



# Management Accounting Practices In Indian Universities: A Comparative Study Between Public And Private Sectors

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## ARTICLE INFO

## ABSTRACT

We used a mixed method and experimented with the features of the web-based online system Moodle applied in four management courses offering business economics course with more than 400 students per trimester at Birla Institute of Management Technology (BIMTECH), Greater Noida, a premier Private B-School in India. The study assesses Moodle, e-Mail, and a self-developed Knowledge Management System based on Network Address Translation (NAT) platforms. The major contributions of this study are as follows: First, it adapts Moodle an online Learning Management System (LMS) platform for conducting web-based external examinations smoothly. Second, it compared the outcomes of three modes of external examinations, i.e. Offline, Online, and Hybrid and their relevance in the digital era. Third, it provides an option of a self-contained assessment tool for fair and better results. Thus, the innovative design saved the efforts of both teachers and students, demonstrating its future implications and effectiveness in higher education.

**Keywords:** Management accounting, Public universities, Private universities, Perceptions, Comparative study.

## 1. INTRODUCTION

The two scholastics and experts have started to challenge the predominant standard administration accounting thinking during the beyond a decade. It has been recommended that the quick advancement of new advances, changes in the expense designs of organizations, and changes in the climate of contest and creation will come down on administration accounting techniques to adjust. Late observational examination led in western countries shows that administration accounting should adjust to supervisors' moving necessities assuming it is to stay significant in the present progressively globalized economy. The capacity of the board bookkeepers in western countries to change new administration accounting strategies to advancing innovation and techniques for creation in assembling firms has periodically experienced harsh criticism (see, for example, Johnson and Kaplan, 1987; Ansari, 1997). As per Kharbanda and Stallworth (1991), Japanese organizations have generally been effective in carrying out these practices, and they have ruled as far as worldwide seriousness since they changed their organizations to be more cutthroat by executing mechanization, cost control, nonstop improvement, and cooperative choice making. The ongoing circumstance of the executives accounting strategies in agricultural countries like India isn't surely known. It is attested that Indian assembling ventures require some investment executing new administration accounting techniques in view of social contemplations. All things being equal, they put a ton of accentuation on traditional administration accounting procedures. No orderly information about the strain for change in the administration accounting techniques among Indian undertakings is known, except for the consequences of a little example study (Anderson and Lanen, 1999)<sup>1</sup>. An examination between India, an arising economy, with the UK, a laid out economy, could assist with featuring the differences in these economies' ways to deal with and results from change. As per Anderson and Lanen (1999; Haldma and Laats (2002), the principal factors causing change in administration accounting techniques in creating economies are changes to the overall political and monetary frameworks. Moreover, the way that conventional administration accounting

systems actually prevail in most of associations is a typical trait of momentary economies. Furthermore, present day administration accounting strategies like action based costing (ABC), entire life cycle costing, the reasonable scorecard, and so on get next to zero consideration in momentary economies. Thusly, this study endeavors to investigate the executives accounting frameworks in Indian associations and investigate the reasons for this turn of events.

### 1.1. Objectives

- To investigate the perceptions of management accountants or management accounting function held by public and private university managements.
- To assess the level of market orientation exhibited by public and private universities and determines any significant variations between them.

## 2. LITERATURE REVIEW

The employment of a practical and scientific strategy to attain target costs in management accounting in industrial enterprises is discussed by Sokolov, A. Y., and Giniatullin, Y. (2015). They offer an algorithm to fill in the gaps and bring the planned and forecasted cost of the product to the desired figure. Many variations of the integrated management accounting system have been investigated on the basis of the method for calculating the target cost of the product. Present are the techniques for cost optimization within the confines of the target cost of the product specification.

Neizvestnaya, D. V., and Antonova, N. V. (2015) evaluated the accounting practices now utilized by river transportation companies severely. The authors provide evidence that management accounting is essential for organizing, monitoring, and evaluating inland shipping businesses' operations. They also provide a management accounting approach based on the E. Schwarz methodology. These benefits apply to the suggested integrated cost system approach: The framework makes it possible to identify any deviations from the arrangement and make the appropriate move, which improves the viability of the organization and benefits the executives. It takes into account the distinctive characteristics of businesses that transport water. Key Account Management (KAM) programs help firms execute their capacity to accomplish a number of financial and non-financial performance measures. Davies and Ryals, J. (2014) explored the extent of KAM programs. The study considers a range of KAM methods and links the extrapolation potential of these methods to nine targeted efficacy criteria. It does, however, provide a deeper grasp of how practices and effectiveness measures might be used than earlier models. The statistical research shows that during the considerable time lag, customer outcomes such as enhanced customer satisfaction, relationship improvement, and joint investment have a lower likelihood than trader benefits such as better revenue, higher profit margins, or cost efficiencies. The results show that the extent to which KAM techniques are institutionalized across the organization is significantly connected with each of the nine effectiveness measures.

Examination of the executives accounting processes with regards to the association's inner and outer business climate is critical, as indicated by Waweru et al. (2004). A more noteworthy cognizance of the change interaction will result from this. The cutthroat environment, innovation, authoritative plan and scale, among other natural and hierarchical viewpoints, are straightforwardly connected with the plan of the executives accounting frameworks, as per the writing presently on paper.

Mbawun, J., and Anertey, A. R. (2014) examined the ways in which Ghanaian telecoms companies employ different management accounting methodologies. The expanding importance of the telecommunications sector, which is also characterized by regional and global rivalry, rising costs, and diminishing profitability, served as the impetus for this research. The breadth and motivations for the usage of various management accounting procedures in the Ghana Mobile Telecom Industry (GMTI) were examined by the writers. The authors gathered pertinent information from 37 accounting and finance experts via a cross-sectional survey from renowned telecoms company MTN Ghana. According to the producers' review, the most popular group or category of guides is critical examination practice, which demonstrated a higher relative use rate than earlier studies. They also asserted that MTN Ghana uses conventional budgeting techniques and financial measurements more frequently than non-financial ones. Activity-based costing and departmental overhead rates are two of the few costing techniques that MTN Ghana uses. However, this study clarifies how telecom corporations use MAPs in developing countries' burgeoning marketplaces.

A few inside and outer components have been distinguished by Clenhall and Euske (2007). They underscore industry structure (cutthroat technique), serious and dynamic commercial centers, innovation, and so on as the outer components and item recognizing system (item customization), hierarchical design, authoritative expertise, and so forth as the inner ones.

The most effective method to deal with the major ecological costs according to a bookkeeping point of view was covered by Huei-Chun Chang (2013). Three Taiwanese schools investigated how they currently deal with the expenses related with utilizing power, water, delivering proposals, and creating junk. The costs referenced above were alluded to be "major" ecological expenses for the reasons for this review. Considering that the examination was exploratory, the report was written in a subjective, contextual investigation design. A various case procedure was utilized in the review to look at three Taiwanese organizations. The fundamental

approach to gathering information was through face to face meets. Among the assets inspected were the monetary records, yearly reports, smart courses of action, supportability reports, and content on the sites of the three associations. The discoveries recommended that none of the three colleges utilized ecological administration bookkeeping to represent their impressive natural expenses. Indeed, even according to a bookkeeping viewpoint, ecological execution actually should have been gotten to the next level.

### **3. RESEARCH METHODOLOGY**

The analytical methods used are described in the section on data analysis that follows.

#### **3.1. Research Design**

The plan or approach that a researcher prepares to direct the research study is referred to as the research design. In addition to describing the overall design of the study, it also covers the procedures and methods that will be utilized to gather and analyze data. The research is cross-sectional and descriptive.

#### **3.2. Research Approach**

The broad method a researcher employs to respond to a research question or objective is referred to as a research methodology. The research is cross-sectional and descriptive. There are numerous research methods that can be applied.

#### **3.3. Target Population**

The analytical units are groups of public and private institutions. Data, however, has been acquired at the individual level and then aggregated into group data for comparisons between the two groups. The top executives or their assistants in charge of financial issues, as well as the directors of finance or those with a title close to that, are among the people who submitted information.

#### **3.4. Sampling Unit**

The Top 19 Private Universities in India and the Top 14 Public Universities in India that were chartered, licensed, or authorized by the proper Indian higher education-related institution made up the study's sample population. The Sample size of the study is 440 employees.

#### **3.5. Sampling Design:**

The sample for the study consisted of the 19 Private Universities and 14 Public Colleges in India that were certified by the India Commission for Universities in 2023. Because the universe is so small, a census survey rather than a representative sample has been conducted; this has prevented random sampling errors. The sample approach for this inquiry will be stratified random sampling. Within the population, there will be two strata—public and private universities.

#### **3.6. Source of Data Collection**

##### **3.6.1. Primary data**

Primary data will be data that has been acquired by request or exploration straightforwardly from its source. This data is new and has never been assembled, distributed, or inspected previously. Various procedures, including reviews, interviews, perceptions, analyses, and center gatherings, can be utilized to assemble essential information. The data assembled can be utilized to test speculations, give replies to investigate issues, and assist with peopling pursue very much educated choices.

##### **3.6.2. Secondary data**

Data that has previously been accumulated by one more party for an alternate design is alluded to as optional information. Numerous sources, including government organizations, market research companies, academic studies, and others, may provide this data.

#### **3.7. Tools used for Data Analysis**

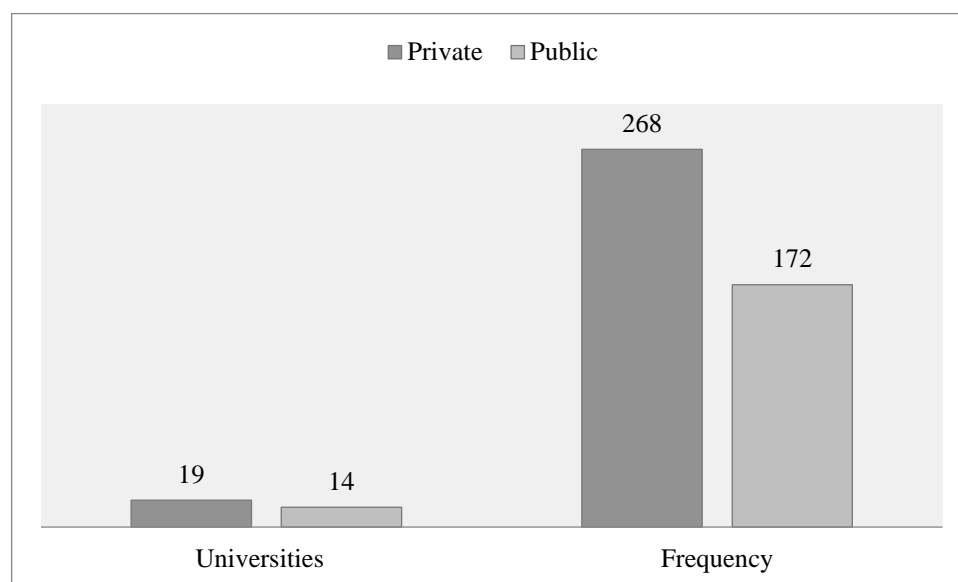
Data analysis has been done using a variety of methods. The statistical program utilized for the data analysis was SPSS. The tactics used depended on whether or not the scale was Likert-type and whether it was nominal, ordinal, or interval. The next subsections provide descriptions of the data analysis techniques employed in this study. In the first subsection, demographic characteristics are examined. The discussion that follows is about scales of the Likert kind and inferential sample independent t-test has been used for testing the Hypothesis.

#### 4. DATA ANALYSIS

##### Perceptions of Management Accountants/Function

**Table 1: Perceived importance of the management accounting function**

Sector	Universities	Frequency	Percentage
Private	19	268	65%
Public	14	172	35%
Total	33	440	100%



**Figure 1: Perceived importance of the management accounting function**

The table offers details on the sector-specific (private and public) perceptions of the function of management accounting at universities. Thirty-three universities in total were involved in the survey, with 19 from the commercial sector and 14 from the public sector. Private universities account for 268 cases per year, or 65% of all incidents. Public universities, on the other hand, have 172 cases per frequency, or 35% of the total. According to these findings, 65% of the universities in the sample that are in the private sector regard the management accounting function to be important, compared to 35% of the universities that are in the public sector. This implies that private institutions could emphasize management accounting's importance more heavily in their operations and decision-making procedures.

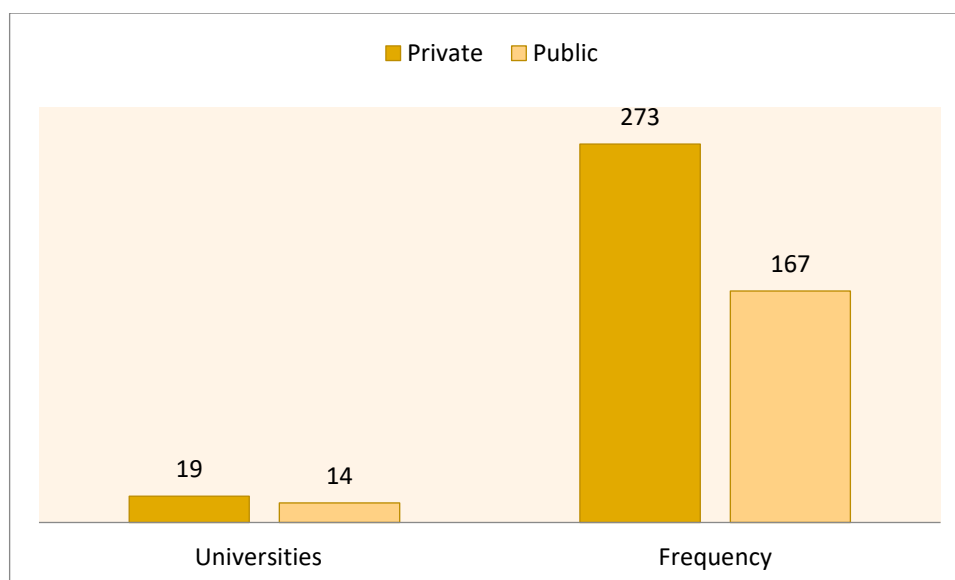
**Table 2: Level of collaboration and integration between management accounting and other departments/functions**

Sector	Universities	Frequency	Percentage
Private	19	273	62%
Public	14	167	38%
Total	33	440	100%

According to sector (private and public), the table shows data on the degree of coordination and integration between the management accounting function and other university departments/functions. Thirty-three universities in total were involved in the survey, with 19 from the commercial sector and 14 from the public sector. Private universities account for 273 occurrences, or 62% of the total, in terms of frequency. Public universities, on the other hand, have 167 cases per frequency, or 38% of the total. Based on these findings, it can be concluded that 62% of the private sector universities in the sample have higher levels of collaboration and integration between the management accounting function and other departments/functions than the 38% of universities in the public sector. This implies that private colleges might give management accounting more weight when combining it with other aspects of their operations and decision-making procedures.

**Table 3: university consider management accountants as strategic partners in decision-making processes**

Sector	Universities	Frequency	Percentage
Private	19	233	53%
Public	14	207	47%
Total	33	440	100%



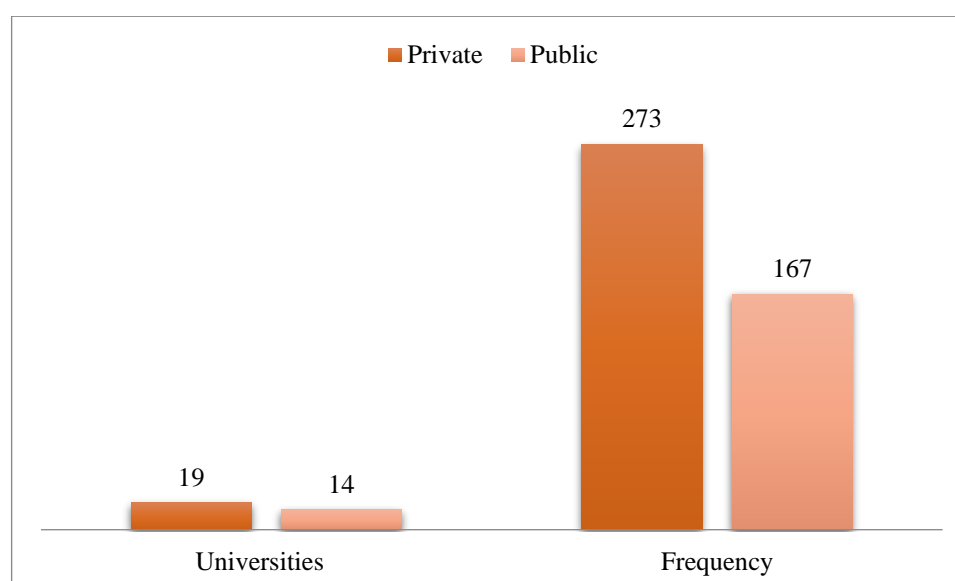
**Figure 2: University consider management accountants as strategic partners in decision-making processes**

The table gives data on how universities view management accountants' position as strategic collaborators in decision-making processes, broken down by sector (private and public). Thirty-three universities in total were involved in the survey, with 19 from the commercial sector and 14 from the public sector. Private universities account for 233 cases every year, or 53% of all incidents. Public universities, on the other hand, account for 47% of the overall frequency with 207 cases. This information suggests that, compared to the public sector, which accounted for 47% of the universities in the sample, a higher percentage, 53%, of the institutions in the private sector view management accountants as strategic partners in decision-making processes. This shows that private colleges may be more aware of the strategic value that management accountants contribute to their businesses' decision-making processes.

### Market Orientation

**Table 4: Level of market orientation exhibited by your university**

Sector	Universities	Frequency	Percentage
Private	19	273	62%
Public	14	167	38%
Total	33	440	100%



**Figure 3: Level of market orientation exhibited by your university**

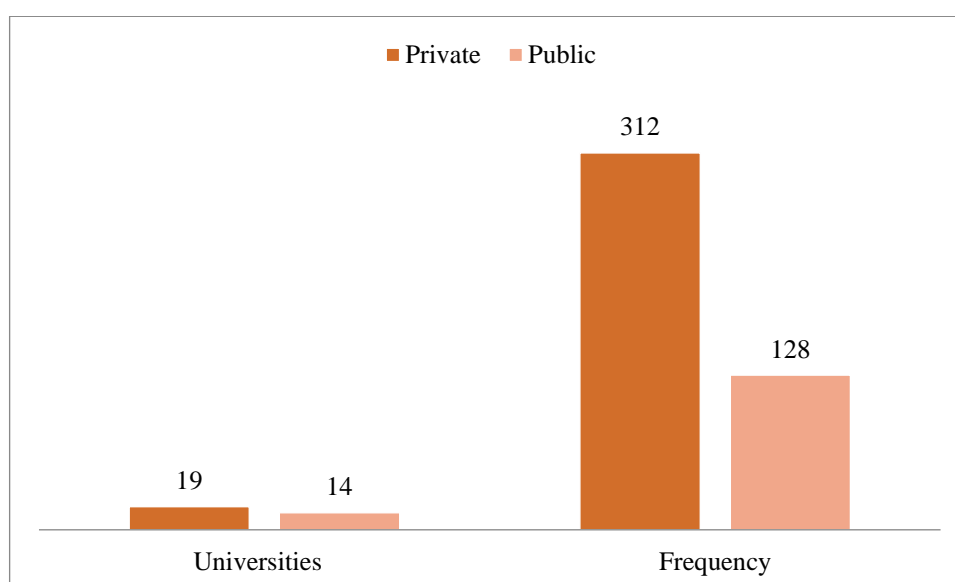
The table details the degree of market orientation shown by universities, broken down by industry (private and public). Thirty-three universities in total were involved in the survey, with 19 from the commercial sector and 14 from the public sector. Private universities account for 273 occurrences, or 62% of the total, in terms

of frequency. Public universities, on the other hand, have 167 cases per frequency, or 38% of the total. These findings suggest that the private sector, which makes up 62% of the sample's universities, has a higher level of market orientation than the public sector, which only accounts for 38% of the institutions. In order to address the demands and needs of the market and stakeholders, this means that private colleges may emphasize and concentrate more on market-oriented strategies and practices. The ability of a business to receive and respond to market information, comprehend consumer wants and preferences, and adapt strategies and actions in accordance with those needs and preferences is referred to as market orientation. Universities with a high level of market orientation are proactive in analyzing and adjusting to the changing market dynamics, stimulating innovation, and ensuring the relevance and competitiveness of their programs and services. It is crucial to remember that this interpretation is completely based on the data shown in the table. The findings and their implications for the market positioning and competitiveness of universities might benefit from additional investigation, such as knowing the specific market-oriented tactics and practices used by universities in each area.

### Adoption of Innovative Management Accounting Practices

**Table 5: Adopting innovative management accounting practices**

Sector	Universities	Frequency	Percentage
Private	19	312	71%
Public	14	128	29%
Total	33	440	100%



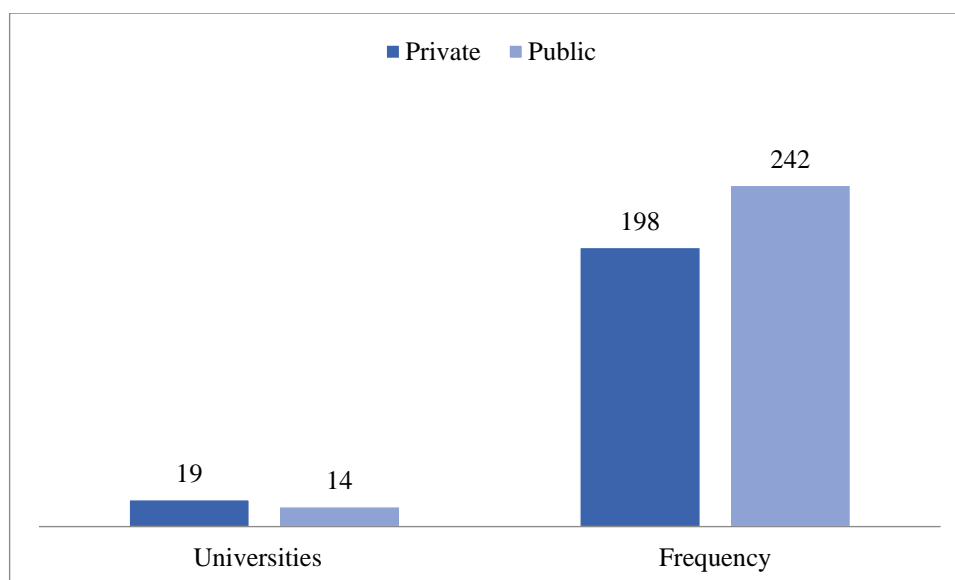
**Figure 4: Adopting innovative management accounting practices**

The table presents data on the adoption of cutting-edge management accounting techniques in higher education, broken down by industry (private and public). Thirty-three universities in total were involved in the survey, with 19 from the commercial sector and 14 from the public sector. Private universities account for 312 occurrences, or 71% of the total, in terms of frequency. Public universities, on the other hand, have a frequency of 128 cases, or 29% of the total. This information suggests that, compared to the public sector, which accounts for 29% of the institutions, a higher percentage, 71%, of the sample's private sector universities have implemented innovative management accounting techniques. In order to improve decision-making, performance measurement, and overall financial management, private colleges may be more likely to explore and implement new and innovative ideas in their management accounting procedures. Utilizing technology, data analytics, automation, and other improvements to increase the effectiveness, accuracy, and relevance of financial information and decision support systems is a key component of adopting innovative management accounting methods. It exhibits a proactive attitude toward keeping up with new trends and utilizing innovative tools and methods to promote organizational performance.

**Table 6: University encourages and supports the adoption of innovative management accounting practices**

Sector	Universities	Frequency	Percentage
Private	19	198	45%
Public	14	242	55%
Total	33	440	100%





**Figure 5: University encourages and supports the adoption of innovative management accounting practices**

The chart shows how far colleges, broken down by industry (private and public), support and promote the use of cutting-edge management accounting techniques. Thirty-three universities in total were involved in the survey, with 19 from the commercial sector and 14 from the public sector. Private universities account for 198 occurrences, or 45% of all occurrences, in terms of frequency. Public universities, on the other hand, have a frequency of 242 cases, or 55% of the total. Based on these findings, it can be concluded that a higher percentage, 55%, of the sample's universities from the public sector than from the private sector, which makes up 45% of the universities, encourages and supports the implementation of novel management accounting techniques. This shows that developing an atmosphere that encourages innovation and facilitates the incorporation of new management accounting methods may be given more priority at public colleges. By offering staff members resources, training, and incentives to encourage them to investigate and utilize new strategies and technology, organizations can encourage and support the adoption of innovative management accounting practices. It demonstrates a dedication to constant improvement and remaining abreast of management accounting developments to improve decision-making, performance assessment, and overall financial management.

**Objective 1: To investigate the perceptions of management accountants or management accounting function held by public and private university managements.**

Hypothesis 1a (Null): There is no significant difference in the perceptions of management accountants or management accounting function between public and private university managements in India.

Hypothesis 1b (Alternative): There is a significant difference in the perceptions of management accountants or management accounting function between public and private university managements in India.

The perceptions of management accountants or the management accounting role differ significantly between Indian public and private university administrations, according to hypothesis 1b (alternative).

**Table 7: Descriptive statistics on how public and private university administrations view management accountants or the management accounting function**

	N	Mean	Standard Deviation
Private	19	3.96	0.88
Public	14	4.36	0.23

The table gives descriptive statistics about how public and private university managements in India perceive management accountants or the management accounting function, based on the data presented. 19 observations are included in the data for the management of the private university. The standard deviation is 0.88 and the mean perception score is 3.96. The data for the management of the public university consists of 14 observations. The standard deviation is 0.23 and the mean perception score is 4.36.

**Table 8: Independent Samples T-Test Results for perceptions of management accountants or management accounting function held by public and private university managements**

	N	Mean differences	Standard Error	t-value	. value
Private	19	0.512	0.632	-3.452	0.04
Public	14				

The table displays the findings of an independent samples t-test on how Indian public and private university managements perceive management accountants or the management accounting function they perform. 19 observations are included in the data for the management of the private university. The average gap between views and management at public universities is 0.512. This mean difference is linked with a standard error of 0.632. The result is a t-value of -3.452. We are unable to identify the precise value of the p-value since the degrees of freedom and p-value are not mentioned in the table. The p-value, however, is presented as 0.04 and denotes that the result is statistically significant. According to the data, there is a statistically significant difference between public and private university managements in India when it comes to how they view management accountants or the management accounting role. According to the positive mean difference, public university managements generally have more favorable perceptions than private university managements.

**Objective 2: To evaluate the degree of market orientation demonstrated by private and public colleges and identifies any notable differences between them.**

Hypothesis 2a (Null): There is no significant difference in the level of market orientation exhibited by public and private universities in India.

Hypothesis 2b (Alternative): There is a significant difference in the level of market orientation exhibited by public and private universities in India.

**Table 9: Descriptive Statistics for level of market orientation exhibited by public and private universities**

	N	Mean	Standard Deviation
Private	19	3.12	0.95
Public	14	4.22	0.32

The table gives descriptive data on the public and private universities' market orientation levels. 19 observations are included in the data for the private sector. With a standard deviation of 0.95, the average level of market orientation is 3.12. The data for the public sector consists of 14 observations. With a standard deviation of 0.32, the average degree of market orientation is 4.22. Using this data, it can be seen that public sector institutions have a mean level of market orientation that is higher (4.22 vs. 3.12 at private sector universities). This implies that public universities place a greater emphasis on comprehending and addressing market realities and customer needs.

**Table 10: Results of the Independent Samples T-Test for the degree of commercial orientation displayed by public and private institutions**

	N	Mean differences	Standard Error	t-value	. value
Private	19	-0.312	0.260	-3.152	0.022
Public	14				

The table shows the findings of a t-test conducted on separate samples to compare the market orientation displayed by public and private institutions. 19 observations are included in the data for the private sector. Comparing the market orientation to the public sector, there is an average difference of -0.312. This mean difference is linked with a standard error of 0.260. The result is -3.152 for the t-value. We are unable to identify the precise value of the p-value since the degrees of freedom and p-value are not mentioned in the table. The p-value, however, is shown as 0.022 and denotes that the result is statistically significant. We can infer from the data that there is a statistically significant difference between public and private institutions in terms of their market orientation. The lack of a positive mean difference indicates that, generally speaking, private institutions are less market-oriented than public ones.

### Findings of the Study

The given text contains tables and figures that show data on the perceptions of management accountants/function, level of collaboration and integration, market orientation, and adoption of innovative management accounting practices in private and public universities. The data suggests that private universities have a higher perceived importance of management accounting, higher collaboration and integration with other departments, higher market orientation, and higher adoption of innovative



management accounting practices compared to public universities. However, it is important to note that these findings are based on the data shown in the tables and figures and may benefit from additional investigation.

## 5. CONCLUSION

Based on the findings of the study, it can be concluded that there is a significant difference in the perceptions of management accountants or the management accounting function between public and private university managements in India. The data analysis revealed that private university managements have a lower perception score compared to public university managements, indicating that public universities place a greater emphasis on the importance of the management accounting function in their operations and decision-making processes. This difference in perception suggests that private universities may need to prioritize and give more weight to the management accounting function to enhance their operations and decision-making procedures. Public universities, on the other hand, seem to recognize the strategic value that management accountants bring to their decision-making processes and consider them as strategic partners. Furthermore, the study also identified a significant difference in the level of market orientation exhibited by public and private universities. Public universities demonstrated a higher level of market orientation compared to private universities. This implies that public universities are more proactive in analyzing market dynamics, understanding consumer needs and preferences, and adapting their strategies and actions accordingly. Public universities focus on market-oriented strategies and practices to ensure the relevance and competitiveness of their programs and services. The study highlights the differences in perceptions of management accountants/function and market orientation between public and private universities in India. These findings can provide valuable insights for university managements in both sectors to understand the importance of the management accounting function and market orientation in their decision-making processes and overall competitiveness.

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