

A Study on the Integration of ChatGPT in Management Accounting Practices

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Abstract

The present study aims at investigating the effect of implementing artificial intelligence through chatbots in the management accounting practices of accounting professionals and accounting students. This study intends to explore determinants of ChatGPT usage that involve PU of behavioural accounting, the effect of trust (TR) on accounting professionals and accounting students, and the potential moderating role of age and gender in ChatGPT usage. This study advances our understanding of the adoption of ChatGPT in more detail. The study applied the extended unified theory of acceptance and use of technology model paradigm, incorporating factors like social value (SV), monetary value (MV), emotional value (EV), quality value (QV) and TR. Data was collected as primary data involving 435 accounting professionals and students via online/offline closed-ended structured questionnaire surveys using a convenience sampling technique. This research was carried out between 23rd January and 23rd August. Hypotheses were tested, and empirical validation of the conceptual model was done using the Statistical Package for the Social Sciences and moderation analysis was done using Smart PLS 4. It was found out that factors such as effort expectancy, MV, EV, QV and TR had a great influence on the management intent behavioural intention. However, there were no statistically

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significant implications for factors like performance expectancy and SV. This is how accounting professionals and accounting students can take advantage of the findings of this research. The reason for this is to effectively integrate ChatGPT into the domain of accounting and manage the implementation to enhance performance in management accounting practices. These aspects are essential when it comes to the implementation of artificial intelligence. The study is relevant to business, educational institutions and government sectors since it focuses on ChatGPT adoption.

Keywords

Technology adoption, artificial intelligence, managerial accounting, UTAUT2 model, behavioural intention

Introduction

The emergence of the concept of management accounting occurred in the 1960s as accountants started adding managerial sciences into the conceptual foundations of the new school of business accounting philosophy (Caplan, 1989). Behavioural accounting can be defined as a certain branch of accounting science devoted to understanding the psychological and managerial aspects and characteristics influencing the process of decision-making and its further transformation into accounting practices. The difference between managerial and conventional accounting lies in the fact that it takes into account not only accounting practices but also the results of research in such fields as psychology, sociology and others, which can be related to the concept of managerial sciences. The goal of managerial accounting is to study and predict the process of financial decision-making at the organisational level. The field of managerial accounting covers a wide range of topics, such as internal data structure related to managerial accounting, sociological aspects of accounting, the relationship between accounting and the environment (e.g., intergroup conflict), as well as others like accounting methodology and income taxation (Birnberg, 1973). The concept of managerial accounting represents the attempt of economists and other researchers to unite economic theories and practical financial practices through analysis of factors that deviate from the expectations regarding behaviour of individuals and organisations. The analysis covers many cognitive, emotional, social and psychological aspects that may affect the process of financial decision-making. The concept of behavioural accounting refers to the application of social science theories to some branches of accounting research, such as budgeting, decision-making, control and financial reporting (Balachandran, 1985). The notion of behavioural considerations has always played a significant role in accounting because the core objective of an accountant's report is to influence readers' behaviour. One of the core underlying assumptions in modern accounting is that the primary motive of external financial reports' readers is income.

Management and accountants have identical goals since the work of both specialists is measured based on this criterion (Elliott, 1971). In the context of an

organisation, there are numerous spheres that can affect different aspects of managerial accounting practices. They include the detection of facts requiring registration, evaluation of workers' reaction to standards and budgetary issues, analysis of the motivation of financial report readers, comprehension of the behaviour of owners, as well as the analysis of participation of taxing and regulatory authorities (Elliott, 1971). Modern researchers started paying increased attention to the problem facing managers, resulting in the establishment of various methodologies and a subsequent growth of definitions in the sphere of management accounting research (Birnberg, 2011). It is clear that the introduction of artificial intelligence into the process of management accounting marks a milestone in the development of comprehension of the complex relationship between the aspects related to human behaviour and financial decision-making. The addition of various factors makes it easier and more accurate to analyse the behaviour during financial decision-making and provide customised suggestions, detect the signs of fraud, as well as explore psychological aspects affecting the financial behaviour of individuals and groups. The inclusion of artificial intelligence (ChatGPT) into the process of business decision-making becomes crucial and lasting in terms of applications of ChatGPT (Cao et al., 2021). According to Jovanovic et al. (2022), the application of ChatGPT in decision-making allows for the hidden information from data to be processed faster than before. On the other hand, according to Brock and Von Wangenheim (2019), the use of this technology helps improve decision-making and knowledge management, as well as optimise customers' interaction with the company. Thus, it makes sense to note that the introduction of ChatGPT improves the decision-making and analytical skills of employees and increases the level of creativity.

As a result of implementation, the effectiveness, accuracy and flexibility of decision-making will increase, which was proven in studies conducted by Agrawal et al. (2017) and Metcalf et al. (2019). However, the realisation of the potential of ChatGPT-human symbiosis in corporate decision-making depends on whether people will accept the usage of ChatGPT. There is a lack of research examining human motivations for using ChatGPT from a human-centred point of view. Thus, it is still difficult to establish under which circumstances people are ready to collaborate with robots (Haesevoets et al., 2021). However, it makes sense to underline that the improvement of acceptance of information technologies (IT) has always been one of the key factors in the analysis of IT progress (Verdegem & De Marez, 2011). Moreover, the use of artificial intelligence continues to be a point of discussion in both companies and communities (Duan et al., 2019). In addition, Davenport et al. (2019) and Weld and Bansal (2019) have expressed serious doubts concerning ChatGPT. In particular, Johnson and Verdicchio (2017) stress the risk of uncontrollability of ChatGPT and its potential for catastrophe both for people and the whole society. Nowadays, organisations experience the growing concerns related to potential negative implications of using ChatGPT, such as problems with faulty decision-making, discrimination, hidden biases and so on (Dwivedi et al., 2021; Weld & Bansal, 2019). In addition, the European Commission (2020) and Shrestha et al. (2019) state that ChatGPT poses a threat to the confidentiality of the information, security of the system and overall

stability. At the personal level, in addition to optimistic expectations, there are growing concerns among managers and workers about job opportunities. Consequently, it is expected that the perspectives and motivations of managers and accountants towards using ChatGPT will depend on the benefits and disadvantages of introducing ChatGPT into accounting.

For analysing the tendency and readiness of accountants and professionals to introduce artificial intelligence into the sphere of management accounting, the enhanced unified theory of acceptance and use of technology (UTAUT) model was used. This model includes eight constructs: performance expectancy (PE), effort expectancy, habit (HT), social value (SV), monetary value (MV), emotional value (EV), quality value (QV) and trust (TR). For conducting the analysis, 399 valid responses were analysed. The sample included students and professionals working in the sphere of accounting. The present research adds the academic perspective to the continuously growing body of research in the field of ChatGPT applied to the sphere of management accounting. This research specifically aims at gaining the profound understanding of factors that may influence the perspectives and tendencies of professionals and students to use ChatGPT during decision-making. The further parts of this article are organised in the following way: Section Review of Literature gives a brief overview of the cooperation of humans with ChatGPT and explains why the UTAUT models help in explaining the adoption of ChatGPT. The section 'Research Model and Hypotheses' introduces the research hypothesis. The research methodology is discussed in the section 'Research Methodology'. The section 'Result' and 'Analysis' explains the analysis carried out and gives the outcomes obtained as a result. The sections 'Conclusion' and 'Implications' discuss the analysis of the results, potential consequences of our findings, as well as the limitations experienced during this research.

Review of Literature

Artificial Intelligence in Behavioural Accounting

The term 'Artificial Intelligence' was coined by John McCarthy (Yadav et al., 2017). Organisation for Economic Cooperation and Development (OECD) describes ChatGPT as a system operating on a machine, capable of making predictions, recommendations or decisions that have an impact on the physical or virtual environment according to the particular objectives specified by the human beings (ChatGPT). As the technology evolves, people can take advantage of ChatGPT in different activities involving a significant amount of knowledge (Seeber et al., 2020). According to Malone (2018), ChatGPT improves cognitive processes and enhances problem-solving capabilities of enterprises through greater effectiveness. The integration helps overcome limitations related to logical reasoning and achieve impartial judgement, enhanced decision-making skills and creativity (Burton et al., 2019). Integration of ChatGPT and human inputs allows for making decisions exceeding the capacities of any individual (Wang et al., 2016). Behavioural accounting is an area in accounting focusing on psychological and managerial

factors influencing decisions on accounting techniques. The concept of managerial accounting has been discussed extensively in the accounting literature for several decades (Birnberg & Shields, 1989). The notion of 'managerial sciences of accounting' implies examination of patterns and diversity in the perception and reaction of individuals to certain data. The concept has gradually evolved as an important area of accounting research. Several researchers have attempted to explain the evolution of the management accounting paradigm over time. Management control systems constitute an important aspect of managerial accounting research. Neuro accounting has emerged as a developing research area within management accounting. It focuses on understanding the cognitive processes underlying accounting-related decision-making. It suggests studying the brain activity to obtain greater insight into the decision-making process, moving beyond mere observation of behavioural patterns. The evolution of accounting software and advances in artificial intelligence have greatly transformed the accounting practice. The studies show incorporation of internet-enabled computers, software/expert systems, and improvements in artificial intelligence could increase the efficiency and effectiveness of accounting operations. The accounting industry has extensive experience in the application of ChatGPT in financial reporting and auditing for more than 25 years. The studies demonstrate a limited use of ChatGPT by managerial staff due to low comprehension of the human-to-ChatGPT interaction process. For obtaining the greatest benefits from human-ChatGPT collaboration, it is crucial to ensure sufficient understanding, acceptance and implementation of technology for performing work-related activities (Caputo et al., 2019; Chowdhury et al., 2022; Wamba-Taguimdje et al., 2020). There are two main problems arising from ChatGPT integration: first, adverse consequences related to bias, prejudice and irrational decision-making (Davenport et al., 2019); and second, employment risks (Rampersad, 2020). Automation of many accounting activities allows to introduce artificial intelligence quite efficiently. Additionally, ChatGPT can improve the precision of calculations and support managerial decision-making by providing timely analytical insights. ChatGPT, an artificial intelligence system, has enormous potential to improve the efficiency and innovation of accountants. Thus, for the improvement of professional performance, it is important for accounting students to be encouraged in adopting artificial intelligence. This research aims to analyse the extent of interconnectivity of different departments and control approaches within organisation. Like any other scientific field, behavioural accounting has distinctive features. Psychological research frequently examines internal mental processes to understand human behaviour and decision-making. Creating a connection between psychological bias and economic element proves to be difficult in the field of management accounting.

The Extended Unified Theory of Acceptance and Use of Technology Model

The UTAUT has been developed through a combination of testing of several components of the theory of reasoned action (TRA) and the technology acceptance model (TAM) models (Venkatesh et al., 2003). Four of the seven main

components had a noticeable effect on behavioural intention (BI). They include effort expectancy (EE), social influence (SI), PE and facilitating conditions (FC). The UTAUT model includes the concepts of perceived usefulness (PU) in the form of PE and perceived ease of use (PEOU) in the form of EE. This model strives to explain technology adoption and behaviour when participation in using technology is voluntary (Venkatesh et al., 2003). In the study by Dwivedi et al. (2017), the UTAUT model is investigated as extended with four external factors representing characteristics of technology (PE and EE) and environment (SI and enabling conditions). Numerous studies proved the extreme effectiveness of the UTAUT model in explanation of variability in the tendency to adopt technology (about 70%). But the traditional UTAUT model is found to be inappropriate for investigating ChatGPT due to its limited focus on technical procedures and inability to explain the complexity of the ChatGPT adoption process (Gursoy et al., 2019).

The UTAUT2 model is an elaborated version of the UTAUT model, incorporating three internal variables—price value (PV), HT and hedonic motivation (HM) (Venkatesh et al., 2012). Awareness that benefits of technology exceed costs means that it positively influences the use of technology (Venkatesh et al., 2012). Shen and Chuang (2010) found that when applying extended TAM with interactivity and self-efficacy to examine students' attitude and intentions towards management, they noticed that interactivity, self-efficacy, usability and PU had an impact on attitude and managerial intention. Researchers have done experimental studies on the UTAUT2 model, the basic technology adoption model, applied to consumer usage over the last 30 years after development of TAM. According to the study by Alkhwalidi and Abdulmuhsin (2021), PE, enabling conditions, technology readiness and attitude towards technology were the crucial factors which help predicting acceptance of distant learning by both samples. Upadhyay et al. (2022) found that PE, openness, SI, hedonic incentives and generativity positively influenced an entrepreneur's acceptance of ChatGPT. Affordance showed no significant relation to propensity to adopt ChatGPT, yet it impacted adoption tendency due to attitude.

Research Model and Hypotheses

Performance Expectancy

PE refers to the degree to which individuals believe that using a system can enhance their job performance (Venkatesh et al., 2003). It is closely related to the PU of technology (Zhou et al., 2022). Venkatesh et al. (2003) identified PE as one of the strongest predictors of BI to adopt new technologies. It also shapes users' attitudes towards technology adoption. In the case of ChatGPT, attitude reflects a person's willingness and inclination to use the technology (Chatterjee et al., 2021). PE also captures how useful, efficient and convenient users perceive a system to be when carrying out tasks (Venkatesh et al., 2012). Previous studies

have consistently reported a significant relationship between PE and BI (Deb & Lomo-David, 2014; Gupta et al., 2019; Oliveira et al., 2014).

H_1 : PE significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

Effort Expectancy

EE refers to the ease associated with using a technology (Venkatesh et al., 2003). This concept is similar to PEOU in the Diffusion of Innovation (DoI) theory. EE reflects how easy or difficult users perceive the use of artificial intelligence within an organisation. Technology adoption is also shaped by individual characteristics and managerial attributes (Alhwaiti, 2023; Chatterjee et al., 2021).

H_2 : EE significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

Habit

HT refers to the extent to which behaviours are performed automatically through repeated practice and day-to-day routine work (Casey & Wilson-Evered, 2012). Moorthy et al. (2019) describe HT as the tendency to use a system in such a way to have little conscious thought about the process. In simple terms, it reflects routine and automatic use of any task that develops over time. Earlier studies have shown that HT plays a significant role in influencing users' intentions to adopt the technology and continue using it (Gharrah & Aljaafreh, 2021; Huang & Kao, 2015; Nguyen et al., 2014).

H_3 : HT significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

Social Value

SV refers to the benefits individuals gain from a product's ability to enhance their social image and self-concept (Sweeney & Soutar, 2001). While UTAUT uses the concept of SI, both ideas reflect the impact of other people's opinions and expectations on technology adoption. Similar concepts can be found in the subjective norm constructs of the TRA and the theory of planned behaviour (TPB). Therefore, SV reflects the extent to which family, friends, colleagues and peers influence an individual's decision to use technology (Alalwan et al., 2017; Gupta et al., 2019; Venkatesh et al., 2003; Zhou et al., 2010).

H_4 : SV significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

Monetary Value

MV refers to the benefits that users perceive from reducing both the short-term and long-term costs which are associated with a product or service (Sweeney & Soutar, 2001). Within the UTAUT2 framework, this concept is represented by PV. PV reflects the balance between perceived benefits and costs (Venkatesh et al., 2012). In this study, MV represents users' evaluation of whether ChatGPT delivers sufficient value and cost savings. It also studies the improved outcomes relative to the resources invested (Kwateng et al., 2019; Sankaran & Chakraborty, 2020, 2022; Venkatesh et al., 2012).

H_5 : MV significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

Emotional Value or Hedonic Motivation

EV refers to the positive feelings and emotional benefits generated through the use of any kind of products or services (Sweeney & Soutar, 2001). In this study, EV explains the intensity to which accountants and managers enjoy using ChatGPT. It also reveals the perceived emotional benefits from its use in their professional and personal work. HM refers to the enjoyment and pleasure derived from using technology (Venkatesh et al., 2012). Prior research has again and again found that enjoyment positively influences users' intentions to adopt new technologies (Gharrah & Aljaafreh, 2021; Nikolopoulou et al., 2020; Venkatesh et al., 2012).

H_6 : EV significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

Quality Value

QV refers to the utility that users derive from a product's perceived quality and expected performance (Sweeney & Soutar, 2001). Previous studies have highlighted the importance of quality in creating perceptions of the value associated with it and influencing outcomes (Parasuraman et al., 1988). Service quality is commonly assessed by the comparison of expected performance with actual performance. This process is known as the disconfirmation paradigm (Oliver, 1980). According to this perspective, higher perceived quality leads to greater perceived value. In this study, QV reflects accountants' and managers' expectations regarding the quality, reliability and effectiveness of ChatGPT.

H_7 : QV significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

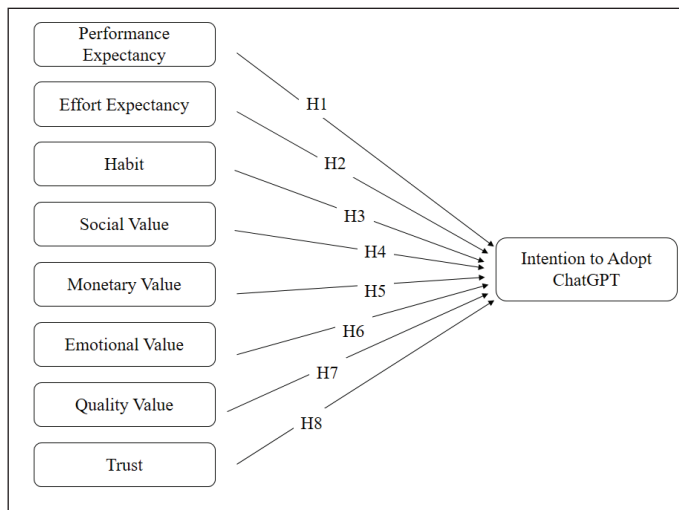


Figure 1. Proposed Research Model.

Source: Adapted from Venkatesh et al. (2012) and Sweeney and Soutar (2001).

Trust

TR is widely recognised as a key factor in technology adoption research and is frequently incorporated into TAM studies (Wu et al., 2011). Numerous studies have reported that TR positively affects users' willingness to adopt and use technology (Alalwan et al., 2017; Gefen et al., 2003; Giovanis et al., 2019). Although TR and security have been examined broadly, Dahlberg et al. (2015) argue that they remain essential foundations for technology acceptance and continued use of the same over a long period of time.

H_8 : TR significantly influences the BI of accounting professionals and students to adopt ChatGPT in managerial accounting.

Research Model

The proposed conceptual framework used in the study is presented in Figure 1.

Research Methodology

Sampling Procedure

To achieve the objectives of the study, primary data were collected using both online and offline survey approaches, including intercept sampling. (if the participants use mobile banking services). In offline mode, a device or application

cannot access online material or execute online tasks. A survey collected data from participants, including non-emailers. Accounting students, accountants and academics participated in the online poll. The volunteers were recruited by email (non-probabilistic convenience sampling). A convincing decision. Convenience sampling was employed to obtain respondents from diverse regions and backgrounds.

Instrument Development

Online and offline approaches, including intercept sampling, were used to collect the key data to meet the requirements. (if the participants use mobile banking services). A device or application in offline mode cannot access online material or execute online activities. A survey was utilised to collect data from participants, including non-emailers. Internet survey participants included accounting students, accountants and academics. Voluntary email non-probabilistic convenience sampling was used to recruit participants. This approach was considered appropriate for achieving the objectives of the study. Convenience: The sampling approach was used to obtain a representative sample from diverse cultures and areas. Participants were recruited from multiple sources to improve the diversity of the sample. Cities in northern and central India are sampled.

Face Validity and Content Validity

Validity was assessed to ensure simple, straightforward questions that responders may readily understand. The research was verified using a pilot study before data collection.

Data Collection

Data was primarily obtained from 420 participants through a combination of online and offline methodologies. The use of digital mechanisms, such as computers and mobile phones, is a common strategy in online surveys, offering benefits (Evans & Mathur, 2018). The constructs used in this study and their corresponding sources are presented in Table 1.

Data validation checks ensured data consistency, including integrity, validity and completeness checks on columns such as gender, age, education level and Likert scale items.

Useful sample: 21 respondents were eliminated owing to unengaged replies, missing data and non-use of ChatGPT, leaving 399 valid responses. Data adequacy demands a sample size of 5–10 times the number of elements (Hair et al., 2010). About 399 respondents satisfy the necessary sample size ($n > 150$) for datasets with several high factor loading scores ($> .8$) (Guadagnoli & Velicer, 1988).

Table 1. Variables with References.

Constructs	Cited Sources
Performance expectancy	Venkatesh et al. (2012)
Effort expectancy	Venkatesh et al. (2012)
Habit	Venkatesh et al. (2012)
Social value	Sweeney and Soutar (2001)
Emotional value	Sweeney and Soutar (2001)
Quality value	Sweeney and Soutar (2001)
Monetary value	Sweeney and Soutar (2001)
Trust	Doney and Cannon (1997), Gefen et al. (2003)
Behavioural intent	Venkatesh et al. (2012)

Source: Compiled from Venkatesh et al. (2012), Sweeney and Soutar (2001) and Gefen et al. (2003).

Result and Analysis

The demographic profile of the respondents is presented in Table 2.

Table 2. Demographic Profile of Respondents.

Respondents	No	%
Gender		
Male	186	47
Female	213	53
Age		
18–25	175	44
26–35	84	21
36–45	118	30
46–55	22	5
Profession		
Students	205	51
Accountants	80	20
Academicians	114	29
Total	399	100

Descriptive Statistics

Out of 399 respondents, females represent 53% of the total respondents, whereas males represent 47%. Most of the respondents are in the age group of 18–25 years, represent 51% as students, followed by the academicians.

The statistical software Smart PLS 4 is used to analyse the measurement model and test hypotheses. The use of PLS-SEM has two fundamental components: the measurement model, which is used to evaluate the reliability and validity of the measurements, and the structural model, which is employed to examine the hypothesised correlations between the study constructs.

Measurement Model

PLS-SEM begins with measurement model reliability and validity validation. The evaluation comprises item loadings, indicator reliability, composite reliability (CR), average variance extracted (AVE) and concept discriminant validity according to Hair et al. (2014). For convergent validity, factor loadings, CR and AVE are used; Table 3 shows the findings. Most scale items had factor loadings over 0.70 for their latent constructs, indicating substantial correlations.

PLS analysis showed that all constructs' CR and AVE values were above 0.5, confirming convergent validity. The scale has good internal consistency and reliability, since all constructs have Cronbach's α values over 0.80.

Fornell and Larcker's (1981) criteria are used to evaluate discriminant validity. According to this criterion, the square root of AVE for a concept should be bigger than its correlations with other constructs. Table 3 shows that none of the squared correlations with other items surpasses the AVE of any construct, confirming discriminant validity.

The results of reliability and convergent validity analysis are presented in Table 3.

Table 4 presents the discriminant validity analysis using the Fornell–Larcker criterion.

The Structural Model and Hypothesis Testing

Figure 2 illustrates the structural model obtained through PLS-SEM analysis, including the coefficients for each association. The results suggest that the changes in PE, EE, HT, SV, MVs, EVs, QV and TR account for 35%, 24.5%, 23%, 22%, 6.7%, 20% and 16.3%, respectively variance of the differences seen in intent to adopt ChatGPT in managerial accounting.

Additional information on the outcomes of PLS path analysis may be found in Table 5. The findings of the PLS-SEM analysis indicate that PE, EE, MV, EV, SV and TR significantly influence the BI of respondents to adopt ChatGPT in management accounting practices. These findings suggest that respondents perceive

Table 3. Reliability and Convergent Validity.

	Cronbach's α	Composite Reliability	Average Variance Extracted (AVE)
Effort expectancy	0.916	0.941	0.799
Emotional value	0.932	0.956	0.88
Habit	0.918	0.942	0.802
Intention to adopt ChatGPT	0.941	0.958	0.849
Monetary value	0.924	0.946	0.815
Performance expectancy	0.906	0.934	0.78
Quality value	0.909	0.936	0.787
Social value	0.911	0.938	0.791
Trust	0.961	0.972	0.895

Table 4. Discriminant Validity Using Fornell–Larcker Criterion.

	Effort Expectancy	Emotional Value	Habit	Intention to Adopt ChatGPT	Monetary Value	Performance Expectancy	Quality Value	Social Value	Trust
Effort expectancy	0.894								
Emotional value	0.744	0.938							
Habit	0.803	0.744	0.895						
Intention to adopt ChatGPT	0.699	0.862	0.739	0.922					
Monetary value	0.759	0.834	0.801	0.839	0.903				
Performance expectancy	0.742	0.636	0.709	0.698	0.758	0.883			
Quality value	0.744	0.82	0.708	0.799	0.834	0.67	0.887		
Social value	0.806	0.791	0.824	0.778	0.818	0.71	0.788	0.889	
Trust	0.732	0.804	0.74	0.841	0.807	0.625	0.839	0.784	0.946

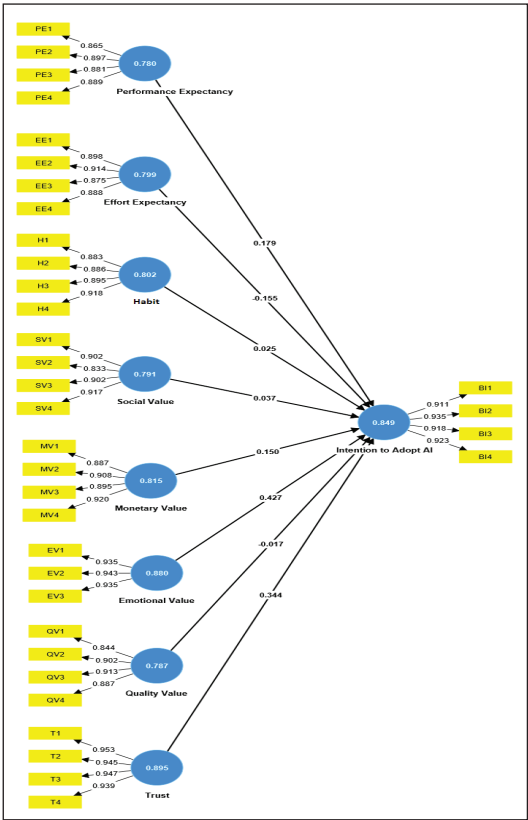


Figure 2. Structural Model and Path Coefficients.

Table 5. Hypothesis Testing Results.

Hypothesis	Path	Beta	T	p Values	Result
1	Performance expectancy $\geq$ intention to adopt ChatGPT	0.043	4.158	***	Accepted
2	Effort expectancy $\geq$ intention to adopt ChatGPT	0.057	2.679	**	Accepted
3	Habit $\geq$ intention to adopt ChatGPT	0.042	0.596	.551	Not accepted
4	social value $\geq$ intention to adopt ChatGPT	0.053	0.694	***	Accepted
5	Monetary value $\geq$ intention to adopt ChatGPT	0.049	3.053	**	Accepted
6	Emotional value $\geq$ intention to adopt ChatGPT	0.041	0.305	**	Accepted
7	Quality value $\geq$ Intention to adopt ChatGPT	0.051	0.318	.75	Not accepted
8	Trust $\geq$ intention to adopt ChatGPT	0.043	7.911	***	Accepted

Note: *** $p < .01$, ** $p < .05$, * $p < .10$.

ChatGPT as a useful, reliable and value-enhancing technological tool for improving accounting-related decision-making and efficiency. However, HT and QV were not found to have a statistically significant influence on BI. This implies that routine usage behaviour and perceived quality alone are insufficient to motivate the adoption of ChatGPT in management accounting.

Conclusion

The results obtained as part of this study prove that such factors as PE, EE, MV, EV, SV and TR are important when discussing BIs among both accounting professionals and students to use ChatGPT within management accounting. At the same time, it should be noted that the TR factor and EV showed greater influence compared to other variables. On the contrary, the relationship between HT and BI, as well as QV and BI are not statistically significant. These facts indicate that even though ChatGPT proves to be helpful, valuable and useful for management accountants to make decisions, habitual adoption and quality are not enough for this technology. Overall, the study proves that artificial intelligence in management accounting is increasingly popular, and the value of technology in this sphere is crucial for its adoption.

The coefficients related to the relationship between quality value and behavioural intention were not statistically significant, which is consistent with findings reported in several previous studies. This suggests that management accountants tend to apply manual or other technologies for data analysis. The only exception is Oliveria et al. (2014), who showed a significant effect of QV, but apparently, it is less influential than other aspects covered by UTAUT. According to Venkatesh et al. (2012), EE can be interpreted as expectations regarding ease of use, learning and necessity, which is important when it comes to ChatGPT adoption.

It has been confirmed by this study that TR is the second most influential aspect in terms of adoption of ChatGPT among management accountants, supporting results obtained by Alalwan et al. (2017), Giovanis et al. (2019), and Kwateng et al. (2019). In addition, ChatGPT software is highly popular, meaning that it is reliable and easy to use. ChatGPT developers should ensure secure operations for management accountants, and the introduction of TR mechanisms in this sphere could enhance ChatGPT adoption rates, and different security measures would boost their safety (Gefen et al., 2003).

ChatGPT adoption within management accounting appears to be based on its MV, which positively correlates with professionals' BI. It means that Indian management accountants view intrinsic motivation as an important reason for adopting this technology. The results support Venkatesh et al.'s finding of a great effect of social norm (technological popularity and recommendations of peers) on professionals' adoption of ChatGPT in management accounting (2003, 2012). The findings agree with Alalwan et al. (2017); Baabdullah et al. (2019); Baptista and Oliveira (2015); Boonsiritomachai and Pitchayadejanant (2017); Kwateng et al. (2019).

On the other hand, it has been discovered that SV elements, such as the influence of colleagues, friends and relatives, can influence managerial accounting professionals' adoption of ChatGPT. On the basis of Oliver's 1980 disconfirmation paradigm, Baptista and Oliveira (2015) and Shareef et al. (2018) suggested that the view of professionals can be formed with the help of experience in terms of ChatGPT-driven services. The expectation of better service results in increased EV. Second, one research suggests that the importance of customer satisfaction can increase ChatGPT application quality and consistency (Sweeney & Soutar, 2001).

Management accountants can save time and money by using applications driven by ChatGPT for non-financial management accounting responsibilities, such as accessing digital passbooks or paying utility bills. These results agree with previous findings (Alalwan et al., 2017; Baptista & Oliveira, 2015; Kwateng et al., 2019; Venkatesh et al., 2012). Signals related to MV also demonstrate that professionals tend to adopt ChatGPT in management accounting if they consider it as a tool that allows them to reduce expenses.

Implications

First, it promotes the adoption and use hypotheses of ChatGPT in management accounting. Adoption and use hypotheses of ChatGPT will add value to the literature on this topic, and future research work can build upon these insights (Webster & Watson, 2002).

Also, this study analyses various components of PERVAL and provides valuable results related to the adoption of ChatGPT in management accounting. The current model includes novel social, emotional, monetary and qualitative PERVAL components. Also, moderating factors influencing the interaction between components under analysis are taken into consideration. The methodology described above helps understand the complexities of ChatGPT adoption and implementation in the field of management accounting.

Management Implications

The study makes a number of recommendations for educational institutions and accounting firms striving to increase their effectiveness in adopting and implementing ChatGPT in managing accounting. This insight could be utilised in recruiting, engaging and retaining ChatGPT adopters among students, accountants and academics because it allows automating usual processes in accounting and managing accounting with ChatGPT. Businesses and educational institutions could take advantage of changing market conditions in terms of financial services and the disruptive nature of ChatGPT in accounting for boosting effectiveness, creating money and maintaining relationships with stakeholders through novel approaches. ChatGPT innovations, together with advancements in machine learning, would enable educational institutions and accounting firms to meet the

needs of students and customers. In this regard, TR plays a critical role from both academic and professional viewpoints as stated above. Establishing and maintaining TR implies analysing actions, not just words.

From the findings provided above concerning the components of PERVAL, it follows that stakeholders are interested in receiving MV from utilising ChatGPT in management accounting. This important information might be helpful to educational institutions and accounting firms in providing high-level ChatGPT-based financial and non-financial services. It is important to focus on building TR when considering PERVAL components because this factor is vital from an academic and professional viewpoint, according to this study. Thus, the establishment of TR requires studying deeds. In light of the fact that only a small percentage of academic and professional accounting stakeholders used ChatGPT in the context of financial and non-financial transactions based on World Bank statistics (Demirguc-Kunt et al., 2018), this finding is particularly valuable. Such information would help educational institutions and accounting firms in obtaining the necessary insights for the effective implementation and usage of ChatGPT in their management accounting services.

In today's era of falling bank branches and ATMs usage, the current study becomes important for governments, educational institutions and accounting firms seeking ways to persuade stakeholders to use ChatGPT for financial and non-financial accounting transactions. ChatGPT saves time and effort for manual accounting among students, accountants and academics. The above findings could be of great importance to educational institutions, accounting firms and accounting departments within educational institutions, considering ChatGPT as a low-cost technology for reducing costs, minimising expenses and time; popularising ChatGPT-enabled accounting services; expanding accounting practices regardless of physical location and adaptability.

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