists of various controls involving the inputs and materials used on the production line (Poffo et al., 2024). Such controls enable companies to measure their costs accurately and have precise information about movements (e.g., raw materials purchased, raw materials consumed, and control over units produced) (Fayard et al., 2012; Ghunaim & Jaaron, 2022). In this context, increasing competition has driven companies to seek strategies to reduce their costs, and these strategies allow companies to engage in cost management in a collaborative manner (Poffo & Lunardi, 2023).

This strategy enables companies to acquire raw materials at lower prices, and consequently, increase their profits, making them more profitable and achieving superior organizational performance compared to their competitors (Fayard et al., 2012). Joint cost management leads to a reduction in the costs involved in the production process, as it facilitates the negotiation of better terms and allows companies to manage their cash flow more effectively (Hakansson & Lind, 2007).

By opting for joint cost management, collaborating companies should be able to identify advantages, such as making production work techniques more efficient to reduce losses and managing specific resources essential for extending cost controls beyond the company's boundaries (Anderson, 2007; Anderson & Dekker, 2009; Fayard et al., 2012; Poffo et al., 2024). Thus, both internal and joint cost management lead company managers and coordinators to increase their information sharing (Fayard et al., 2012).

Silva and Beuren (2020) and Parker and Kyj (2006) emphasize that information sharing is a strategy adopted by companies that provides greater knowledge to specialists, as it involves the exchange of ideas and perceptions among company members. Information sharing represents the exchange of ideas among company managers and communication among cost specialists, such that the dissemination of information provides specialists with greater knowledge and skills (Dunk, 1993; Herz et al., 2016; Beuren et al., 2019; Silva & Beuren, 2020). Such knowledge and skills enable managers to make decisions that enhance company performance (Silva & Beuren, 2020).

The sharing of information among managers enhances trust due to the exchange of ideas and perceptions, resulting in the production of lower-cost products (Parker & Kyj, 2006; Anderson & Dekker, 2009; Fayard et al., 2012; Oliveira & Beuren, 2024). Companies involved in transactions with other companies (value chain) aim to reduce costs (Anderson & Dekker, 2009). Information sharing is a prerequisite that enables companies to achieve higher performance (Silva & Beuren, 2020).

Dekker and Van Goor (2000) indicate that performance represents a company's ability to be profitable even in uncertain environments. Wijethilake et al. (2018) add that performance results from the difference between actual growth and the growth projected by the company for subsequent periods. Previous research highlights the necessity of information sharing for companies to achieve higher performance; for example, the influence of the need for resources and information sharing on cost management between buyers and suppliers in transport companies (Castanha & Gasparetto, 2022).

The sharing of information and the risks involved in the cooperation network among companies (Beuren et al., 2019; Silva & Beuren, 2020), as well as the influence of conflict management on information sharing and organizational performance (Oliveira & Beuren, 2024). Although previous literature has addressed organizational performance, the constructs involving cost management and joint information sharing in this research bring additional applications to the literature, leading to a research gap. In this regard, the present investigation aimed to analyze the effect of internal and inter-organizational cost management on organizational performance, with a focus on understanding the central role of information sharing.

It is important to highlight that for the development of this investigation, only cost managers and coordinators were considered. According to Poffo et al. (2024), it is essential to question specialists with experience in the cost department to bring forth relevant results. This investigation presents both theoretical and practical contributions, as well as social implications. The research contributes to theory by providing new insights and advancing the findings of Castanha and Gasparetto (2022). This study suggests that information sharing, i.e., the exchange of ideas and perceptions, the ability to seek relevant information, and the application of this information, maximizes the performance of companies.

Advancing on the findings of Poffo et al. (2024), this study demonstrates that, in addition to the information being of high quality, it also needs to be shared among the members of the cost team. Moreover, it shows that beyond internal cost management, the sharing of information enables companies to achieve higher organizational performance. This research further builds on the findings of Oliveira and Beuren (2024) by extending the context of information sharing beyond Brazilian cooperatives.

Practically, it demonstrates that information sharing enhances trust among managers and increases engagement between companies, resulting in greater performance for both. The study highlights that joint cost management is a strategic decision that elevates company performance. Additionally, it contributes to the broader social context by indicating that cost reduction tends to lower the final price of products, which encourages consumer spending. The findings of this investigation may also pique the interest of specialists, academics, and researchers who wish to delve deeper into this topic.

2 Theoretical Framework and Hypothesis Development

The technological development has enabled companies to use innovation to enhance their organizational processes (Poffo, 2023). These innovations have led to the development of systems, allowing companies to employ various controls to manage internal costs, aiming to reduce costs incurred throughout production (Shen et al., 2022). In this regard, many companies have devised strategies to decrease costs involved in the production process along the production line, prompting autonomous companies to engage in transactions with other firms (Anderson & Dekker, 2009). This strategy enables companies to lower costs for acquiring raw materials, thereby increasing their profits and making them more profitable (Fayard et al., 2012).

Internal cost management allows companies to control cost movements, such as purchased raw materials, consumed raw materials, inventories, and production unit controls (Fayard et al., 2012; Ghunaim & Jaaron, 2022). The ability to manage costs jointly provides companies with a competitive advantage (Anderson, 2007).

Managed jointly, costs provide a reduction in the costs involved in the production line and the ability to negotiate better terms, further enabling companies to manage their cash flow (Hakansson & Lind, 2007). When opting for cost management involving joint efforts, collaborating companies should be able to identify advantages, such as making production techniques more efficient to reduce losses and managing specific resources essential for extending cost controls beyond company boundaries (Anderson, 2007; Anderson & Dekker, 2009; Fayard et al., 2012).

The knowledge and experience in using internal cost management resources are extended to build interorganizational cost management resources among production chain partners for the benefit of both companies (Anderson & Dekker, 2009; Fayard et al., 2012). Given this, it is expected that in the Brazilian organizational context, internal cost management will show a positive relationship with joint cost management. Thus, the first hypothesis of this research is presented as follows:

H₁. Internal cost management has a positive relationship with interorganizational cost management.

Internal cost management consists of the procedures used to control internal costs, internal planning, and controls existing within companies (e.g., inventory, expenses, raw material losses, and inputs) (Michels & Zonatto, 2017; Kurisu et al., 2022). Thus, the practice of internal cost management contributes to managing the company's resources and evaluating the resources consumed throughout production lines (Fayard et al., 2012).

Internal cost management encourages managers to explore the organizational circumstances around them, that is, exchanging ideas and perceptions with departmental specialists (Fayard et al., 2012; Michels & Zonatto, 2017). This enables companies to respond to changing conditions more quickly through the knowledge gained from sharing information and experiences among managers regarding internal cost management (Ghunaim & Jaaron, 2022). Moreover, a company can develop knowledge-based resources to effectively utilize these opportunities (Ghunaim & Jaaron, 2022).

The company requires controls to plan and implement strategies and work techniques, thus necessitating sharing information to control costs among companies (Fayard et al., 2012; Michels & Zonatto, 2017). Sharing information enables specialists to gain greater knowledge, allowing for a broader understanding of organizational circumstances (Silva & Beuren, 2020; Oliveira & Beuren, 2024).

Information sharing allows company managers to exchange ideas and perceptions, resulting in greater sharing of experiences, which in turn enables companies to enhance their internal processes (Parker & Kyj, 2006; Boonstra & Vries, 2008; Silva & Beuren, 2020; Oliveira & Beuren, 2024). Regular meetings facilitate the discussion of areas for improvement within the company (Silva & Beuren, 2020), constituting information sharing that facilitates the enhancement of these techniques and work metrics (Michels & Zonatto, 2017; Beuren et al., 2019).

Thus, internal cost management promotes internal cooperation within companies (Michels & Zonatto, 2017), creating a better understanding of work techniques involving cost management that can be improved within them (Herz et al., 2016). In this sense, internal cost management increases information sharing among managers, allowing for a better understanding of work techniques and generating more efficient processes. Therefore, the second hypothesis is formulated as follows:

H₂. Internal cost management has a positive relationship with information sharing.

Costs managed jointly enable companies to optimize processes developed in the production line, allowing them to increase production capacity and reduce costs incurred in production processes (Chang et al., 2016; Michels & Zonatto, 2017). Wouters et al. (2016) emphasize that joint cost management enables companies to procure raw materials in larger quantities and at lower prices, providing them with a higher profit margin compared to competitors.

Fayard et al. (2012) point out that joint cost management allows companies to procure raw materials in larger quantities, enabling negotiation of better prices and longer payment terms. Moreover, Castanha and Gasparetto (2022) demonstrate that joint cost management prompts managers to increase information sharing within companies, given the need for information from both parties.

Information sharing facilitates greater exchange of ideas and perceptions among companies through meetings among members, enabling companies to understand the costs of the companies involved in the production chain (Dunk, 1993; Silva & Beuren, 2020; Oliveira

& Beuren, 2024). Interorganizational cost management leads to information exchange for greater insight and understanding of work techniques and methods applied in cost management among partner companies (Castanha & Gasparetto, 2022).

Furthermore, joint cost management leads to information exchange aimed at providing employees with greater knowledge to develop more effective work (Herz et al., 2016). When information is shared, there is an exchange of knowledge and experiences that facilitates the transfer of metrics and work techniques to other companies in the production chain, thereby improving work techniques and enhancing market understanding (Fayard et al., 2012; Ghunaim & Jaaron, 2022).

Thus, it is perceived that joint cost management increases information sharing among managers, leading to a better understanding of tasks and work metrics, and potentially fostering collaborative dialogue between partner companies and their suppliers. In this regard, the third hypothesis of this research is presented:

H3. Interorganizational cost management has a positive relationship with information sharing.

Sharing information represents the intention of company collaborators to exchange information related to techniques and work metrics within the collaboration network with other company members (Herz et al., 2016; Oliveira & Beuren, 2024). Moreover, information sharing among companies enables those within the production chain to foster greater engagement among stakeholders in work processes (Boonstra & Vries, 2008; Oliveira & Beuren, 2024).

Thus, information sharing enhances awareness among network collaboration managers, clarifying the expectations and characteristics of the involved companies, thereby contributing to improved company performance (Pu et al., 2020). Consequently, it enables managers to understand bottlenecks (e.g., losses and waste) that lead to enhanced performance (Castanha & Gasparetto, 2022). Furthermore, information sharing may lead a company to develop relationships with clients and suppliers, strengthening commercial partnerships and enhancing performance (Pu et al., 2020).

A company's performance is measured by its market share and the return it obtains from investments (Wijethilake et al., 2018). Pu et al. (2020) point out that communication can promote a deeper understanding of organizational strategies and expectations with suppliers, fostering strong partnerships between them and companies.

In this context, it is perceived that, in Brazilian companies, cost department managers who share information with counterparts from partner companies aim to enhance work metrics and develop supplier relationships that lead to improved company performance. This forms the basis of the fourth hypothesis of this investigation:

H4. Information sharing has a positive relationship with organizational performance.

3 Methodology

3.1 Population and Sample

This research comprised several steps, including the selection of the population and data collection for measuring the variables. Fayard et al. (2012) and Poffo et al. (2024) emphasize that studies aiming to understand internal and interorganizational cost management should involve specialists with technical knowledge, skills, and experience in cost estimation techniques due to their complexity.

In this regard, the population of this research consisted of managers and cost coordinators from Brazilian companies. To identify these professionals, LinkedIn was used for

filtering people with "cost manager" or "cost coordinator" jobs. Through this filtering process, 525 professionals who hold roles as cost managers or coordinators were identified.

After identifying the research population, the questionnaire underwent a pilot test phase. The questionnaire used for the pilot test was divided into three parts: a cover letter introducing the survey, the Informed Consent Form, the questionnaire itself including respondent and company characteristics.

Three cost managers or coordinators participated in the pilot test, providing feedback on each question of the questionnaire. They were asked to evaluate each question for clarity and suggest improvements where necessary. Based on their feedback, adjustments were made to ensure clarity in the wording of the questionnaire items.

Following the pilot test phase, the questionnaire was distributed to potential respondents. The questionnaire package sent to respondents included a cover letter explaining the purpose of the research, the questionnaire itself, and sections to collect respondent and company details. The online questionnaire, hosted on QuestionPro, also included the Informed Consent Form clarifying the voluntary nature of participation and the potential publication of collected data in scientific events and journals.

Data collection occurred from December 1, 2022, to January 30, 2023. Out of the 525 invitations sent to potential respondents, 389 were accepted. Ultimately, 101 responses were received, but two were incomplete, resulting in a valid sample of 99 responses and a response rate of 18.85%.

3.2 Tests Applied to the Sample

Given the data collection period, two non-response bias tests were conducted. The first test was the mean comparison test, which involved comparing the first 25% of responses with the last 25% (Af Wählberg & Poom, 2015). The test yielded ($p > 0.05$), indicating no response bias issues in the data. The second test was Harman's single-factor test (Podsakoff & Organ, 1986). This involved conducting a principal component factor analysis on items measuring the four variables in the study. The results showed 22.287% (ideal < 0.50), demonstrating no common-method bias in the sample (Podsakoff & Organ, 1986).

3.3 Estimation of Variables

For the questionnaire application, validated constructs from previous literature were utilized. The variables of internal cost management (13 items) and interorganizational cost management (16 items) were based on the constructs by Fayard et al. (2012). The information sharing variable was operationalized using Dunk's construct (1993), and for organizational performance, the construct by Wijethilake et al. (2018) was employed. Both constructs were applied using a Likert scale (seven points) ranging from (1) completely disagree to (7) completely agree. Additionally, a control variable was included for companies with integrated cost management (CGCIN) for further analysis, as these companies engage in joint cost management to enhance their performance (Fayard et al., 2012). The control variable was operationalized using a dummy variable (1 for companies with integrated cost management and 0 otherwise).

3.4 Procedures Applied in Data Analysis and Interpretation

The estimation of the data was conducted using the structural equation modeling (SEM) technique. Faul (2009) suggests that in survey research, it is essential to estimate the minimum required number of respondents to ensure the sample validity. Therefore, G*Power 3.1 software was employed to determine the medium effect size (f^2) of 0.15, α error probability of 0.05, power ($1 - \beta$ error probability) of 0.80, considering 2 predictors with the highest number of arrows. Based on this, a minimum sample size of 77 responses is required for this study (Faul *Internal and Interorganizational Cost Management and Organizational Performance: Effect of Information Sharing* 96

et al., 2009). Given that the sample consists of 99 responses, the application of SmartPLS4 software is appropriate. It is noteworthy that bootstrapping with 5,000 samples and a 95% confidence interval was used to calculate indirect and total effects.

4 Research Results

4.1 Characterization of Companies and Respondents

This section addresses the characterization of companies and respondents in this investigation. The majority of cost managers or coordinators are male, accounting for 71.72%, followed by 28.28% who identified as female. A large portion of the sample in this study holds a degree in accounting, 84.84%, suggesting that an accounting background may be seen as a prerequisite for specialists wishing to work in the cost department.

Forty percent of managers/coordinators fall within the age range of 36 to 45 years old, possibly due to the managerial role typically being assigned to professionals with substantial practical experience in the market (Poffo et al., 2024). Regarding tenure in their current role, 47.48% of respondents reported having between 6 and 15 years of experience as cost coordinators/managers. Additionally, 15.15% and 13.13% indicated having between 16 and 20 years, and over 21 years of practical experience, respectively.

Furthermore, 37.37% stated they have been employed by their company for between two and five years, followed by 24.24% who have been with their company for one year. Concerning joint cost management practices, 75.76% stated that their company engages in interorganizational cost management. The majority of companies, 63.64%, employ over 500 employees, with 30.30% having between 100 and 500 employees. However, the majority of companies, 75.76%, are not publicly listed.

Regarding company longevity, 43.44% of the companies have been in the market for between 26 and 50 years, and another 18.18% have been active for over 75 years. The largest segment of companies are in the industrial sector, 49.49%, followed by commercial and industrial at 26.26%. Moreover, 74.74% of the companies have revenues exceeding 40 million, indicating that the study sample comprises large companies, with 9.10% preferring not to respond to this question.

4.2 Measurement of Data

This section presents the information guiding the estimation of variables. As shown in Table 1 (Panel A), descriptive statistics including means and standard deviation (SD), reliability (Cronbach's Alpha > 0.70 and Composite Reliability – CR > 0.70), and convergent validity (Average Variance Extracted – AVE > 0.50) meet the minimum expected criteria (Hair Jr. et al., 2017).

Panel B demonstrates the discriminant validity of the model using the Heterotrait-Monotrait Ratio of Correlations – HTMT metric, which remained below the recommended threshold (< 0.90), supporting the discriminant validity of this research (Hair Jr. et al., 2017). Additionally, in Panel C, the coefficient of determination (R²) and the test for multicollinearity (Variance Inflation Factor – VIF) are presented, with VIF values below the expected threshold (< 5.000), indicating no issues of multicollinearity in the estimation of variables in this investigation (Hair Jr., 2017).

Table 1
Descriptive statistics of the variables

| Panel A: Descriptive Statistics, Reliability, and Convergent Validity | | | | | |
|--|---------|------|-------|-------|-------|
| Variables | Average | (DP) | Alpha | CR | AVE |
| Internal Cost Management | 5.2 | 1.26 | 0,913 | 0,930 | 0,625 |
| Information Sharing | 4.9 | 0.99 | 0,773 | 0,897 | 0,817 |

| | | | | | |
|-------------------------------------|-----|------|-------|-------|-------|
| Interorganizational Cost Management | 5.9 | 0.74 | 0,933 | 0,943 | 0,625 |
| Organizational Performance | 5.9 | 0.74 | 0.877 | 0.916 | 0.732 |
| Integrated Cost Management (CGCIN) | - | - | - | - | - |

Panel B: Discriminant Validity – HTMT

| Variables | CI | DO | GCI | GCIN |
|--|-------|-------|-------|------|
| 1. Information Sharing | | | | |
| 2. Organizational Performance | 0.513 | | | |
| 3. Interorganizational Cost Management | 0.482 | 0.643 | | |
| 4. Internal Cost Management | 0.430 | 0.639 | 0.754 | |

Panel C: R2 and VIF

| Variable | R ² | VIF |
|---|----------------|-------|
| 1. Information Sharing | 0,216 | 1,105 |
| 2. Interorganizational Cost Management. | 0,399 | 1,110 |
| 3. Organizational Performance | 0,334 | 1,156 |

Source: Prepared by the authors based on the results of the research (2024).

According to Hair Jr. et al. (2017), factor loadings of construct items should exceed 0.500, as values above 0.500 indicate the validity of the estimation model. Therefore, it was essential to exclude seven items from the questionnaire where factor loadings were below 0.500. Five items from internal cost management (GCI_3, GCI_4, GCI_7, GCI_8, and GCI_10) and two items from interorganizational cost management (GCIN_1 and GCIN_10) were removed. It is also noted that the removal of these items did not diminish the construct's ability to determine the variable.

4.3 Presentation of Results

Table 2 presents the hypotheses investigated in this study. In Panel A, direct effects are shown, and in Panel B, indirect effects are presented, with their respective beta coefficients, t-statistics, and p-values. The estimation results indicate that the hypotheses were not rejected. Thus, internal cost management enables companies to improve their interorganizational cost management processes (H₁) (β 0.730; p-value 0.000), and similarly, internal cost management leads companies to share information (H₂) (β 0.366; p-value 0.000).

Table 2
Measurement of Variables

| Panel A: Direct Effect | | | |
|--|------------------|--------------|---------|
| Relationships | Beta coefficient | t statistics | p-value |
| GCI → GCIN | 0.730 | 12.759 | 0.000 |
| GCI → CI | 0.366 | 3.577 | 0.000 |
| GCIN → CI | 0.501 | 3.550 | 0.000 |
| CI → DO | 0.352 | 4.808 | 0.000 |
| CGCIN → DO | 0.361 | 4.982 | 0.000 |
| Panel B: Indirect Effect / Additional Testing | | | |
| Relationships | Beta coefficient | t statistics | p-value |
| GCI → CI → GCIN | 0.129 | 2.601 | 0.009 |
| GCI → GCIN → CI | 0.143 | 3.307 | 0.021 |
| GCIN → CI → DO | 0.355 | 3.432 | 0.001 |
| GCI → GCIN → CI → DO | 0.105 | 2.211 | 0.027 |

Note 1: R2: 0.02 = small; 0.13 = medium; 0.26 = large (Cohen, 1988).

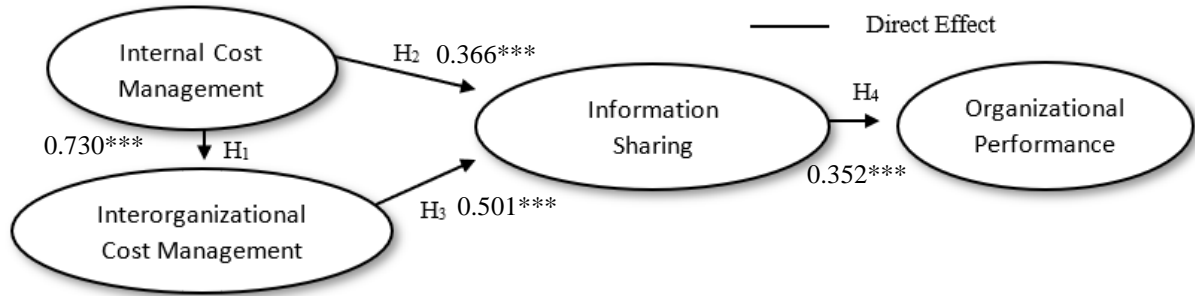
Nota2: * p < 0.10; ** p < 0.05; *** p < 0.01.

Source: Prepared by the authors based on the results of the research (2024).

Following this, there is the connection between interorganizational cost management and information sharing (H₃). The results showed that cost managers or coordinators seek to exchange ideas with their superiors to improve work processes (β 0.501; p-value 0.000). *Internal and Interorganizational Cost Management and Organizational Performance: Effect of Information Sharing* 98

Information sharing allows cost managers or coordinators to exchange ideas and perceptions about information covering opportunities and issues faced by the company, which consequently enhances company performance, with (H₄) not being rejected. Finally, an additional test (β 0.129; p-value 0.009) indicated that managers who share information aiming to disseminate information and knowledge among company members contribute to the application of techniques involved in estimating internal costs within partner companies of the company.

Figure 1
Relationships investigated



Source: Prepared following the investigated relationships (2024).

4.4 Additional Analysis

In order to examine the relationships among the variables considering only the companies that operate within a production chain, data measurement was conducted considering the 75 companies that have integrated cost management systems (production chain). Thus, the measurement involved assessing the relationships between internal and interorganizational cost management and information sharing, and their relationship with organizational performance. The results demonstrated that internal cost management significantly enhances interorganizational cost management (β 0.821; p-value 0.000). Furthermore, information sharing was found to be crucial for the organization to achieve organizational performance among companies that work with integrated cost management (β 0.498; p-value 0.000).

4.5 Discussion of Research Findings

The findings of the research demonstrated a positive relationship between internal cost management and interorganizational cost management. Shen et al. (2022) emphasize that internal cost management involves various controls, including direct and indirect costs, fixed and variable costs, manufacturing costs, and inventory costs. Companies that engage in shared cost management have the opportunity to work together to refine their control techniques, making cost management more efficient (Anderson & Dekker, 2009; Fayard et al., 2012).

These results validate prior literature by describing how companies can identify potential flaws in cost management metrics across companies, prompting them to improve their data sharing processes (Anderson & Dekker, 2009; Fayard et al., 2012). Thus, the knowledge and skills of cost department managers and coordinators can generate shared knowledge and contribute to more efficient cost management for companies involved in the production chain (Anderson & Dekker, 2009; Fayard et al., 2012).

Next, it is understood that various procedures such as planning, expense controls, and raw material and material losses prompt managers to engage in dialogue, as information sharing enables companies to enhance their internal work techniques. These findings corroborate with previous literature, indicating that companies with internal work techniques need to seek information to improve their internal processes (Fayard et al., 2012; Michels & Zonatto, 2017).

Furthermore, information sharing enhances knowledge about internal cost calculation techniques (Castanha & Gasparetto, 2022). Sharing information among departments such as procurement, production, and billing is essential for developing internal cost management (Da Silva et al., 2023). Thus, internal cost management increases information sharing, emphasizing the need for communication among departments to ensure continuity and improvement of internal work techniques (Dekker et al., 2013; Da Silva et al., 2023).

Similarly, interorganizational cost management contributes to increased information sharing, as opting to work jointly in production lines requires managers and coordinators to dialogue to understand differences between companies. Companies that choose to jointly control their costs need to share information so that both can understand the processes and metrics involved in their operations, as well as improve these metrics (Castanha & Gasparetto, 2022; Oliveira & Beuren, 2024).

Thus, joint cost management leads managers and coordinators to exchange information and insights to better understand difficulties and process divergences. This includes addressing issues in production lines (for example, learning about better ways to perform activities) and coordinating meetings on product marketing. Furthermore, joint cost management increases information sharing with suppliers, strengthening commercial agreements and contributing to enhanced company performance.

Subsequently, the results demonstrated that information sharing enables companies to achieve greater organizational performance. These findings validate previous literature by highlighting that information sharing can help companies develop relationships with customers and suppliers, enhancing commercial partnerships and leading to improved performance (Pu et al., 2020). Therefore, exchanging ideas and information in meetings allows management to develop more efficient work measures aimed at increasing company performance (Castanha & Gasparetto, 2022).

Information sharing allows management to understand bottlenecks within companies and take measures to reduce losses, thus enhancing organizational performance (Castanha & Gasparetto, 2022). Panel B of Table 2 presents additional tests (indirect relationships) where information sharing positively mediates the relationship between internal cost management and interorganizational cost management.

Thus, this test demonstrates that the shared information among companies in the Brazilian organizational context leads to greater knowledge and competence, enabling metrics and work techniques to be transferred to other companies (Fayard et al., 2012). This provides companies with improved work techniques (Ghunaim & Jaaron, 2022). Sharing information enables companies to solve internal problems, leading to optimization of work and production techniques (Michels & Zonatto, 2017). Open dialogue also enables companies to develop open-book management (Fayard et al., 2012; Castanha & Gasparetto, 2022).

Furthermore, it involves deeper analysis, such as "trade-offs, functionality, price, and quality," aiming to develop products that offer functionality, quality, and affordable prices to the population (Castanha & Gasparetto, 2022). Similarly, the results showed that companies with internal cost management and who apply their processes in joint cost management demonstrate better information sharing. In this sense, when organizations develop joint cost management, there is a need to share information to enhance work processes (Herz et al., 2016; Michels & Zonatto, 2017).

Following this perspective, when companies engage in joint cost management, information sharing provides cost managers or coordinators with a deeper understanding of partner companies' work processes (Michels & Zonatto, 2017; Ghunaim & Jaaron, 2022). Thus, aligning work processes makes companies more efficient as, through information, they can identify where their losses and wastes are allocated within the production line and seek solutions to minimize them (Boonstra & Vries, 2008; Fayard et al., 2012; Castanha & Gasparetto, 2022).

Additionally, as shown in Table 2, measurement results involving the control variable indicated that companies with integrated cost management exhibit higher organizational performance. In this regard, companies that analyze functionality, price, and quality to develop joint cost management, engage in open-book accounting, and focus on inventory level controls (Just-in-Time, for instance), demonstrate higher organizational performance (β 0.361; p-value 0.009).

Table 3
Relationships tested in research

| Research hypotheses | Relationships p |
|---|--------------------|
| H ₁ . Internal cost management has a positive relationship with interorganizational cost management. | Not Rejected |
| H ₂ . Internal cost management has a positive relationship with information sharing. | Not Rejected |
| H ₃ . Interorganizational cost management has a positive relationship with information sharing. | Not Rejected |
| H ₄ . The sharing of information has a positive relationship with organizational performance. | Not Rejected |

Source: Prepared by the authors based on the results of the research (2024).

More broadly, this research demonstrates the perspectives held by Brazilian companies' cost managers and coordinators regarding the variables investigated in this study. As shown in Table 3, all four hypotheses of this investigation were not rejected. Thus, these results indicate that companies with well-defined internal cost management processes tend to achieve greater success in developing joint cost management.

Both internal management and jointly developed cost management increase information sharing among managers, fostering the exchange of ideas and insights aimed at addressing company issues (for instance, learning better ways to perform activities). Information sharing also enables managers to understand production line bottlenecks, leading them to implement measures to reduce costs and enhance organizational performance. Finally, information sharing allows companies to apply their internal work metrics to partner companies.

5 Conclusions

The present investigation sought to analyze the effect of internal and interorganizational cost management on organizational performance, aiming to understand the central role of information sharing. To achieve this research objective, an inferential investigation was conducted using a survey technique with 99 participants, representing specialists with experience in the cost department of Brazilian companies. The sample included cost coordinators and managers. Structural equation modeling was employed with the assistance of SmartPLS 4 software.

To address the research objective, four research hypotheses were developed. Following the application of structural equation modeling techniques, all hypotheses were not rejected. Therefore, companies that extend their work metrics and techniques to other companies within the production chain can manage their joint costs more efficiently, promoting increased production and reduced production costs.

Similarly, the estimation data demonstrated that internal cost management enhances information sharing, prompting experts from various departments within the company to seek information to expand their knowledge. The same applies to joint cost management, where managers share information to improve work processes, thereby enhancing their skills and knowledge to identify and minimize potential losses. These factors facilitated by information sharing also enable the company to achieve higher performance.

Information sharing enables company experts to manage joint costs more effectively, as the exchange of ideas and insights provided by information sharing empowers managers with greater knowledge to enhance their work. Information sharing also provides departmental experts with greater knowledge and skills, contributing to increased confidence among specialists. Thus, shared information enables companies to operate with open-book management, providing specialists with more specific insights into their activities.

This research has several limitations, as it is characterized by non-probability and convenience sampling, which may compromise the representativeness of the sample. The Likert-type scales (7-point) used in the questionnaire for data collection may introduce response bias. The methodological procedure of this research employs an exclusively quantitative approach, which may limit the understanding of certain concepts (such as interorganizational cost management).

Therefore, future research is necessary to comprehensively understand cost management. One option could be to incorporate risks associated with joint cost management into the model, to understand the behavioral factors that may reduce information sharing. Additionally, it is recommended to investigate the relationship between information sharing, internal and interorganizational cost management qualitatively. Hence, further research is needed to comprehend the factors influencing the utilization and sharing of information, costs, and performance in Brazilian companies.

Financing

This research does not have a funding body.

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APPENDIX

Table 4
Construct of the research and its respective factor loadings.

| Variable | Item | Average | Error Deviation | Mín | Máx | Factor Loadings | |
|--------------------------------------|--------|--|-----------------|------|------|-----------------|-------|
| Internal Cost Management | GCI1 | Cost information determines whether costs are fixed or variable | 6,21 | 1,28 | 1,00 | 7,00 | 0,716 |
| | GCI2 | Performance standards and budgets are useful for managing or controlling internal costs within our company | 6,28 | 1,27 | 1,00 | 7,00 | 0,814 |
| | GCI3* | Activity-Based Costing (ABC) are used to determine the costs associated with specific activities | 5,22 | 1,91 | 1,00 | 7,00 | 0,842 |
| | GCI4* | Cost information associated with specific activities is used to manage the costs of activities and processes (i.e., Activity-Based Management) | 5,74 | 1,56 | 1,00 | 7,00 | 0,489 |
| | GCI5 | Use Kaizen or other continuous improvement processes | 5,36 | 1,69 | 1,00 | 7,00 | 0,719 |
| | GCI6 | Cost target in internal planning, design, and development of products or services | 5,81 | 1,50 | 1,00 | 7,00 | 0,755 |
| | GCI7* | An analysis of internal value chain activities as part of our internal cost management | 5,66 | 1,51 | 1,00 | 7,00 | 0,497 |
| | GCI8* | Business process redesign (reengineering) to manage costs | 5,60 | 1,43 | 2,00 | 7,00 | 0,482 |
| | GCI9 | Similar processes are used to manage costs associated with quality | 5,56 | 1,39 | 2,00 | 7,00 | 0,830 |
| | GCI10* | Non-financial measures of performance, such as those in a balanced scorecard, as part of our internal cost management processes | 5,02 | 1,63 | 1,00 | 7,00 | 0,498 |
| | GCI11 | Activity Based Costing (ABC) are used to assess our internal costs to be worked out with our supply chain partners | 4,64 | 2,03 | 1,00 | 7,00 | 0,685 |
| | GCI12 | We use measures of the efficiency of the processes that convert our resources (such as material, labor, and/or overhead) into goods and/or services | 5,75 | 1,44 | 2,00 | 7,00 | 0,674 |
| | GCI13 | Inventory management procedures are used to manage and control work-in-process, goods, or other internal inventory costs | 5,78 | 1,48 | 1,00 | 7,00 | 0,749 |
| Inter-Organizational Cost Management | GCIN1* | Made analyses of the interorganizational cost information to determine whether the costs are fixed or variable | 5,53 | 1,66 | 1,00 | 7,00 | 0,473 |
| | GCIN2 | Developed common demand, sales, or loss forecasts | 5,75 | 1,35 | 1,00 | 7,00 | 0,729 |
| | GCIN3 | Measured inter-organizational costs as a function of the activities that drive the costs (we apply Activity-Based Costing to inter-organizational costs) | 4,95 | 1,87 | 1,00 | 7,00 | 0,726 |
| | GCIN4 | Used information about the activities that generate interorganizational costs | 4,83 | 1,98 | 1,00 | 7,00 | 0,747 |

| | | | | | | | |
|----------------------------|----------|--|------|------|------|------|-------|
| | | to manage and control those activities. (we apply Activity-Based Management for cross-organizational costs) | | | | | |
| | GCIN5 | Engage in continuous improvement processes (Kaizen) to control inter-organizational costs | 5,19 | 1,63 | 1,00 | 7,00 | 0,842 |
| | GCIN6 | Use cross-organizational cost-target processes to meet market prices for our product, providing a profit margin for our company and our partner | 5,29 | 1,63 | 1,00 | 7,00 | 0,783 |
| | GCIN7 | Engage in cross-organizational cost investigations in order to analyze the cost structure of processes/products that impact both firms | 5,61 | 1,56 | 1,00 | 7,00 | 0,818 |
| | GCIN8 | Engage in the analysis of "functionality, price, and quality trade-off" to manage joint costs to deliver an appropriate level of functionality, price, and quality | 5,27 | 1,48 | 1,00 | 7,00 | 0,789 |
| | GCIN9 | Engage in open-book accounting | 4,96 | 1,71 | 1,00 | 7,00 | 0,798 |
| | GCIN 10* | Reshape business processes to manage and control cross-organizational costs | 5,31 | 1,55 | 1,00 | 7,00 | 0,491 |
| | GCIN11 | Use processes to manage and control inventory levels (JustIn-Time) to control cross-organizational costs | 5,34 | 1,59 | 1,00 | 7,00 | 0,791 |
| | GCIN12 | Share common assets with our partner or place assets at our partner company location to coordinate activities and/or reduce costs | 4,82 | 1,70 | 1,00 | 7,00 | 0,810 |
| | GCIN13 | Place employees on-site with each other for the purpose of coordinating activities and collaborating on product or service plans, design, or development | 4,43 | 1,92 | 1,00 | 7,00 | 0,685 |
| | GCIN14 | It is promoted to develop inter-organizational cost management collaborative activities to manage and control the overall costs of both companies | 5,06 | 1,71 | 1,00 | 7,00 | 0,857 |
| | GCIN15 | Analyzes and manages our overall supply chain or value chain costs that extend beyond our company and our partner's company | 5,03 | 1,72 | 1,00 | 7,00 | 0,868 |
| | GCIN16 | Work is done to manage quality costs at current inter-organizational value | 5,32 | 1,66 | 1,00 | 7,00 | 0,861 |
| Organizational Performance | DO1 | We have been increasing our market share. | 5,97 | 1,22 | 1,00 | 7,00 | 0,818 |
| | DO2 | The satisfaction of our customers is higher. | 6,03 | 1,14 | 1,00 | 7,00 | 0,841 |
| | DO3 | We get a higher return on investment. | 5,88 | 1,30 | 1,00 | 7,00 | 0,904 |
| | DO4 | Our level of profitability is higher. | 5,83 | 1,32 | 1,00 | 7,00 | 0,853 |
| Information Sharing | CI1 | I share my ideas with my superior about the situation in my area of responsibility. | 6,68 | 0,92 | 1,00 | 7,00 | 0,865 |
| | CI2 | I communicate information to my superiors about the opportunities and problems facing the organization. | 6,21 | 1,14 | 1,00 | 7,00 | 0,869 |

| | | | | | | |
|-----|---|------|------|------|------|-------|
| CI3 | Information is shared with superiors that helps solve problems in the organization that involve cost management (to learn about better ways to perform activities). | 5,03 | 1,40 | 1,00 | 7,00 | 0,584 |
|-----|---|------|------|------|------|-------|

Legend: Min: Minimum; Max: Maximum.

Note 1: * Represents an item excluded in the process of measuring variables.

Source: Extracted from Smart PLS software from survey data (2024).