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# Perceived Effectiveness of Finance and Accounts Practices in a Precision Automotive Components Manufacturer: A Questionnaire-Based Study with a Proposed Finance–Operations MIS Dashboard

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## Abstract

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Manufacturing finance functions are expected to do more than record transactions; they must supply timely, accurate and decision-relevant information to production, procurement and senior management. This study examines the perceived effectiveness of finance and accounts (F&A) practices in a precision automotive components manufacturer in Jamshedpur, India, using a fifteen-item, five-point Likert questionnaire that covers seven dimensions: financial reporting and accounting controls, taxation and compliance, budgeting and variance analysis, management information system (MIS) and decision support, cost analysis, digital integration and automation, and people and coordination. The research context is built from industry data and a review of recent literature on the digitalisation of management accounting, enterprise resource planning (ERP) and business intelligence, and Industry 4.0 in automotive manufacturing. Descriptive statistics and cross-tabulation are applied to a simulated demonstration dataset of 48 respondent records. The dataset is disclosed as simulated throughout and is intended to illustrate the analytical method, not to evidence the actual performance of any organisation. In the demonstration dataset, financial reporting and accounting controls recorded the highest theme mean (4.17), followed by taxation and compliance (3.98), cost analysis (3.88), people and coordination (3.85), MIS and decision support (3.83), budgeting and variance analysis (3.66) and digital integration and automation (3.49); the overall mean was 3.85. Perceived MIS timeliness differed by role, with managers rating it higher than executives. The paper proposes a phased Finance–Operations MIS dashboard that prioritises data integration, driver-based budgeting and exception-based alerts, and it offers a replicable instrument for future studies with authenticated data.

**Keywords:** finance and accounts; management accounting; MIS; budgeting and variance analysis; cost analysis; ERP integration; automotive components; Likert questionnaire; India

## 1. Introduction

Manufacturing finance differs from finance in service settings because accounting information is continuously shaped by production volumes, material consumption, machine utilisation, labour productivity, scrap and rework, inventory movements, supplier terms and customer schedules. In such an environment the finance and accounts (F&A) function operates as both a record-keeping unit and a control and decision-support unit. Its value depends not only on whether the books are accurate but also on whether information reaches decision-makers with adequate relevance and speed.



The Indian automotive components industry provides a demanding setting for this question. The Automotive Component Manufacturers Association of India (ACMA, 2025) reported industry turnover of approximately ₹6.73 lakh crore in FY2024–25, an increase of 9.6% over the previous year, with a five-year compound annual growth rate of about 14% between FY2020 and FY2025. Industry bodies also describe a sector shaped by electric mobility, localisation, digital manufacturing, supply-chain resilience and cost pressure from large original equipment manufacturers (IBEF, 2026). These conditions raise the importance of capital budgeting, cost analysis, working-capital control and timely management reporting.

The case organisation for this study is an unlisted precision-machining and automotive components manufacturer based in Jamshedpur, Jharkhand, with more than three decades of operating history and IATF 16949:2016 certification. Public corporate-information sources report FY2025 revenue of approximately ₹161.01 crore, a decline of about 12% year on year. Detailed profitability and ratio data are not freely disclosed, and this paper therefore does not present unverified company accounts as audited facts.

The study was developed during a two-month on-the-job training placement in the organisation's F&A department (2 June to 1 August 2026), which provided exposure to financial reporting, accounting processes, taxation, budgeting, MIS reporting and cost analysis. The practical exposure motivated a structured question: how effective do finance practitioners perceive core F&A practices to be, and where do improvement priorities lie?

### 1.1 Research objectives

The study pursues four objectives: (a) to assess the perceived effectiveness of financial reporting, accounting controls, taxation and reconciliation practices; (b) to examine the role of budgeting, variance analysis, MIS reporting and cost analysis in supporting managerial decision-making; (c) to evaluate the perceived usefulness of ERP and digital integration, automation and cross-functional information sharing; and (d) to identify practical improvement priorities and recommend a phased Finance–Operations MIS approach.

### 1.2 Contribution and structure

The paper contributes a compact fifteen-item instrument mapped to seven F&A dimensions, a transparent analytical template (item means, theme means, role-wise cross-tabulation) and a phased dashboard recommendation grounded in recent literature. Section 2 reviews the literature, Section 3 describes the methodology, Section 4 reports the results, Section 5 discusses the findings and recommendations, and Section 6 concludes with limitations and directions for future research.

## 2. Literature Review

### 2.1 Theoretical framework

The study draws on five connected ideas. First, management accounting theory treats accounting information as a decision-support resource rather than a purely historical record. Second, budgeting and variance analysis provide a planning-and-control mechanism in which actual performance is compared with expectations. Third, internal-control concepts emphasise authorisation, segregation of duties, reconciliation, documentation and monitoring. Fourth, information-processing theory suggests that organisations need information capacity that matches the complexity of their decision environment. Fifth, the digital-accounting and Industry 4.0 literature highlights the growing role of ERP, business intelligence, analytics and automation. In a component manufacturer, information flows into F&A from procurement, stores, production, quality, maintenance, sales and logistics; if these flows are fragmented or delayed, reporting may remain accurate while becoming less useful for decisions.

**Table 1**

*Conceptual Linkage Between Theory, Questionnaire Dimension and Management Value*

| Concept | Questionnaire dimension | Expected management value |
|---|---|---|
| Management accounting | Cost analysis; decision support | Better operational decisions |
| Budgetary control | Budgeting; variance analysis | Early corrective action |
| Internal control | Reconciliation; process standardisation | Lower error and fraud risk |
| Information processing | MIS timeliness and accuracy | Faster decisions |



| Concept | Questionnaire dimension | Expected management value |
|---|---|---|
| Digitalisation / ERP | Integration and automation | Lower manual effort; higher visibility |
| Human capability | Training and coordination | Effective adoption of systems |

*Note.* Compiled by the author.

### 2.2 Digitalisation of management accounting

Holtkemper (2020) analysed manufacturing companies and identified top-down, efficiency-oriented and employee-driven, data- and analytics-oriented approaches to digitising the management accounting function, which suggests that digital finance is not only automation but also a change in how information is used. Andreassen (2020) found in a case study that digital technologies can narrow some accounting tasks while expanding business-oriented roles, changing the identity and expectations of management accountants. A broader review of digital transformation in manufacturing emphasises automation, quality, efficiency, waste reduction and cost reduction as typical outcomes (Duraivelu, 2022). Together these studies support treating automation and MIS as central, rather than peripheral, to F&A effectiveness.

### 2.3 ERP, business intelligence and management accounting practice

Using survey evidence, Youssef and Mahama (2021) reported that ERP use is positively related to management accounting practices and that business intelligence and analytics partially mediate that relationship. This finding is directly relevant to budgeting, costing and MIS because it implies that transaction systems alone are insufficient; analytical layers convert transaction data into managerial insight. Nartey and van der Poll (2021) connected innovative management accounting practices with the sustainability of manufacturing small and medium enterprises, supporting the link between cost information and broader manufacturing performance.

### 2.4 Industry 4.0 and automotive digitalisation

Wankhede and Vinodh (2021a) used the best–worst method to prioritise Industry 4.0 challenges in an Indian automotive component manufacturer and identified real-time integration and adaptive systems among the important barriers. In a systematic review of 90 papers, Wankhede and Vinodh (2021b) developed a framework for Industry 4.0 in automotive manufacturing. Colombari et al. (2023) surveyed Italian and U.S. automotive suppliers and found that data integration can strengthen cost-reduction outcomes, whereas technology proliferation without integration can be counterproductive. Li et al. (2022) reported a positive relationship between digitalisation and firm performance, conditional on organisational factors. Fabbe-Costes and Lechaptois (2022) described the multi-actor, multi-layer nature of automotive supply-chain digitalisation, which reinforces the need for finance–operations integration.

### 2.5 Research gap

The reviewed studies establish that digital integration, ERP/BI use and data-driven decision-making can improve management accounting and cost outcomes, but they say little about how practitioners inside a mid-sized Indian precision-component manufacturer perceive the different strands of F&A practice relative to one another. This paper addresses that gap by offering an instrument and an analytical template that rank F&A dimensions on a common scale and link the ranking to a practical improvement roadmap.

## 3. Methodology

### 3.1 Research design

The study is descriptive, exploratory and cross-sectional. It is descriptive because it summarises perceptions of existing F&A practices, and exploratory because it seeks improvement areas rather than testing a causal model. Contextual information was drawn from the case organisation's public website, public corporate-information sources, ACMA and IBEF publications, and the academic literature. Qualitative insight from workplace observation during the training period informed the design of the questionnaire items but is not reported as data.

### 3.2 Instrument

The instrument contains fifteen statements rated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Items were grouped into seven dimensions so that each maps to a research objective (Table 2). The full item wording is shown in Table 5. Content validity was addressed by conceptual review of every item against the objectives; no formal pilot test was conducted.



**Table 2**

*Questionnaire Dimensions, Items and Linked Objectives*

| Dimension | Items | Objective |
|---|---|---|
| Financial reporting and accounting controls | Q1, Q2, Q10 | Objective (a) |
| Taxation and compliance | Q3 | Objective (a) |
| Budgeting and variance analysis | Q4, Q5 | Objective (b) |
| MIS and decision support | Q6, Q7, Q11, Q15 | Objective (b) |
| Cost analysis | Q8 | Objective (b) |
| Digital integration and automation | Q9, Q12 | Objective (c) |
| People and coordination | Q13, Q14 | Objective (c) |

*Note.* Objective (d) is addressed through the comparative ranking of theme means and the resulting recommendation.

### 3.3 Sampling plan and data

The sampling frame comprises F&A employees and managers, and closely connected users of finance information, in the case organisation. The planned sample size is 48 respondents drawn purposively or by convenience, distributed across five roles: Accounts Executive (n = 20), Finance Executive (n = 12), Senior Accountant (n = 8), Finance Manager (n = 4) and Accounts Manager (n = 4).

**Data disclosure.** An authenticated respondent database was not available when this paper was prepared. The 48 response records analysed in Section 4 are therefore a simulated dataset constructed to demonstrate the analytical method. They are not responses from employees of the case organisation, and no finding in this paper should be read as evidence of that organisation's actual practices or performance. The simulated records were generated with a common underlying response tendency, which inflates internal consistency and inter-item agreement; this limitation is discussed in Section 6.

### 3.4 Analysis

Analysis uses frequencies, percentages, item means, theme means (the unweighted mean of the item means within each theme) and cross-tabulation by role. For interpretation, means of 4.00–5.00 are treated as relatively strong, 3.00–3.99 as moderate-to-strong, 2.00–2.99 as moderate-to-weak and below 2.00 as weak. These bands are analytical conventions adopted for this paper and are not externally validated cut-offs.

## 4. Results

### 4.1 Respondent profile

Table 3 shows the role distribution of the 48 simulated respondents. Operational finance personnel (Accounts Executives, Finance Executives and Senior Accountants) account for 83.3% of the sample, and managers for 16.7%. This mix is useful because process and MIS observations are typically generated by those who handle transaction-level information daily, while managerial respondents are better placed to judge decision support and budgeting.

**Table 3**

*Respondent Distribution by Role (Simulated Dataset)*

| Role | n | % |
|---|---|---|
| Accounts Executive | 20 | 41.7 |
| Finance Executive | 12 | 25.0 |
| Senior Accountant | 8 | 16.7 |
| Finance Manager | 4 | 8.3 |
| Accounts Manager | 4 | 8.3 |
| Total | 48 | 100.0 |

*Note.* Simulated academic dataset; see Section 3.3.



### 4.2 Item-wise results

Table 4 reports the mean score for each questionnaire item. The overall mean across the fifteen items is 3.85, indicating generally favourable perceptions within the demonstration dataset. The highest-rated items concern reconciliations (Q10, M = 4.31), accurate and timely financial reporting (Q1, M = 4.25) and the accuracy and relevance of MIS reports (Q7, M = 4.12). The lowest-rated items concern the effect of automation on repetitive work (Q12, M = 3.40), ERP integration (Q9, M = 3.58), and both real-time data access (Q15) and budget-versus-actual variance analysis (Q5), each at M = 3.56.

**Table 4**

*Item-wise Mean Scores (Simulated Dataset, n = 48)*

| Item | Statement | Mean |
|---|---|---|
| Q1 | Financial reporting is prepared accurately and within the required reporting timeline. | 4.25 |
| Q2 | Accounting processes and documentation are standardized across routine transactions. | 3.96 |
| Q3 | Tax-related activities (GST/TDS and related compliance) are handled systematically. | 3.98 |
| Q4 | Budget preparation is linked with departmental operating plans. | 3.75 |
| Q5 | Budget-versus-actual variance analysis is performed regularly and used for action. | 3.56 |
| Q6 | MIS reports are timely enough to support operational and managerial decisions. | 3.71 |
| Q7 | MIS reports provide sufficiently accurate and relevant information. | 4.12 |
| Q8 | Cost analysis helps identify material, labour, overhead and process-cost drivers. | 3.88 |
| Q9 | ERP/accounting systems provide adequate integration between finance and operations data. | 3.58 |
| Q10 | Bank, vendor and ledger reconciliations provide strong financial control. | 4.31 |
| Q11 | Finance information is useful for management decision-making. | 3.92 |
| Q12 | Automation reduces repetitive finance and accounting work. | 3.40 |
| Q13 | Finance and accounts employees receive adequate training on systems and processes. | 3.98 |
| Q14 | Cross-functional coordination between finance, production, stores and purchase is effective. | 3.73 |
| Q15 | Finance has adequate access to real-time data for monitoring performance. | 3.56 |

*Note.* Scale: 1 = strongly disagree, 5 = strongly agree. Simulated academic dataset.

### 4.3 Theme-wise results

Table 5 and Figure 1 summarise the seven dimensions. Financial reporting and accounting controls rank highest (M = 4.17) and are the only dimension in the relatively strong band. Digital integration and automation rank lowest (M = 3.49), followed by budgeting and variance analysis (M = 3.66). All other dimensions fall between 3.83 and 3.98. The gap between the highest and lowest theme means is 0.68 scale points.

**Table 5**

*Theme-wise Mean Scores and Interpretation*

| Rank | Dimension | Mean | Interpretation band |
|---|---|---|---|
| 1 | Financial reporting and accounting controls | 4.17 | Relatively strong |
| 2 | Taxation and compliance | 3.98 | Moderate-to-strong |
| 3 | Cost analysis | 3.88 | Moderate-to-strong |

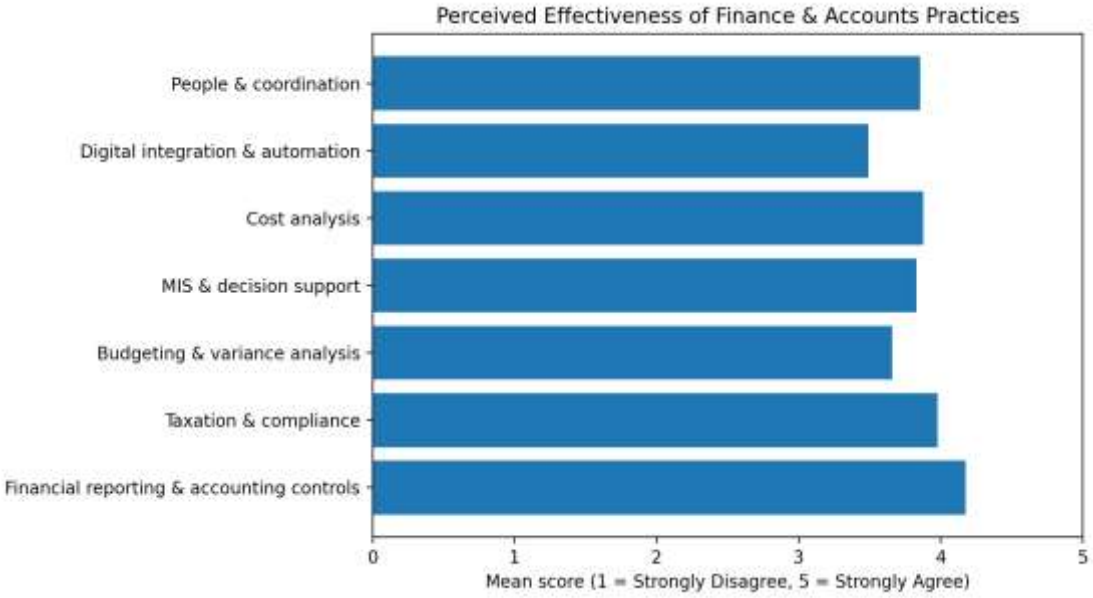


| Rank | Dimension | Mean | Interpretation band |
|---|---|---|---|
| 4 | People and coordination | 3.85 | Moderate-to-strong |
| 5 | MIS and decision support | 3.83 | Moderate-to-strong |
| 6 | Budgeting and variance analysis | 3.66 | Moderate-to-strong |
| 7 | Digital integration and automation | 3.49 | Moderate-to-strong |

*Note.* Theme mean is the unweighted mean of constituent item means. Simulated academic dataset.

**Figure 1**

*Perceived Effectiveness of Finance and Accounts Practices by Dimension*



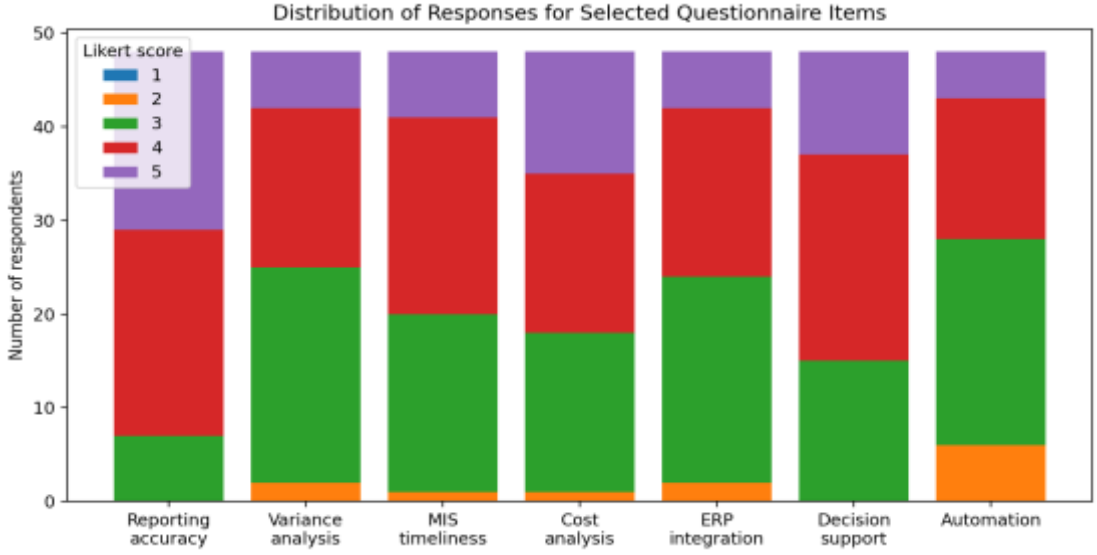

*Note.* Bars show theme means on a 1–5 scale. Simulated academic dataset (n = 48).

**4.4 Response distribution**

Figure 2 shows the distribution of responses for selected items. High-scoring items contain a large share of "agree" and "strongly agree" responses, whereas items on ERP integration and automation contain a larger neutral and lower-agreement component. For example, 22 of 48 respondents were neutral on Q9 (ERP integration) and on Q12 (automation), and 6 gave a disagree rating on Q12, compared with 4 neutral responses on Q10 (reconciliations). The full frequency table is given in Appendix A.

**Figure 2**

*Distribution of Responses for Selected Questionnaire Items*




*Note.* Simulated academic dataset (n = 48).



### 4.5 Cross-tabulation by role

Table 6 and Figure 3 cross-tabulate perceived MIS timeliness (Q6) by role, dichotomised as lower (below 4) and higher (4 or above). All four Finance Managers gave higher ratings, compared with 66.7% of Finance Executives, 62.5% of Senior Accountants, 50.0% of Accounts Managers and 45.0% of Accounts Executives. Because several cells are very small, these differences are treated as diagnostic signals rather than as statistically tested effects.

**Table 6**

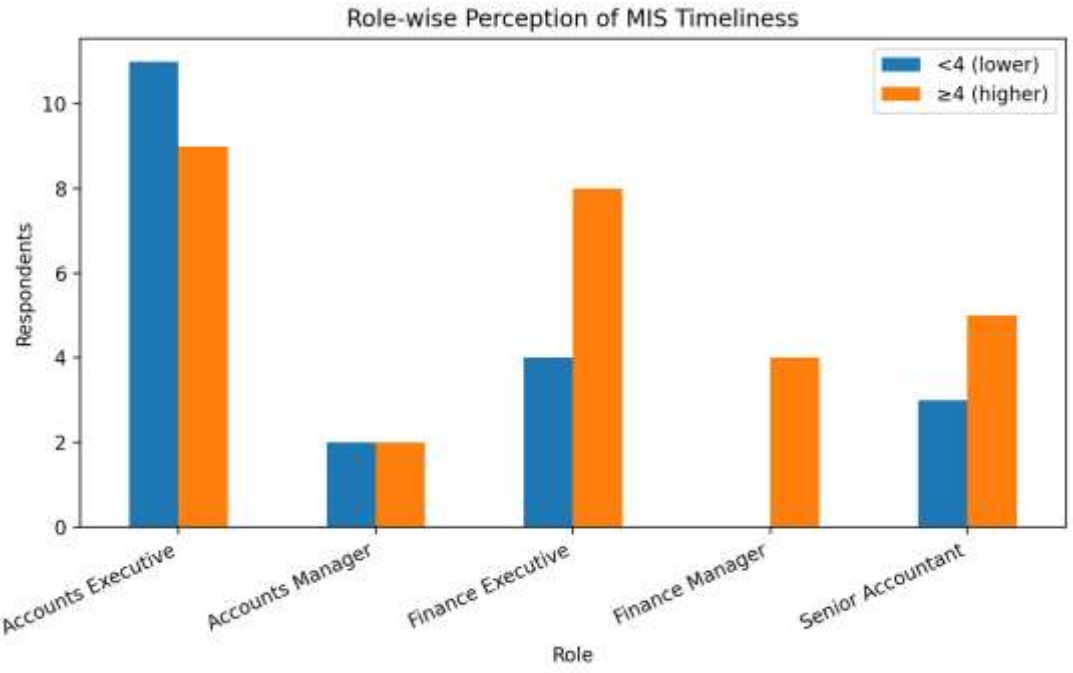
*Role-wise Perception of MIS Timeliness (Q6)*

| Role | Lower (< 4) | Higher (≥ 4) | Higher (%) |
|---|---|---|---|
| Accounts Executive | 11 | 9 | 45.0 |
| Accounts Manager | 2 | 2 | 50.0 |
| Finance Executive | 4 | 8 | 66.7 |
| Finance Manager | 0 | 4 | 100.0 |
| Senior Accountant | 3 | 5 | 62.5 |

*Note.* Simulated academic dataset.

**Figure 3**

*Role-wise Perception of MIS Timeliness*




*Note.* Simulated academic dataset.

## 5. Discussion

### 5.1 Interpretation of findings

In the demonstration dataset, the pattern is one of strong transactional discipline and weaker forward-looking and integrative capability. Reporting accuracy, standardisation and reconciliation score highest, which is consistent with the control-oriented foundations of accounting. By contrast, budget-versus-actual analysis, real-time data access, ERP integration and automation score lowest. This suggests that historical accounting is perceived as more mature than performance management, a pattern that is plausible in manufacturing settings where core controls are established earlier than analytics.

The pattern is consistent with the literature reviewed. Youssef and Mahama (2021) show that analytical layers matter for the link between ERP and management accounting practice, and Colombari et al. (2023) caution that technology without integration can be counterproductive. Wankhede and Vinodh (2021a) identify real-time integration as a major barrier in Indian automotive component manufacturing. These studies suggest that the lowest-scoring dimension in this



paper, digital integration and automation, is also where the literature expects the largest returns. The study does not test this relationship; it observes that the ranking is directionally consistent with prior evidence.

The role-wise differences in perceived MIS timeliness illustrate why a single report may be experienced differently by those who prepare it and those who use it. Managers tend to judge reports by decision usefulness and delivery speed, whereas executives may focus on the effort and data quality that sit behind each report. Short follow-up interviews with lower-agreement roles could identify whether the bottleneck is data availability, report format, approval delay, system integration, spreadsheet dependence or unclear ownership.

**Table 7**

*Alignment of Findings with Research Objectives*

| Objective | Evidence | Conclusion |
|---|---|---|
| (a) | Reporting and controls M = 4.17; taxation M = 3.98 | Core financial controls are perceived as strong. |
| (b) | Budgeting M = 3.66; MIS M = 3.83; cost analysis M = 3.88 | Management accounting is useful, with room for more proactive analysis. |
| (c) | Digital integration and automation M = 3.49 | Digital integration is the clearest improvement priority. |
| (d) | Theme ranking and cross-tabulation | An integrated dashboard with exception-based review is an appropriate response. |

*Note.* Based on the simulated dataset; conclusions are illustrative of method.

### 5.2 Proposed Finance–Operations MIS dashboard

The principal recommendation is a phased Finance–Operations Management Information Dashboard that consolidates approved data from finance, production, purchase, stores and sales into a standard management view with exception-based alerts. It would complement, not replace, existing accounting systems. An initial indicator set could include revenue; operating margin or contribution; inventory, receivable and payable days; cash position; material-price variance; production volume; machine utilisation; scrap and rework; labour productivity; budget-versus-actual expenditure; capital-expenditure utilisation; and major tax or compliance exceptions.

Implementation is proposed in five phases: (1) define data owners, indicator definitions and reporting frequency; (2) standardise source files and establish a controlled data dictionary; (3) automate extraction and reconciliation for a limited set of high-value indicators; (4) introduce exception alerts and monthly review meetings with named indicator owners and action thresholds; and (5) extend to predictive analytics once data quality has stabilised. A cross-functional steering group spanning F&A, production, purchase, stores, IT/MIS and senior management should govern the programme. Consistent with Colombari et al. (2023), integration should take priority over adding further tools.

Two complementary changes follow from the budgeting and cost-analysis results: a shift from annual budgets towards rolling, driver-based forecasts linked to production volumes, machine hours, material rates, labour productivity and energy cost; and a move from total-cost reporting to driver-level cost analysis covering scrap, rework, tooling, energy and machine utilisation.

### 5.3 Implications

For practitioners, the analysis shows how a short questionnaire can rank F&A dimensions on a common scale and direct improvement effort to the weakest links without implying that core controls are deficient. For researchers, the instrument and template can be reused with authenticated data and extended with inferential tests (for example, t-tests, ANOVA or regression) where sample size and assumptions permit.

## 6. Conclusion

This paper examined perceived F&A effectiveness in a precision automotive components manufacturer through a fifteen-item questionnaire grounded in management accounting, ERP/BI and Industry 4.0 literature. In the simulated demonstration dataset, financial reporting and accounting controls were rated highest and digital integration and automation lowest, with budgeting and variance analysis also below average. The analysis supports a maturity-



development perspective: preserve strong transaction controls while increasing the decision-support value of finance information through integrated dashboards, driver-based budgeting, cost analytics and automated exception reporting.

### 6.1 Limitations

The principal limitation is that the questionnaire data are simulated; the results illustrate method and must not be read as findings about the case organisation. Because the simulated records share a common response tendency, internal consistency is artificially high (Cronbach's alpha ≈ 0.96) and should not be cited as evidence of instrument reliability. Further limitations are as follows. The sample of 48 is suited to a descriptive demonstration but cannot represent the wider Indian automotive component sector. Likert responses are subject to respondent bias, role-based interpretation and social-desirability effects. Several cross-tabulation cells are small. The company is unlisted, so market-based measures are unavailable, and public databases provide only partial financial data. The two-month placement limited observation of annual budgeting, audit and investment cycles.

### 6.2 Future research

Future work should replace the simulated records with authenticated, consented responses and apply significance testing; develop a product-level cost model using verified drivers; study working-capital cycles; assess the return on selected automation or MIS projects with actual capital-expenditure and savings data; examine GST/TDS process efficiency and reconciliation error rates; build a rolling forecast model linked to production volumes; and benchmark finance indicators against listed automotive component peers.

### Acknowledgements

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### Declarations

**Conflicts of interest.** The author declares no competing interests.

**Funding.** This research received no specific grant from any funding agency.

**Ethical approval.** The questionnaire data analysed in this paper are simulated and do not involve human participants or identifiable personal information. If the simulated data are replaced with authentic responses, institutional ethical approval and informed consent should be obtained before data collection.

**Data availability.** The complete frequency distribution of the simulated dataset is provided in Appendix A. No confidential company financial information is reproduced.

### References

Automotive Component Manufacturers Association of India. (2025, July 8). *Indian auto component industry clocks turnover of Rs. 6.73 lakh crore (USD 80.2 billion) in FY24–25; grows at CAGR of 14% from FY20 to FY25*.

Andreassen, R.-I. (2020). Digital technology and changing roles: A management accountant's dream or nightmare? *Journal of Management Control, 31*, 209–238. https://doi.org/10.1007/s00187-020-00303-2

Colombari, R., Geuna, A., Helper, S., Martins, R., Paolucci, E., Ricci, R., & Seamans, R. (2023). The interplay between data-driven decision-making and digitalization: A firm-level survey of the Italian and U.S. automotive industries. *International Journal of Production Economics, 255*, Article 108718. https://doi.org/10.1016/j.ijpe.2022.108718

Duraivelu, K. (2022). Digital transformation in manufacturing industry – A comprehensive insight. *Materials Today: Proceedings, 68*, 1825–1829. https://doi.org/10.1016/j.matpr.2022.07.409

Fabbe-Costes, N., & Lechaptois, L. (2022). Automotive supply chain digitalization: Lessons and perspectives. In *The digital supply chain*. Elsevier. https://doi.org/10.1016/B978-0-323-91614-1.00017-4

Holtkemper, O. (2020). *Digitization of the management accounting function: A case study analysis on manufacturing companies*. Springer Gabler. https://doi.org/10.1007/978-3-658-31509-2

India Brand Equity Foundation. (2026). *Auto components industry in India*. https://www.ibef.org/industry/autocomponents-india

Li, L., Ye, F., Zhan, Y., Kumar, A., Schiavone, F., & Li, Y. (2022). Unraveling the performance puzzle of digitalization: Evidence from manufacturing firms. *Journal of Business Research, 149*, 54–64. https://doi.org/10.1016/j.jbusres.2022.04.071

Nartey, S. N., & van der Poll, H. M. (2021). Innovative management accounting practices for sustainability of manufacturing small and medium enterprises. *Environment, Development and Sustainability, 23*, 18008–18039. https://doi.org/10.1007/s10668-021-01425-w



Wankhede, V. A., & Vinodh, S. (2021a). Analysis of Industry 4.0 challenges using best worst method: A case study. *Computers & Industrial Engineering, 159*, Article 107487. https://doi.org/10.1016/j.cie.2021.107487

Wankhede, V. A., & Vinodh, S. (2021b). State of the art review on Industry 4.0 in manufacturing with the focus on automotive sector. *International Journal of Lean Six Sigma, 13*(3), 692–732. https://doi.org/10.1108/IJLSS-05-2021-0101

Youssef, M. A. E. A., & Mahama, H. (2021). Does business intelligence mediate the relationship between ERP and management accounting practices? *Journal of Accounting & Organizational Change, 17*(5), 686–703. https://doi.org/10.1108/JAOC-02-2020-0026

## Appendix A

**Table A1**

*Likert Frequency Distribution by Item (Simulated Dataset, n = 48)*

| Item | 1 | 2 | 3 | 4 | 5 | Mean |
|---|---|---|---|---|---|---|
| Q1 | 0 | 0 | 7 | 22 | 19 | 4.25 |
| Q2 | 0 | 0 | 13 | 24 | 11 | 3.96 |
| Q3 | 0 | 0 | 13 | 23 | 12 | 3.98 |
| Q4 | 0 | 0 | 19 | 22 | 7 | 3.75 |
| Q5 | 0 | 2 | 23 | 17 | 6 | 3.56 |
| Q6 | 0 | 1 | 19 | 21 | 7 | 3.71 |
| Q7 | 0 | 0 | 9 | 24 | 15 | 4.12 |
| Q8 | 0 | 1 | 17 | 17 | 13 | 3.88 |
| Q9 | 0 | 2 | 22 | 18 | 6 | 3.58 |
| Q10 | 0 | 0 | 4 | 25 | 19 | 4.31 |
| Q11 | 0 | 0 | 15 | 22 | 11 | 3.92 |
| Q12 | 0 | 6 | 22 | 15 | 5 | 3.40 |
| Q13 | 0 | 2 | 14 | 15 | 17 | 3.98 |
| Q14 | 0 | 3 | 16 | 20 | 9 | 3.73 |
| Q15 | 0 | 5 | 17 | 20 | 6 | 3.56 |

*Note.* Columns 1–5 show the number of respondents selecting each scale point. Simulated academic dataset; not responses from any real organisation.

## Appendix B

**Table B1**

*Simulated Respondent Profile by Experience*

| Experience | n | % |
|---|---|---|
| Less than 2 years | 22 | 45.8 |
| 2–5 years | 16 | 33.3 |
| 6–10 years | 7 | 14.6 |
| More than 10 years | 3 | 6.2 |

*Note.* Simulated academic dataset.

**Open-ended prompts for use in an authentic survey.** (1) Which Finance & Accounts activity currently provides the most useful information to management? (2) What is the main difficulty in preparing or using MIS reports? (3) Which budget or cost variance should receive more frequent attention? (4) What one improvement would make Finance & Accounts more effective? (5) What training or digital skill would be most useful for the finance team?