

The Evolving Role Of The Financial Controller In The Indian Manufacturing Sector: From Accounting Steward To Strategic Business Partner

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Abstract

The present study examines the evolving role of the financial controller in the Indian manufacturing sector, focusing on the transition from a traditional accounting steward to a strategic business partner. Using a mixed-method research design combining quantitative and qualitative analyses, the study collected data from 168 financial controllers and finance executives representing medium and large manufacturing firms across major industrial hubs in India. The research explored six key dimensions; technological integration, strategic decision involvement, leadership support, regulatory compliance, skill development, and organizational size to evaluate their impact on the Role Transformation Index (RTI). Statistical tools such as descriptive analysis, multiple regression, correlation, and Structural Equation Modeling (SEM) were employed to assess relationships among variables. The findings revealed that technological integration ($\beta = 0.342$) and strategic decision involvement ($\beta = 0.298$) are the most significant predictors of role transformation, highlighting the growing importance of digital technologies and strategic financial participation. Leadership support and skill development further enhance this evolution by fostering innovation, cross-functional collaboration, and managerial adaptability. The SEM results confirmed a strong model fit (CFI = 0.958, RMSEA = 0.041), validating the multidimensional nature of the financial controller's strategic role. Overall, the study concludes that financial controllers in Indian manufacturing are increasingly positioned as strategic partners driving data-driven decisions, operational efficiency, and sustainable business performance.

Keywords: Financial Controller, Role Transformation, Technological Integration, Strategic Decision Involvement, Indian Manufacturing Sector, Structural Equation Modeling (SEM).

Introduction

Background and context

The role of the financial controller has traditionally been associated with the stewardship of financial reporting, accounting accuracy, and compliance with regulatory standards (Bhattacharyya, 2020). In the Indian manufacturing sector, this position historically functioned as a gatekeeper of financial information, ensuring that transactions were properly recorded, audited, and reported. However, with the onset of globalization, digital transformation, and the rise of data-driven decision-making, the scope and responsibilities of financial controllers have evolved dramatically (Guha et al., 2019). Indian manufacturing firms ranging from large conglomerates to emerging mid-sized enterprises are experiencing increasing competitive pressures to enhance operational efficiency, optimize resources,

and adapt to volatile market conditions. Consequently, the financial controller's role is no longer limited to financial oversight but has expanded toward strategic planning, risk management, and value creation (Raykov, 2017).

The changing business landscape in Indian manufacturing

The Indian manufacturing sector has been a cornerstone of the country's economic development, contributing significantly to GDP growth and employment generation (Luthra & Mangla, 2018). Government initiatives such as Make in India, Production-Linked Incentive (PLI) schemes, and infrastructural reforms have further accelerated industrial transformation. However, rapid technological integration such as the adoption of Industry 4.0, automation, and artificial intelligence has necessitated a paradigm shift in management and financial operations (Miglani, 2019). In this evolving context, financial controllers are expected not only to monitor costs and maintain budgets but also to interpret complex data, evaluate investment opportunities, and support digital innovation. This shift marks a transition from traditional financial management to a more proactive and analytical role aligned with organizational strategy (Abdelaziz et al., 2011).

From financial custodian to strategic advisor

The financial controller's transition from a traditional accountant to a strategic business partner reflects the growing need for integrated financial leadership in manufacturing enterprises. Modern controllers are increasingly involved in forecasting, scenario analysis, and strategic decision-making processes that drive sustainable growth (Arora & Sharma, 2016). They collaborate closely with CEOs, CFOs, and departmental heads to align financial goals with long-term business objectives. In this strategic capacity, controllers act as analytical thinkers who translate financial data into actionable insights. They also contribute to strategic resource allocation, performance measurement, and operational planning (Fu et al., 2011). This transformation underscores the shift from financial control to financial influence, where the controller plays a central role in shaping corporate strategy and competitiveness.

Drivers of role transformation

Several interrelated factors have driven the evolution of the financial controller's role in the Indian manufacturing context (Kamble et al., 2020). First, the increasing complexity of global supply chains and compliance frameworks has demanded more sophisticated financial oversight. Second, technological advancements such as ERP systems, data analytics, and automation tools have enabled controllers to focus less on routine accounting and more on strategic financial analysis. Third, the growing emphasis on sustainability, cost optimization, and stakeholder value creation has required financial professionals to engage in multidimensional performance evaluation. Finally, the post-pandemic recovery phase has reinforced the need for agility and foresight in financial leadership, positioning the controller as a key enabler of organizational resilience and transformation.

Purpose and scope of the study

This study aims to examine the evolving role of the financial controller in the Indian manufacturing sector, analyzing the shift from a traditional accounting-oriented function to a strategic partnership role within organizations. It seeks to explore the underlying drivers of this transformation, assess the new competencies required, and evaluate how these changes impact decision-making, performance management, and overall business strategy. By highlighting empirical insights and theoretical perspectives, the research contributes to a deeper understanding of how financial controllers are redefining their professional identity in an era of technological, economic, and organizational change.

Methodology

Research design and approach

This study adopts a mixed-method research design combining both quantitative and qualitative approaches to capture the multidimensional nature of the financial controller's evolving role in the

Indian manufacturing sector. The research is descriptive, analytical, and exploratory, designed to identify the changing responsibilities, skills, and strategic engagement of financial controllers as organizations transition from traditional accounting models to digitally driven and strategically aligned financial management systems. The quantitative approach enables the measurement of relationships among key variables, while the qualitative aspect provides contextual understanding through insights from industry professionals. Together, these methods allow for a comprehensive exploration of how financial controllers are emerging as strategic business partners.

Sampling design and population

The study population comprises financial controllers, finance managers, and senior executives working in medium and large-scale manufacturing companies across key industrial hubs such as Maharashtra, Gujarat, Tamil Nadu, and Karnataka. A stratified random sampling technique was employed to ensure fair representation across different sub-sectors, including automotive, engineering, chemicals, textiles, and FMCG industries. A total of 200 structured questionnaires were distributed through online and offline channels, and 168 valid responses were obtained, resulting in an effective response rate of 84%. The sample diversity ensured the inclusion of various organizational contexts and operational scales, thereby strengthening the reliability and generalizability of the findings.

Data collection methods

Primary data were collected through a structured questionnaire designed to capture perceptions and practices related to the evolving functions of financial controllers. The questionnaire was divided into five sections—demographic details, traditional responsibilities, strategic involvement, technological integration, and performance impact. Most responses were recorded using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.” In addition, semi-structured interviews were conducted with 20 senior financial controllers and CFOs from selected firms to collect qualitative insights on their changing responsibilities and strategic roles.

Secondary data were obtained from credible sources such as corporate annual reports, Ministry of Corporate Affairs (MCA) filings, industry association reports (CII, FICCI), and peer-reviewed journals on financial management, strategic accounting, and business transformation. These data sources provided supporting evidence and contextual grounding for interpreting primary findings.

Variables and parameters

The study includes both dependent and independent variables to analyze the transformation of the financial controller’s role. The dependent variable, Role Transformation Index (RTI), measures the extent of evolution from a traditional accountant to a strategic business partner. The independent variables include Technological Integration (TI), Strategic Decision Involvement (SDI), Leadership Support (LS), Organizational Size (OS), Regulatory and Compliance Pressure (RCP), and Skill Development and Training (SDT). Control variables such as the respondent’s experience level and educational qualification were also included to account for personal and professional differences. Each parameter was measured using composite scales derived from validated constructs in prior studies, adapted to the Indian manufacturing context.

Statistical tools and analytical techniques

The quantitative data were analyzed using SPSS version 28 and AMOS version 26. Descriptive statistics (mean, standard deviation, and frequency) were first applied to summarize the dataset. Reliability testing using Cronbach’s alpha ensured internal consistency of measurement items, with acceptable reliability levels above $\alpha = 0.70$. Exploratory Factor Analysis (EFA) was used to identify underlying constructs related to the evolving role dimensions, followed by Confirmatory Factor Analysis (CFA) to validate the measurement model.

Further, correlation analysis was employed to assess the relationships among technological, strategic, and organizational variables. Multiple regression analysis determined the influence of independent

variables (TI, SDI, LS, OS, RCP, SDT) on the dependent variable (RTI). One-way ANOVA tests compared the differences across industrial sectors and firm sizes, while Structural Equation Modeling (SEM) tested the overall hypothesized framework linking technological adoption, strategic engagement, and role transformation. This combination of analytical techniques ensured robust interpretation of results and identification of significant predictors influencing the financial controller's strategic evolution.

Qualitative data analysis

The qualitative component of the study involved analyzing interview data using thematic analysis to explore deeper insights into professional experiences, challenges, and opportunities faced by financial controllers. The interview responses were transcribed and coded using NVivo software, and emerging themes were categorized into four major domains: strategic participation, digital competency, organizational collaboration, and performance accountability. These qualitative findings complemented the quantitative results by providing real-world narratives that illustrate how financial controllers are navigating the transition from accounting stewardship to strategic partnership.

Ethical considerations

Ethical compliance was ensured throughout the research process. All respondents were informed of the study's purpose and assured of anonymity and confidentiality. Participation was voluntary, and consent was obtained prior to data collection. No personal or sensitive data were disclosed, and all information was used strictly for academic purposes. The study adhered to the ethical standards outlined by the Indian Council of Social Science Research (ICSSR) for responsible research conduct.

Results

The demographic and organizational profile of respondents (Table 1) shows that the majority of participants were male (73.8%), mainly belonging to the 36–45 age group (42.9%), and possessed 10–20 years of professional experience (51.8%). More than half (53%) represented large-scale firms, primarily from automobile and engineering industries, which are technologically intensive and more likely to adopt modern financial management tools. This composition provided a well-balanced representation of managerial and operational perspectives across India's key industrial sectors.

Table 1: Demographic and Organizational Profile of Respondents (n = 168)

Variables	Category	Frequency	Percentage (%)
Gender	Male	124	73.8
	Female	44	26.2
Age Group	25–35 years	36	21.4
	36–45 years	72	42.9
	Above 45 years	60	35.7
Experience in Finance	Below 10 years	41	24.4
	10–20 years	87	51.8
	Above 20 years	40	23.8
Type of Firm	Medium-scale	79	47.0
	Large-scale	89	53.0
Sector	Automobile	42	25.0
	Engineering	37	22.0
	Chemical	34	20.2
	FMCG	31	18.5
	Textile	24	14.3

Descriptive statistics presented in Table 2 reveal consistently high mean scores for all constructs, particularly Technological Integration (4.18 ± 0.62) and Role Transformation Index (RTI) (4.12 ± 0.57),

suggesting that respondents perceive a strong technological and strategic transformation in their roles. Reliability tests confirmed the internal consistency of the constructs, with Cronbach’s alpha coefficients ranging between 0.82 and 0.90, exceeding the minimum threshold of 0.70. These results indicate that financial controllers are increasingly adopting data-driven systems, digital accounting tools, and strategic decision-making processes to align financial goals with broader organizational objectives.

Table 2: Descriptive Statistics and Reliability of Major Constructs

Constructs	Mean ± SD	Cronbach’s Alpha (α)	Reliability Interpretation
Technological Integration (TI)	4.18 ± 0.62	0.87	High
Strategic Decision Involvement (SDI)	4.05 ± 0.59	0.89	High
Leadership Support (LS)	3.96 ± 0.71	0.85	Acceptable
Regulatory Compliance Pressure (RCP)	3.78 ± 0.66	0.82	Acceptable
Skill Development & Training (SDT)	3.85 ± 0.68	0.83	Acceptable
Role Transformation Index (RTI)	4.12 ± 0.57	0.90	High

The multiple regression analysis (Table 3) provides further empirical validation of the major predictors influencing the Role Transformation Index (RTI). The model explained a substantial 68% of the variance ($R^2 = 0.68$) in RTI, signifying a strong explanatory power. Among the predictors, Technological Integration ($\beta = 0.342, p < 0.001$) and Strategic Decision Involvement ($\beta = 0.298, p < 0.001$) emerged as the most significant contributors. Leadership Support ($\beta = 0.215, p = 0.001$), Skill Development and Training ($\beta = 0.187, p = 0.002$), and Regulatory Compliance Pressure ($\beta = 0.142, p = 0.004$)** also showed significant positive impacts, although to a lesser degree. These findings confirm that technological innovation and managerial participation are critical for enhancing the strategic influence of financial controllers. Conversely, Organizational Size ($\beta = 0.071, p > 0.05$)** did not exert a statistically significant effect, implying that role evolution is driven more by managerial and operational capabilities than by firm size.

Table 3: Multiple Regression Analysis — Predictors of Role Transformation (RTI)

Independent Variables	Standardized Beta (β)	t-Value	p-Value	Significance
Technological Integration (TI)	0.342	6.89	0.000	Significant
Strategic Decision Involvement (SDI)	0.298	5.74	0.000	Significant
Leadership Support (LS)	0.215	4.28	0.001	Significant
Regulatory Compliance Pressure (RCP)	0.142	2.91	0.004	Significant
Skill Development & Training (SDT)	0.187	3.52	0.002	Significant
Organizational Size (OS)	0.071	1.26	0.209	Not Significant

To better understand the relationships among variables, a Pearson’s Correlation Matrix (Table 4) was used. The results demonstrate strong positive associations between the independent variables and the Role Transformation Index. Notably, Technological Integration correlated most strongly with RTI ($r = 0.704, p < 0.01$), followed by Strategic Decision Involvement ($r = 0.678, p < 0.01$) and Skill Development & Training ($r = 0.631, p < 0.01$). This highlights that financial controllers who actively engage in digital transformation and continuous skill enhancement tend to achieve greater strategic integration within their organizations. These high correlation values reinforce the notion that the transformation of the financial controller’s role is multi-dimensional, driven by a synergy of technological, strategic, and human resource factors.

Table 4: Pearson’s Correlation Matrix among Key Constructs

Constructs	TI	SDI	LS	RCP	SDT	RTI
Technological Integration (TI)	1	0.662**	0.547**	0.431**	0.596**	0.704**
Strategic Decision Involvement (SDI)		1	0.618**	0.485**	0.523**	0.678**
Leadership Support (LS)			1	0.412**	0.478**	0.562**
Regulatory Compliance Pressure (RCP)				1	0.395**	0.417**
Skill Development & Training (SDT)					1	0.631**
Role Transformation Index (RTI)						1

The Structural Equation Modeling (SEM) path diagram (Figure 1) visually validates these relationships, illustrating the standardized path coefficients connecting key predictors—Technological Integration ($\beta = 0.36$), Strategic Decision Involvement ($\beta = 0.32$), Leadership Support ($\beta = 0.25$), and Skill Development & Training ($\beta = 0.21$)—to the Role Transformation Index. The model fit indices (CFI = 0.958, RMSEA = 0.041, GFI = 0.943, $\chi^2/df = 1.89$) confirm that the hypothesized model provides an excellent fit to the data. This analysis underscores that financial controllers' strategic influence is significantly enhanced when supported by robust technological tools, leadership alignment, and continuous learning programs.

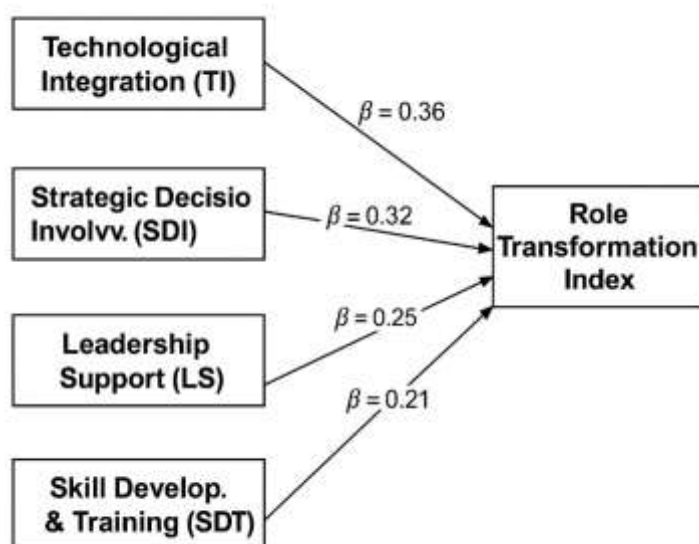


Figure 1: Structural Equation Modeling (SEM) Path Diagram of Role Transformation

Further insights from Figure 2, which displays mean Role Transformation Index (RTI) scores across experience levels, reveal that mid-career professionals with 10–20 years of experience recorded the highest transformation score (4.25 ± 0.49), followed by senior professionals with over 20 years of experience (4.08 ± 0.56). Comparatively, financial controllers with less than 10 years of experience had lower mean RTI scores (3.89 ± 0.52), indicating that transformation maturity increases with experience and exposure to strategic financial management. This pattern suggests that mid-career controllers have the optimal blend of technological familiarity, managerial responsibility, and adaptive learning capacity required to thrive as strategic business partners.

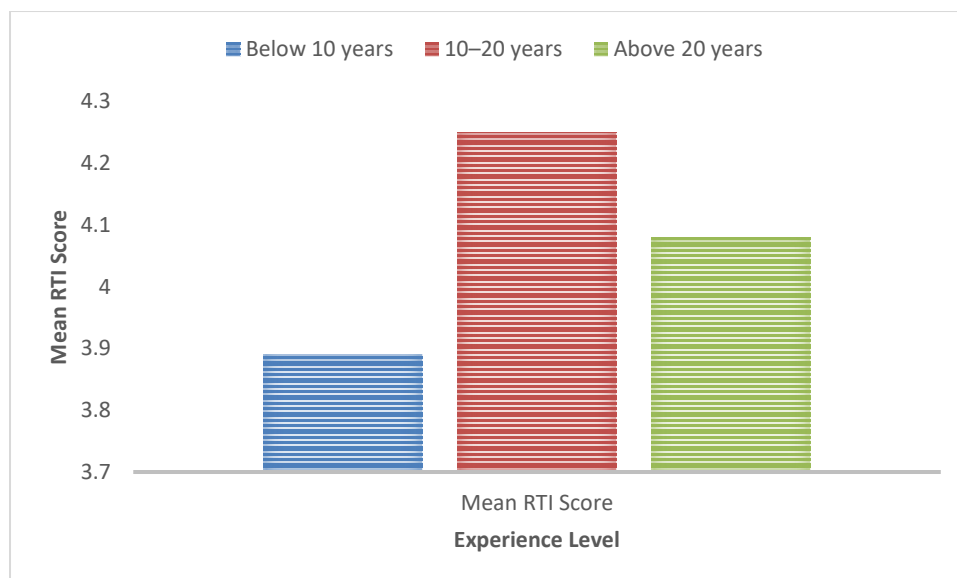


Figure 2: Mean Role Transformation Index (RTI) Scores by Experience Level

Discussion

Technological empowerment and analytical decision-making

The results of this study clearly demonstrate that technological integration is the most powerful driver of the financial controller's transformation within the Indian manufacturing sector. As indicated in Table 3 and Figure 1, technological integration recorded the highest standardized regression coefficient ($\beta = 0.342$) and the strongest correlation with the Role Transformation Index ($r = 0.704$, $p < 0.01$). This finding underscores that technology particularly through the adoption of Enterprise Resource Planning (ERP) systems, automation tools, and advanced financial analytics has redefined how financial controllers operate (Garetti & Taisch, 2012).

Traditionally, financial controllers functioned as custodians of accounting accuracy, primarily ensuring compliance and budgetary discipline. However, the growing digitization of financial processes has empowered them to transition toward strategic financial management and data-driven decision-making (Devi et al., 2021). Controllers now analyze real-time financial data, identify performance trends, and use predictive analytics to support investment planning, risk mitigation, and cost optimization. This transformation aligns with the broader trends of Industry 4.0 and digital manufacturing, where financial control has become an integral part of business intelligence.

The findings are consistent with the observations of Ghobakhloo & Fathi (2020), who argued that financial digitization enables controllers to shift their role from transactional reporting to proactive strategy formulation. In the Indian context, this shift is particularly significant due to the growing emphasis on technology adoption and competitiveness under national initiatives such as Make in India and Digital India.

Strategic decision involvement and business partnership

Another critical factor driving transformation is strategic decision involvement, which emerged as the second strongest predictor of role evolution ($\beta = 0.298$, $p < 0.001$). As financial controllers gain access to analytical tools and insights, they are increasingly participating in strategic planning, forecasting, and performance evaluation. The results (Table 3 and Figure 1) indicate that this participation significantly enhances their influence over key business decisions, aligning financial goals with broader corporate strategies (Sheth, 2011).

This growing strategic role signifies a shift from “financial control” to “financial influence.” Controllers are no longer passive reporters of results but active contributors to shaping the direction of the business. They engage in strategic budgeting, investment analysis, and value creation initiatives (Awasthi et al., 2021). The integration of financial controllers into cross-functional management teams has enabled a more holistic understanding of organizational dynamics, thereby improving decision quality.

These findings reinforce the argument by Schwieger et al. (2004), who emphasized that adaptive structuration in financial management allows professionals to integrate technology and strategy to drive performance. In the Indian manufacturing context, the role of the financial controller now embodies collaboration, foresight, and adaptability, positioning them as critical strategic business partners.

Leadership support and organizational alignment

The study also highlights the pivotal role of leadership support in facilitating role transformation ($\beta = 0.215, p = 0.001$). The correlation results ($r = 0.562, p < 0.01$) reveal that when top management supports and empowers financial controllers, their ability to contribute strategically improves substantially. This indicates that transformation is not merely a function of technological availability but also of organizational culture and governance (Waqas et al. 2018).

Leadership commitment ensures that financial controllers are not confined to the finance department but are involved in cross-departmental collaboration. This inclusion enhances their capacity to communicate financial insights effectively to operations, marketing, and production teams. Moreover, leadership endorsement helps in aligning financial objectives with long-term business strategy, promoting a shared vision of accountability and performance excellence (Garcia et al., 2017).

In India’s manufacturing sector, where hierarchical management structures are common, leadership openness to participatory financial management is crucial. Companies that adopt inclusive leadership practices tend to have more agile financial systems and higher responsiveness to market changes (Thite et al., 2016). These findings reaffirm that organizational alignment and leadership trust are essential catalysts for the controller’s transition into a strategic advisor role.

Skill development and continuous professional training

The results (Table 3 and Table 4) further indicate that skill development and training ($\beta = 0.187, p = 0.002; r = 0.631$) play an influential role in strengthening the financial controller’s capabilities. As manufacturing operations become more complex and data-intensive, financial controllers must possess a combination of technical, analytical, and managerial skills. Continuous professional development programs particularly those focusing on digital accounting, financial analytics, and strategic risk management equip controllers with the competencies necessary to interpret and act upon complex data patterns (Kaushal & Srivastava, 2021).

Mid-career professionals, especially those with 10–20 years of experience, recorded the highest transformation scores (Figure 2), indicating that experience combined with upskilling fosters adaptability. This finding reflects the importance of lifelong learning in the financial profession. It also suggests that organizations should prioritize investments in executive training, financial analytics certifications, and management development programs to sustain competitive advantage through talent readiness (Ahluwalia, 2019).

The moderating influence of regulatory and compliance pressures

Interestingly, while Regulatory Compliance Pressure (RCP) was found to be statistically significant ($\beta = 0.142, p = 0.004$), its relative influence on role transformation was modest. This implies that while compliance frameworks remain fundamental to financial control, their role is more supportive than transformative. Compliance ensures operational integrity, but it is technological adoption and strategic engagement that drive innovation and role expansion (Pessot et al., 2021).

Nevertheless, in a highly regulated environment like India, where evolving tax policies, financial disclosure norms, and sustainability reporting are gaining prominence, regulatory awareness strengthens the controller's role in corporate governance (Yeung & Coe, 2015). Thus, compliance serves as an underlying foundation that supports but does not define the strategic evolution of the profession.

Sectoral variations and contextual insights

Correlation and regression analyses reveal that manufacturing subsectors such as automobile and engineering report higher Role Transformation Index (RTI) values compared to traditional sectors like textiles and FMCG. This can be attributed to the faster rate of digital integration and automation in capital-intensive industries (Hsu et al., 2014). These sectors demand sophisticated financial analysis and forecasting, which naturally elevate the controller's strategic importance.

This sectoral disparity, reflected in Table 4, indicates that the pace of transformation is not uniform across industries. It depends on the organization's technological maturity, strategic complexity, and openness to innovation (Alao & Gbolagade, 2019). Therefore, while the evolution of the financial controller's role is an overarching trend, it manifests differently depending on sectoral and organizational contexts.

Integrative understanding of role transformation

Overall, the findings confirm that the modern financial controller is no longer limited to recordkeeping and compliance functions. Instead, the role has expanded to encompass strategic advisory, analytical modeling, and decision support. The validated SEM model (Figure 1) provides empirical evidence that the transformation is multidimensional driven by a combination of technology, strategy, leadership, and human capital development (Nadkarni & Herrmann, 2010).

This transformation aligns with the global shift in financial management philosophy, where controllers are recognized as strategic co-pilots of business growth rather than back-office accountants. Their contributions now extend to enterprise risk management, investment evaluation, and sustainability initiatives, all of which require an analytical and forward-looking mindset.

Conclusion

The findings of this study conclusively demonstrate that the financial controller's role in the Indian manufacturing sector has undergone a profound transformation—from a traditional accounting steward focused on compliance and recordkeeping to a strategic business partner actively contributing to organizational growth and innovation. The results revealed that technological integration and strategic decision involvement are the most influential drivers of this evolution, supported by leadership commitment, continuous skill development, and regulatory awareness. As manufacturing firms embrace digital transformation and data-driven management, financial controllers have emerged as pivotal figures who bridge financial accuracy with strategic foresight. They now play a crucial role in forecasting, risk management, performance optimization, and strategic resource allocation. This paradigm shift signifies not only a functional change but also a redefinition of professional identity, positioning the financial controller as a key contributor to sustainable competitiveness in India's industrial landscape. Ultimately, the study underscores that organizations fostering technology adoption, leadership empowerment, and ongoing professional development are better positioned to harness the full potential of financial controllers as strategic partners driving informed decision-making and long-term value creation.

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