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The Effect of Technology Adoption on Financial Control and Accounting Efficiency in FMCG Distribution

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Abstract

This study looks at how technology adoption affects accounting effectiveness and financial control in the distribution of FMCG. Organizations are seeing more accuracy, more efficient financial operations, and better decision-making skills as a result of their growing dependence on digital tools, automation, and AI-driven accounting systems. A structured questionnaire was used to gather primary data from 100 respondents in the FMCG industry using a descriptive research approach. The adoption of technology and increases in processing speed and efficiency were shown to be statistically and positively correlated, according to the findings of the paired t-test. According to the study's findings, companies should adopt cutting-edge accounting systems to improve operational efficiency and financial integrity. To keep a competitive advantage in the FMCG sector, it is advised to invest in automation, staff training, and ongoing assessment of accounting systems.

Keywords: Technology Adoption, Financial Control, Accounting Efficiency, FMCG Distribution, Automation, Digital Transformation, etc.

INTRODUCTION

Rapid technology improvements have caused a paradigm change in accounting and financial management procedures in the Fast-Moving Consumer Goods (FMCG) industry. Financial control and accounting efficiency in FMCG distribution have greatly increased with the use of digital tools, automation, and cloud-based financial management systems. Technology integration has become essential for sustainability and competitiveness due to the industry's complexity, which is typified by large supplier chains, huge transaction volumes, and the need for real-time financial tracking (Deloitte, 2021). While accounting efficiency improves decision-making by offering precise and fast financial insights, effective financial control guarantees profitability, risk minimisation, and regulatory compliance (Kokina & Blanchette, 2019).

Financial reporting and transaction processing have been transformed by Enterprise Resource Planning (ERP) systems, analytics powered by Artificial Intelligence (AI), and automated financial management tools. These technologies improve overall financial management by increasing bookkeeping accuracy, reducing human error, and streamlining reconciliation procedures (Chen et al., 2022). Furthermore, blockchain technology and digital payment systems have improved transactional transparency, lowering the risk of fraud and guaranteeing compliance with financial rules (Pimentel & Boulianne, 2020). FMCG distributors may also access real-time financial data using cloud-based accounting systems, which makes it easier to react quickly to changes in demand and market conditions (Goyal & Jeswani, 2021).

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Managing massive stocks while keeping financial control over sales, transportation, and procurement expenses is a major difficulty in FMCG distribution. Distributors now have better financial supervision because to technological developments in inventory management systems that allow them to precisely estimate demand, track stock levels, and cut waste (Brynjolfsson & McElheran, 2019). Automated financial reporting solutions also streamline auditing and tax compliance procedures, lowering administrative workloads and improving regulatory compliance (PwC, 2021).

Another important area where technology has changed financial control in FMCG distribution is risk management. In large-scale enterprises, traditional accounting systems sometimes have trouble spotting financial irregularities or fraudulent activity. Financial analytics driven by AI and machine learning can spot anomalies, forecast fraud trends, and offer early warnings of potential financial dangers (Zhang et al., 2021). This protects financial integrity by strengthening company governance, boosting investor trust, and guaranteeing regulatory compliance.

Adoption of technology has many benefits, but there are still a number of obstacles to overcome. High implementation costs, opposition to digital transformation, and the requirement for qualified staff to handle cutting-edge financial systems are some of the obstacles that small and mid-sized FMCG distributors frequently face (Beck et al., 2020). Furthermore, strong encryption and cybersecurity procedures are required to mitigate the cybersecurity risks connected to digital financial transactions and stop financial losses brought on by cyberattacks (Vasant, 2022). To optimise the advantages of technology integration in financial management, several issues must be resolved.

The purpose of this study is to assess how technology adoption affects financial management and accounting effectiveness in the distribution of FMCG. The research will look at how digital transformation improves financial reporting accuracy, reduces operational risks, and strengthens financial decision-making. It will also examine possible restrictions and difficulties that organisations may encounter when putting technology solutions into practice. This study will advance knowledge of the function of technology in contemporary financial management in the FMCG industry by offering empirical insights.

Financial management and accounting effectiveness are still essential for long-term sustainability and profitability as technology continues to change the FMCG distribution ecosystem. Businesses may increase operational transparency, strengthen regulatory compliance, and optimise financial management by utilising digital technologies. For companies looking to incorporate technology advancements into their financial management systems, this research will provide insightful advice that will eventually boost productivity and expansion.

LITERATURE REVIEW

A thorough approach for combining cost-effectiveness and sustainability in food and FMCG supply chains is put out by Adewale et al. (2024). The research emphasises the necessity of striking a balance between environmental responsibility and economic viability, with particular emphasis on ethical sourcing, waste reduction, and effective resource utilisation. It investigates technical advancements like blockchain and AI-driven analytics to improve operational effectiveness and transparency. The strategy also promotes environmentally friendly packaging and green logistics while addressing customer expectations and regulatory compliance. According to the authors, using these tactics can increase long-term profitability while reducing environmental impact, making sustainability a key differentiator for businesses in the FMCG industry.

Radebe (2021) investigates how Big Data Analytics affects warehouse costs in the FMCG industry, emphasising how it may improve operational efficiency, lower storage costs, and optimise inventory management. The study investigates how data-driven insights improve demand forecasts, reduce overstocking, and minimise stockouts, all of which result in cost savings. It also covers how automation and predictive analytics may be combined to streamline

warehouse and logistics operations. The study comes to the conclusion that employing big data analytics greatly improves decision-making and cost-effectiveness in FMCG warehousing, making it an essential tool for gaining a competitive edge.

The effect of accounting control on the financial performance of multinational corporations in Nigeria is examined by Ali-Momoh, Olorunsola, and Oyedeko (2024). The research emphasises how improving profitability and lowering financial risks may be achieved through internal control systems, regulatory compliance, and accurate financial reporting. The authors stress that strong accounting control systems boost investor trust, increase transparency, and stop fraud. The study uses empirical data to show that rigorous accounting controls and financial stability are positively correlated, indicating that multinational corporations with strict financial monitoring perform better over the long run and are more sustainable.

Ismawati, Trihatmoko, and Ratnaningrum (2024) look at the timeliness and compliance of financial reports in Indonesian fast-moving consumer goods firms. The research looks at corporate governance, technology adoption, and legal frameworks as well as other factors that affect timely financial reports. Results show that companies with digital accounting systems and robust internal controls are more likely to meet reporting deadlines, increasing investor trust and transparency. Inadequate compliance procedures and operational inefficiencies are frequently associated with financial reporting delays. The study suggests that better financial management systems can increase reporting efficiency in the FMCG industry and highlights the significance of timely financial disclosures in preserving market trust and regulatory compliance.

RESEARCH GAP

Significant knowledge gaps still exist about the combined impact of technology adoption on financial control and accounting efficiency, despite the fact that previous research has examined a number of topics related to financial control, accounting efficiency, and technical improvements in the FMCG industry. Previous research has looked at supply chain cost-effectiveness and sustainability, the use of big data analytics in warehousing, and how accounting controls affect financial performance. Research has also examined the timeliness and compliance of financial reports in FMCG companies. Nevertheless, there is little actual data on how automation, data-driven decision-making, and the use of digital financial technology all work together to improve financial control, streamline accounting procedures, and boost distribution efficiency in FMCG. Closing this gap is essential to creating a complete framework that synchronises technical improvements with financial management systems.

RESEARCH OBJECTIVES

The objectives of this research are:

1. To examine the impact of technology on enhancing the accuracy and efficiency of accounting practices in FMCG distribution.

2. To analyze the role of technology in streamlining financial control processes and reducing errors in FMCG distribution.

Hypothesis

"Technology adoption has a significant positive impact on the efficiency and processing speed of accounting practices."

METHODOLOGY

The influence of technology adoption on financial control and accounting efficiency in FMCG distribution is examined in this study using a descriptive research approach. A systematic questionnaire intended to gather information on accounting accuracy, financial supervision, and technology developments is used to gather primary data. Respondents with pertinent experience in accounting and financial management in FMCG distribution organisations are chosen using a purposive sample approach. With 100 participants, the

sample size guarantees a thorough comprehension of the topic. Statistical methods are used in data analysis to investigate the connections between increased financial control and accounting efficiency and technology adoption.

The impact of technology on enhancing the accuracy and efficiency of accounting practices in FMCG distribution

By automating financial procedures, lowering human error, and enhancing data management, technology adoption has greatly improved the accuracy and efficiency of accounting practices in FMCG distribution. Real-time transaction tracking is made possible by sophisticated accounting software, cloud-based financial systems, and analytics powered by artificial intelligence. This ensures accurate record-keeping and adherence to financial rules. Reconciliation, tax computation, and invoicing procedures that are automated reduce inconsistencies and improve operational effectiveness. Digital accounting technologies also simplify financial reporting and inventory management, enabling FMCG distributors to act swiftly and decisively. Businesses may increase overall financial performance, lower fraud risks, and improve transparency by incorporating technology into financial control processes. This improves resource allocation and strategic planning in the cutthroat FMCG industry.

In order to study the effectiveness of technology in enhancing the accuracy and efficiency of accounting practices in FMCG distribution, responses have been received from 100 respondents who have experience in the filed of finance and accounting.

The majority of respondents (63%) agree, with 38% agreeing and 25% strongly agreeing, that the use of technology has increased the accuracy of financial record-keeping in FMCG distribution operations. This implies that by lowering mistakes and improving data dependability, technology breakthroughs have improved financial accuracy. 28% of respondents, however, disagree with this statement (11% strongly disagreeing and 17% disagreeing), which may be a sign of implementation or adaption issues. Nine percent of individuals, on the other hand, express no opinion, indicating ambiguity or conflicting experiences. Although there may still be some opposition or restrictions, the results show that technology's contribution to better financial record-keeping is usually seen favourably.

According to the survey's findings, the majority of participants (59%) agree—with 35% strongly agreeing—that automation of accounting procedures has improved efficiency by lowering mistakes and processing times in the distribution of FMCG. This implies that automation has been essential to increasing accuracy and simplifying financial procedures. But according to 33% of respondents (16% strongly disagreeing and 17% disagreeing), there hasn't been a noticeable change. This might be because of technology constraints, implementation difficulties, or a lack of training. Conversely, 8% are indifferent, suggesting a range of experiences or a lack of clarity. Overall, the results show that automation has had a mainly beneficial influence, but they also show that issues with its efficacy and acceptance need to be addressed.

Hypothesis Testing

To test the hypothesis "Technology adoption has a significant positive impact on the efficiency and processing speed of accounting practices" T-test has been applied between the variable "the adoption of technology has significantly increased the speed of processing financial transactions" and "Technology-driven accounting systems have improved overall efficiency", the results are as under:

To determine if technology adoption significantly improves the effectiveness and processing speed of accounting procedures in FMCG distribution, a paired t-test was used. Efficiency increases were evaluated higher by respondents than processing speed improvements, as seen by the mean score of 4.21 for efficiency and 3.7 for processing speed. Processing speed had a variation of 1.22 whereas efficiency had a variance of 0.57, indicating that respondents' evaluations of efficiency were more uniform.

The two variables have a significant positive association, as indicated by the Pearson correlation value of 0.801, which suggests that increasing technology use tends to improve processing speed and efficiency. The two-tailed test yielded a p-value of 2.02×10^{-11} and a t-statistic of -7.565, both of which are considerably below the conventional significance level of 0.05. This indicates that there is a statistically significant difference between processing speed and efficiency.

Given that the p-value is significantly less than 0.05, we reject the null hypothesis and come to the conclusion that the efficiency and processing speed of accounting procedures in FMCG distribution are significantly improved by technology adoption.

CONCLUSION

According to the study's findings, the efficiency and processing speed of accounting procedures in FMCG distribution are greatly increased by the use of technology. The results show that digital accounting systems and automation increase accuracy, decrease human error, and simplify financial processes, all of which contribute to improved financial control. With a notable difference in their effects, the statistical analysis demonstrates a substantial positive association between technology-driven efficiency and quicker transaction processing. Businesses must use cutting-edge accounting solutions to streamline operations and preserve a competitive edge in light of the FMCG industry's fast digital revolution. All things considered, this study emphasises how important technology is to improving financial management, highlighting the necessity of ongoing investment in cutting-edge accounting solutions.

RECOMMENDATIONS

In order to improve accuracy and efficiency, it is advised that FMCG distribution companies invest in cutting-edge accounting technology including cloud-based solutions, AI-driven analytics, and automated financial reporting systems. Employees should receive regular training to provide them the digital skills they need to accept new technology with ease. Real-time data integration should be used by organisations to enhance financial decision-making and cut down on processing delays. Additionally, it's important to regularly assess accounting software to make sure it complies with changing legal and industry standards. FMCG distributors may improve financial management, maximise operational performance, and maintain long-term business development by placing a high priority on technology adoption and ongoing innovation.

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