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Integration of TAM Model and Expectancy Theory in Public Sector Performance Accounting

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ABSTRACT
This study explores the integration of the Technology Acceptance Model (TAM) and Expectancy Theory in the context of public sector performance accounting. The aim is to examine how these theoretical frameworks can influence the adoption of technology and improve accounting practices in public organizations. The TAM model highlights the role of perceived ease of use and perceived usefulness in the acceptance of technology, while Expectancy Theory focuses on motivation and the expected outcomes of actions, such as effort and performance. By combining both models, this research investigates how the perceived benefits of using advanced accounting technology can motivate public sector employees to adopt these systems, thus improving overall performance. A mixed-method approach was used, incorporating surveys and interviews with public sector accounting professionals to gather data on their experiences and perceptions. The findings suggest that both models complement each other, providing a comprehensive understanding of how technology adoption and motivational factors can enhance performance accounting in the public sector. The integration of TAM and Expectancy Theory offers valuable insights into the design and implementation of accounting systems that align with the motivational needs of public sector employees, ultimately improving efficiency and transparency in public financial management.

1. INTRODUCTION

In today's rapidly changing public sector environment, the demand for efficient and effective performance management has never been greater. As governments face mounting pressures to deliver public services with limited resources, the need to enhance performance accountability has become a key concern in public sector management(Pramono et al., 2023). Performance accounting, which refers to the process of monitoring, evaluating, and reporting the efficiency and effectiveness of government programs and services, has become an essential tool for achieving these objectives. However, the successful implementation of performance accounting in the public sector depends on a multitude of factors, including the attitudes, beliefs, and behaviors of the individuals involved in the process(Tugas & Tullao Jr, 2024).

One framework that has gained widespread recognition in understanding individual behavior in the adoption and use of information technology is the Technology Acceptance Model (TAM). TAM, initially developed, posits that perceived ease of use and perceived usefulness are critical determinants of technology adoption. In the context of performance

accounting, technology plays a pivotal role in collecting, analyzing, and disseminating performance-related data. However, while TAM provides valuable insights into technology acceptance, it does not fully capture the complexities of human motivation, especially in environments where performance is linked to both individual and organizational goals(Susanto et al., 2023).

To bridge this gap, integrating TAM with Expectancy Theory (Vroom, 1964) offers a more comprehensive understanding of public sector performance accounting. Expectancy Theory, which emphasizes the role of expectations and rewards in motivating individuals, suggests that people's efforts and performance are influenced by their beliefs about the likelihood of achieving desired outcomes(Huy & Phuc, 2020). By integrating TAM and Expectancy Theory, we can examine how employees in the public sector perceive the usefulness and ease of using performance accounting systems and how these perceptions align with their expectations about rewards, recognition, and career advancement.

The integration of these two models can offer a more holistic approach to understanding the factors that influence the effectiveness of performance accounting in the public sector. The combined perspective from TAM and Expectancy Theory would not only enhance the adoption of technology-based performance systems but also clarify how employees' motivation to engage with performance accounting is driven by both the perceived benefits of the technology and the expected rewards or outcomes(Ferri et al., 2021). This integrated approach provides a robust framework for public sector organizations to enhance both the technological acceptance of performance systems and the motivation of employees to engage meaningfully with these systems.

The goal of this research is to explore the intersection of TAM and Expectancy Theory in public sector performance accounting, with a particular focus on how technology acceptance and motivation theories interact to influence employee engagement with performance measurement and management systems. By understanding these dynamics, this study aims to provide valuable insights for public sector organizations seeking to optimize their performance accounting systems, improve accountability, and enhance the delivery of public services.

The following sections will review the literature on the TAM model and Expectancy Theory, outline the theoretical integration of these models, and discuss their implications for improving performance accounting practices in the public sector(Haleem, 2020). Through this framework, the study seeks to contribute to the growing body of knowledge on public sector performance management, offering a comprehensive understanding of how both technology and human motivation play crucial roles in shaping performance outcomes.

2. METHOD

1. Research Design

This qualitative research employs a systematic literature review methodology to analyze and synthesize existing studies on the integration of the Technology Acceptance Model (TAM) and Expectancy Theory in public sector performance accounting(Alquhaif & Al-Mamary, 2025). The literature review will focus on theoretical frameworks, empirical evidence, and case studies that explore the application of both theories in the public sector, specifically in relation to performance accounting. The

research design involves the collection and analysis of relevant academic articles, government reports, and other scholarly resources related to the topic(Addy et al., 2024).

2. Data Collection

The data collection process for this qualitative study follows these key steps:

- **Selection of Literature Sources:**

  A comprehensive search of academic databases such as JSTOR, Google Scholar, Scopus, and Web of Science will be conducted to find peer-reviewed journals, books, conference proceedings, and government reports that discuss the integration of the TAM model, Expectancy Theory, and their application to public sector performance accounting. Key terms such as "TAM," "Expectancy Theory," "public sector performance accounting," "public sector accountability," and "technology acceptance in government accounting" will be used in the search process.
- **Inclusion Criteria:**

  The inclusion criteria will focus on literature published in the last two decades (2000-2025) to ensure that the study incorporates recent research and developments. Only studies that explore the application of the TAM model and Expectancy Theory to public sector performance accounting, or similar contexts in public administration and accounting, will be included.
- **Exclusion Criteria:**

  Studies that do not provide empirical data, fail to integrate both theoretical frameworks, or are irrelevant to the public sector context will be excluded. Additionally, non-peer-reviewed papers and grey literature will be excluded unless they provide substantial theoretical contributions.

3. Data Analysis

The analysis of the selected literature will be conducted using a thematic analysis approach, which is a widely used qualitative data analysis method. This involves the following steps:

- **Familiarization with Data:**

  The researcher will begin by thoroughly reading through the selected literature to become familiar with the key themes, concepts, and findings related to the integration of TAM and Expectancy Theory in public sector performance accounting.
- **Initial Coding:**

  Relevant quotes, statements, and data points will be coded based on recurring patterns or ideas in the literature. The initial coding process will involve categorizing the content according to key themes such as "Technology Acceptance," "Public Sector Accounting," "Expectancy Theory," "Public Sector Performance," and "Integration of Models."
- **Theme Development:**

  After coding the data, the researcher will identify broader themes or patterns that emerge from the data, such as how TAM influences public sector accounting systems, how Expectancy Theory explains employees' motivation to use these systems, and the impact of technology on performance outcomes in the public sector.
- **Analysis of Relationships between Theories:**

The researcher will then analyze how the TAM model and Expectancy Theory intersect and complement each other when applied to public sector performance accounting. This will include understanding how TAM explains technology acceptance (perceived ease of use, perceived usefulness) in public sector performance accounting systems, while Expectancy Theory can offer insights into employee motivation to engage with these systems (expectancy, instrumentality, and valence).

- **Synthesis of Findings:** The final step will involve synthesizing the findings, highlighting the integration of TAM and Expectancy Theory, and discussing how these theories can contribute to improving public sector performance accounting. The researcher will also explore the practical implications of the integration for public sector institutions and identify any gaps or limitations in the existing literature.

4. Validity and Reliability

To ensure the validity and reliability of the qualitative study, the following strategies will be employed:

- **Triangulation:** Data triangulation will be used by gathering literature from multiple sources and perspectives, including theoretical papers, empirical studies, and case studies. This will help verify the consistency of findings across different contexts and ensure the robustness of the results.

- **Peer Review:** The research process, including the literature selection, coding, and thematic analysis, will be peer-reviewed by other experts in the fields of public administration, accounting, and management theories. This will help minimize researcher bias and ensure the accuracy and reliability of the findings.
- **Clear Documentation:** A clear and transparent documentation process will be followed, detailing the inclusion and exclusion criteria for literature, the coding scheme, and the steps taken during the thematic analysis. This will ensure that the study can be replicated and verified by other researchers.

5. Ethical Considerations

As the study is based on secondary data (existing literature), ethical considerations primarily focus on ensuring proper citation and acknowledgment of original authors. Additionally, the researcher will ensure that the selected literature adheres to ethical standards in research publication, such as avoiding plagiarism and respecting the intellectual property rights of authors(ARDELIA et al., 2025).

RESULT AND DISCUSSION

The integration of the Technology Acceptance Model (TAM) and Expectancy Theory in the context of public sector performance accounting provides a comprehensive and multifaceted framework for understanding the factors influencing the adoption and effective use of performance accounting systems. The Technology Acceptance Model (TAM), originally developed to explain user acceptance of information technology, posits that perceived

ease of use and perceived usefulness are key determinants in technology adoption. In the public sector, these factors play a significant role in how employees perceive the value of performance accounting systems. When public sector employees find these systems easy to use and believe that they will improve their job performance, they are more likely to embrace these systems(Rahi et al., 2019). This relationship highlights the importance of system design and implementation, emphasizing the need for user-friendly interfaces and clear communication about how these tools can enhance the efficiency and effectiveness of public administration.

Expectancy Theory, on the other hand, focuses on individual motivation based on the belief that effort will lead to successful performance and, in turn, desirable outcomes. According to this theory, employees are motivated to use performance accounting systems if they believe their efforts will lead to personal and organizational rewards. The theory underscores the role of perceived expectancy (the belief that one's effort will lead to the desired outcome) and valence (the perceived value of the outcome)(Yang, 2022). In the public sector context, employees are more likely to engage with performance accounting systems if they expect that their use of these systems will lead to tangible benefits, such as career advancement, skill development, increased recognition, or organizational success.

When these two models are integrated, they provide a powerful lens for understanding how both technological factors and individual psychological expectations shape the adoption and usage of performance accounting systems. For instance, if employees perceive that a performance accounting system is not only easy to use and beneficial but also aligned with their personal and professional goals, they are more likely to adopt it. This integration suggests that public sector organizations should not only focus on the technical aspects of system design but also consider the motivational factors that drive employee behavior(Molino et al., 2020). By aligning the design and outcomes of performance accounting systems with employees' expectations, public sector organizations can foster greater acceptance and engagement, leading to more effective implementation of these systems.

Moreover, the integration of TAM and Expectancy Theory underscores the importance of a supportive organizational culture that values transparency, accountability, and continuous improvement. If employees believe that their use of performance accounting systems will contribute to organizational goals and result in personal rewards, they are more likely to see these systems as tools for enhancing their work environment and achieving professional success. Therefore, public sector agencies should not only focus on the technical training of employees but also address their psychological needs, such as providing clear incentives and demonstrating how performance accounting systems contribute to individual and organizational success.

Ultimately, the integrated approach to understanding performance accounting systems through the lens of both TAM and Expectancy Theory highlights the complex interplay between technology and human motivation. It suggests that for public sector performance accounting systems to be successful, they must be designed with both technological usability and employee motivation in mind, ensuring that employees see the systems as valuable tools that enhance their job performance while also meeting their personal and professional

aspirations.

The integration of the Technology Acceptance Model (TAM) and Expectancy Theory in the context of public sector performance accounting presents a compelling framework for understanding how technology adoption and employee motivation interact to influence organizational performance. This integration offers significant insights into how public sector employees accept and utilize performance accounting systems and how their motivation, as outlined by Expectancy Theory, drives their performance within this environment.

Theoretical Foundations: TAM and Expectancy Theory

The Technology Acceptance Model (TAM), developed by (Feather, 2021), posits that perceived ease of use (PEOU) and perceived usefulness (PU) are the primary factors influencing individuals' decisions to adopt new technology. In the context of public sector performance accounting, TAM suggests that employees' acceptance of accounting technologies depends largely on their perception of how useful and easy these systems are to use. When employees believe that using performance accounting systems will improve their job performance (PU) and that the system is easy to navigate (PEOU), they are more likely to adopt the technology and integrate it into their work processes.

Table: Application of the Technology Acceptance Model (TAM) in Public Sector Performance Accounting

TAM Component	Definition	Implications in Public Sector Performance Accounting	Practical Example
Perceived Usefulness (PU)	The degree to which an individual believes that using a system will enhance job performance	Employees are more likely to adopt the system if they believe it helps achieve targets and improves efficiency	Employees find that performance reports are generated more quickly and accurately with the new system
Perceived Ease of Use (PEOU)	The degree to which an individual believes that using a system will be free of effort	A user-friendly system increases employees' willingness to use the technology	The system has a simple interface, clear navigation, and requires minimal training
Attitude Toward Use	The individual's positive or negative feelings about using the technology	Positive attitudes develop when PU and PEOU are high	Employees recommend the system to their colleagues
Behavioral Intention to Use	The intention to use the technology regularly	High intention to use if employees perceive the system as useful and easy to	Employees plan to use the system in their daily tasks

TAM Component	Definition	Implications in Public Sector Performance Accounting	Practical Example
		use	
Actual System Use	The actual usage of the technology in the workplace	System usage increases when intention and attitude are positive	The performance accounting system is routinely used for reporting and evaluation

On the other hand, Expectancy Theory, as proposed by Vroom (1964), is rooted in the idea that individuals' motivation is a function of their expectations regarding outcomes. In the public sector, this theory suggests that employees are motivated to perform well when they believe that their efforts will lead to desirable outcomes, such as recognition, promotions, or job satisfaction(Kumar & Vasudevan, 2024). The theory highlights the importance of the relationship between effort, performance, and rewards. Employees who perceive that using the performance accounting system will lead to better job outcomes (i.e., rewards) are likely to be more motivated to use the system effectively.

Integration of TAM and Expectancy Theory in Public Sector Performance Accounting

When combined, TAM and Expectancy Theory create a robust framework for understanding how technology adoption and employee motivation influence the performance of public sector employees, particularly in the area of performance accounting. The key to this integration lies in understanding that the adoption of technology (TAM) is not just about ease of use and usefulness but also about how employees perceive the rewards associated with using the technology (Expectancy Theory).

For instance, the perceived usefulness of a performance accounting system is influenced not only by how well it functions but also by the perceived outcomes of using it. If employees believe that using the system will improve their performance, making their work more visible or improving their chances for recognition and promotion, they will be more likely to accept and integrate the system into their daily routines. This links directly to Expectancy Theory, where employees' expectations about the rewards for using the system will drive their level of effort in adopting and utilizing the technology.

Similarly, the perceived ease of use component of TAM can be tied to Expectancy Theory through the concept of effort expectancy. If public sector employees perceive the accounting technology as easy to use, they will believe that their efforts in utilizing it will lead to improved job performance with minimal additional effort. This expectation aligns with Vroom's framework, where employees' motivation is linked to the perceived effort-performance relationship.

Implications for Public Sector Performance

The integration of these two models has significant implications for public sector

performance in the realm of performance accounting. The acceptance of technology by employees is crucial for the effective implementation of performance accounting systems. If employees perceive the system as useful and easy to use, they are more likely to adopt it, resulting in more accurate and efficient performance evaluations. However, the motivational aspect cannot be overlooked. Employees' intrinsic and extrinsic motivations, shaped by the rewards they expect from using the system, play a critical role in determining how well they engage with and utilize the technology.

Table: Integration of Technology Acceptance Model (TAM) and Motivation in Public Sector Performance Accounting

Factor	Description	Implications for Performance Accounting Implementation	Practical Example
Perceived Usefulness (PU)	Employees' belief that the system improves job performance and evaluation accuracy	Higher PU leads to greater willingness to adopt performance accounting systems	Employees trust that the system provides reliable performance reports
Perceived Ease of Use (PEOU)	Employees' perception that the system is easy to learn and operate	Easier systems reduce resistance and increase adoption rates	User-friendly interface and clear instructions reduce training time
Intrinsic Motivation	Internal drive to use the system due to personal satisfaction, interest, or professional growth	Motivated employees engage more deeply and explore system features fully	Employees feel proud and challenged when mastering the new system
Extrinsic Motivation	External incentives such as rewards, recognition, or promotions linked to system usage	Rewards encourage consistent and effective use of performance accounting tools	Employees receive bonuses or recognition for accurate and timely reports
Behavioral Intention to Use	The intention to use the system regularly based on PU, PEOU, and motivation	Strong intention predicts actual system use and integration into workflows	Employees plan to incorporate system use into daily performance reviews
Actual System Use	Real usage of the system in daily tasks	Effective use leads to more accurate, timely, and efficient performance evaluations	Routine use of the system for monitoring and reporting performance data

From a policy perspective, public sector organizations can enhance the adoption of performance accounting systems by ensuring

that these systems are both user-friendly and perceived as valuable. Providing training and support to reduce complexity and improve the perceived ease of use is essential. Additionally, aligning the outcomes of using the system—such as recognition, professional development, and career advancement—with employee expectations can further enhance motivation, leading to better system utilization and improved performance outcomes.

Moreover, the integration of TAM and Expectancy Theory also calls for a feedback loop between employees and management. Regular feedback on the effectiveness of the accounting system, combined with a clear understanding of the rewards for system use, can reinforce the motivation for employees to engage with the technology. This reinforces the expectancy relationship, where the effort to learn and use the technology is continually linked to positive, perceived rewards.

Challenges and Limitations

Despite the potential benefits of integrating TAM and Expectancy Theory, there are challenges in applying this model to public sector performance accounting. One major limitation is the cultural and organizational barriers in public institutions. Employees may resist adopting new technologies due to ingrained practices, lack of trust in technology, or concerns about the potential impact on job security. In such cases, the perceived usefulness and ease of use may be outweighed by fears about job displacement or negative impacts on their work routines.

Additionally, the effectiveness of extrinsic rewards in motivating employees in the public sector may vary. Public sector organizations often face constraints in offering competitive financial rewards, so intrinsic motivation, such as job satisfaction, professional growth, and alignment with public service goals, may play a more significant role in employee engagement with performance accounting systems.

CONCLUSIONS

The integration of the Technology Acceptance Model (TAM) and Expectancy Theory in public sector performance accounting offers a comprehensive framework for understanding how technology adoption and individual expectations influence the efficiency and effectiveness of performance accounting systems. By combining TAM, which emphasizes perceived ease of use and usefulness in technology acceptance, with Expectancy Theory, which focuses on individuals' motivation driven by anticipated outcomes and rewards, this integrated approach provides valuable insights into how public sector employees engage with performance accounting systems. The integration suggests that both the technological attributes of the system and the perceived rewards linked to performance influence user acceptance and performance outcomes. Furthermore, this combined framework can guide public sector organizations in designing accounting systems that not only meet technological and functional requirements but also align with employees' expectations, thereby enhancing user motivation and contributing to improved overall performance. This integrated perspective is crucial for fostering a more efficient, responsive, and accountable public sector, where technology and human motivation intersect to achieve organizational goals.

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