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Balancing the Books and the Planet: Leveraging Cloud-Based Accounting for Sustainable Business Practices

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Abstract: Cloud based accounting have revolutionized conventional corporate practices leading to improved decision-making capabilities and optimising accounting process. In addition to operational enhancements, the use of cloud-based accounting has considerable implications for sustainable growth. This paper examines the relation between cloud-based accounting and sustainability by analysing its capacity to mitigate environment damage, enhance economic resilience and foster social inclusion. Data were gathered using a standardised questionnaire created using Google form. A total of 217 responses very included in the study and the final data analysis was conducted using smart PLS software which demonstrated significant connections between environmental, economic and social factors highlighting the transformative potential of cloud-based accounting. The measurement model was evaluated using convergent validity and divergent validity, both of which exceed the necessary requirement to further proceed for hypothesis testing. The findings of the hypothesis testing indicated that the adoption of cloud-based accounting software enhances the economic, environmental and social performance of the company which ultimately enhances the overall sustainability confirming H1 to H6. This study adds to the existing Corpus of knowledge by offering a deeper understanding of the relationship between sustainability and cloud-based accounting systems. It also offers valuable insights to accountants, government and other stakeholders, seeking to implement cloud-based accounting solutions for sustainable development.

1. Introduction

The use of cloud technology in diverse areas have revolutionized traditional business method across several sectors. Cloud-based accounting solutions have rapidly become essential components of contemporary financial management techniques. Consequently, organisations can enhance decision making capabilities and optimise accounting procedures. CBA can swiftly adjust to the fast-evolving digital landscape. In addition to the basic cost reduction and operational improvements, the adoption of CBA has significant implications for sustainable developments (Awewommomom et al.,2024; xu,2012). These Repercussions addresses significant social, economic and environmental issues that impact enterprises worldwide. Adoption of sustainable business practices is becoming imperative as we live in a time where concerns about resource depletion, inequalities in society and climate change are becoming more severe. Given this, cloud-based accounting system demonstrates the ability to serve as a vital tool for enacting positive change (Chang et al.,2010). It integrates financial aim with overreaching sustainability goals in order to benefit both corporations and the wider society (Deb et al.,2021). In the context of sustainable development, cloud-based accounting is crucial as it has the ability to minimise negative effects on environment along with boosting economic resilience and

social inclusion (Hackett and Dissanayake2014; Choy et al.,2021). Businesses can optimise their resource consumption and enhance data transparency as adopting cloud-based accounting systems will help them implement sustainable practices and contributes to the global efforts to combat climate change. This availability and accessibility of CBA technology enhances the capacity of to navigate economic volatility more effectively (Parmentoal et al.,2022). It also preserves stability which aids resilience in the face of change (Kara et at,2022; Maksimovic,2018). Adoption of Cloud-based accounting has significant consequences for advancing equity and inclusivity. It enables variety of stakeholders regardless of location or socioeconomic barriers.

By enhancing collaboration communication and knowledge exchange, Cloud-based accounting overcomes conventional challenges which further encourages transparent, accountable and reliable culture among firms (Balogun et al., 2020). The sustainability of traditional accounting techniques is hindered by their reliance on manual processes and on-premise technology. Traditional accounting depends on on-premise technology which sometimes make them less sustainable (Alsharari,2020) and results in the overuse of resources. This in turn limit accessibility. This issues of using traditional accounting makes it more challenging for businesses to implement environmentally, Socially and economically responsible practices. Consequently, the advent of cloud-based accounting solutions offers an affordable way to address these challenges, enabling companies to leverage technology effectively.

2. Literature of Review

2.1 Cloud-based accounting

The evolution of CBA can be traced back to the advent of cloud computing technology. Cloud computing as described by Dimitriu and Matei (2014), refers to delivery of computing services over the internet enabling customers to access resources like storage and processing power. conventional accounting software's providers began to move their services over the cloud as cloud computing gained popularity worldwide. These software applications allowed users to complete accounting task remotely using mobile apps or web browsers (Miller ,2008; Ali,2020).

In the field of accounting, cloud-based accounting has become a game-changer. This is owing to its advantages including affordability, scalability, accessibility and flexibility (Agrawal and Jethy,2023). Because they offer instruments for tracking and reporting environmental, social and governance (ESG) information, cloud-based accounting systems constitute essential tools for promoting sustainable accounting practices (Petcu et al.,2024; Wang et al., 2017). Utilizing cloud technology, organizations can gather and examine data while sharing sustainability data with stakeholders in a transparent manner. This improves accountability and builds confidence.

2.2 Sustainability and its parameters

As sustainability is a comprehensive term with social, economic and environmental components, it has attracted considerable interest in academic literature. Additionally, it has gained attention in policymaking forums. Sustainability is a multidimensional term that demands integrated approaches and cooperative efforts from various stakeholders (Al-Okaily et al.,2023; Edwards and Lawrence,2021; Binder, 2010). Sustainable development involves addressing environmental deterioration while promoting economic prosperity and cultivating social inclusiveness. For enterprises to balance profitability and social responsibility, sustainability is not merely theoretical. It necessitates aligning economic activity with social and ecological well-being. This requires a shift to comprehensive decision-making procedures and value generation (Ismail, 200; Barron et al.2023). Firms can protect the environment for future generations while enhancing their competitiveness.

Adopting sustainable practices also offers benefits such as risk reduction and the creation of societal value.

2.3 Linking sustainability with Cloud-based accounting technologies

The integration of sustainability concepts with CBA technologies presents substantial opportunity for the advancement of socially and ecologically responsible business practices. Organizations can advance their sustainability agendas by enhancing transparency, while economic viability and stakeholder engagement. This can be achieved by utilizing cloud-based accounting solutions which is also known for their scalability, accessibility and operational efficiency (Kumar and Buyya,2012; Balogun et al.,2020). However, the potential of sustainable Cloud-based accounting cannot be fully realized unless issues such as Data security, regulatory compliance, digital inclusiveness are addressed. Firms can preserve their financial resilience and competitive edge in the digital age by utilizing the synergies between sustainability and cloud technology which would result in beneficial environmental and social outcomes (Alshirahet al.,2023). Businesses are increasingly integrating sustainability as they recognize the interconnectedness of social equality, economic resilience and environmental stewardship. The growing recognition of companies regarding interdependence of social equality, economic resilience and environmental stewardship makes incorporation of sustainability into Cloud-based accounting systems essential for ensuring long-term sustainability (Melnyk etal.,2019). Organizations can improve their environmental performance and can enhance their social authorization to operate by integrating sustainability concerns into cloud-based accounting methods. This will result in a collaborative gain for all stakeholders. Table 1 presents the proposed items used for measuring the impact of CBA technologies on sustainability across three key dimensions: environmental, economic and social (Deegan et al.,2018). Each dimensions include several measurable items to access specific aspects of organisational sustainability performance. These items are developed on the basis of existing literature and are designed to give a comprehensive overview of how CBA adoption influences sustainability outcomes of organization.

Although the potential of Cloud-based accounting software to support sustainable development goals is becoming increasingly evident, little is known about the attitudes of professionals toward its use. Their perceptions of the benefits regarding the use of cloud-based accounting in terms of social, economic, and environmental impacts remain under-researched. Despite abundant literature on how cloud-based accounting enhances organizational efficiency, studies exploring its role in sustainable development and users' perceptions are relatively scarce.

Table 1: Proposed items for measurement of the impact of CBA technologies on sustainability

Environmental Sustainability	(1) Reduction In Paper Usage. (2) Energy Efficiency. (3) Carbon Footprint Reduction. (4) Resource Conservation. (5) E-Waste Management. (6) Lifecycle Assessment.
Economic Sustainability	(1) Cost Savings. (2) Return on Investment. (3) Business Performance. (4) Revenue Growth. (5) Productivity. (6) Infrastructure Cost. (7) Market Competitiveness. (8) Long Term Savings. (9) Smart Growth
Social Sustainability	(1) Improved Satisfaction. (2) Accessibility. (3) Remote Work. (4) Collaboration. (5) Transparency. Accountability. (6) Inclusivity. (7) Security and Privacy. (8) Stakeholder Engagement

Source: Author's own calculation

3. Hypothesis of the Study

3.1 Environmental Sustainability:

Environmental sustainability refers to the management and preservation of natural resources and ecosystem for future generations. According to Kidd (1992), environmental sustainability means preservation of ecological integrity. It involves strengthening ecosystems and ensuring responsible use of renewable resources. Achieving sustainability goals requires incorporating environmental issues into decision making processes (Mensah,2019). Evaluating the environmental impact of various activities and commodities require comprehensive methodologies such as ecological footprint analysis and life cycle assessment (Alshirah et al.,2023; Chapin et al.,2009). Researches emphasizes on how important it is to encourage companies and individuals to adopt environmentally friendly procedures and innovations (Kuhlman et al,2010;Agrawal, and Jethy, 2023).Reducing pollution, mitigating the effects of climate change and encouraging sustainable resource management techniques are some of the common goals of interventions that foster environmental sustainability (Lara and Doyer,2008).Numerous studies indicate that the environmental benefits of cloud computing meet several important criteria for determining environmental sustainability such as reductions in consumption of energy, carbon footprint, consumption of paper and electronic thrash generation. Cloud-based accounting helps to preserve the environment by lowering the requirement of paper-based financial documentation, reducing energy used by traditional IT infrastructure, promoting sustainable practices and lowering the production of electronic waste.

H1 =Cloud-based account significantly enhances the environmental performance of the organisation
H2 = Improved environmental performance contributes positively to the overall sustainability

3.2 Economic Sustainability:

Economic sustainability means encouraging economic growth and progress while maintaining long - stability and equality. According to Schneider et al. (2010), economic sustainability is developing systems that provide wealth without consuming too many natural resources. Researchers believe that encouraging inclusive growth and lowering wealth disparity are essential to ensure economic sustainability (Lieder and Rashid,2016; Edwards and Lawrence ,2021). Improving human capital requires investment in social security system, health care and education in order to ensure fair access to opportunities, promoting entrepreneurship and innovation, which can further drive economic sustainability (Velenturf et al.,2021; Ghisellini et al.,2016).

Cloud-based accounting offers substantial financial benefits that aligns with key criteria for accessing economics sustainability, financial transparency, scalability and cost reductions. It contributes to the accomplishment of economic sustainability objective by lowering the expenses of IT infrastructure and maintenance. Additionally, it makes it easier to allocate resource efficiently, improve financial transparency and boost competitiveness (Kara et al.,2022; Ashford and Hall,2011). These benefits demonstrate how cloud-based accounting promote creativity, optimises resources, supports stability and prosperity in the economy.
H3= Cloud-based accounting adoption significantly enhances the economic performance of the organisation.
H4 = Improved economic performance contributes positively to the overall sustainability.

3.3 Social Sustainability:

The basis of social sustainability is establishing inclusive community, that advance equity, well-being and social cohesion. Social sustainability includes elements like social justice, human right, cultural diversity and community resilience policies that guarantee access to fundamental services while advancing social inclusion to achieve social sustainability (Barron et al.,2023; Dempsey et al.,2011). The advantages of social aspect of sustainability includes transparency, accountability, satisfaction among workers, improved employee engagement and improved financial data accessibility (Jewett et al.,2021). The social benefits highlight how cloud-based accounting can promote social inclusion,

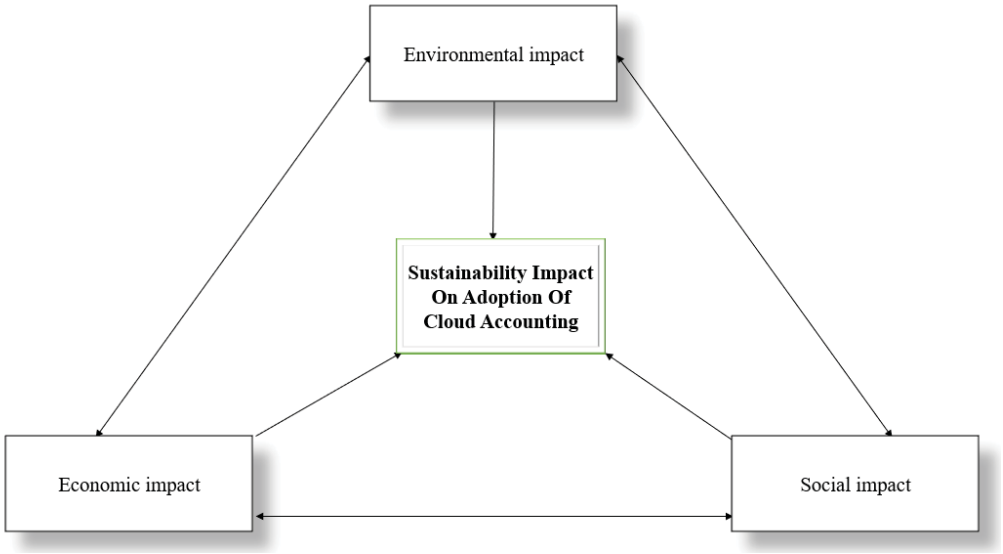
cohesiveness and employee well-being with in enterprises and contribute to the goals of social sustainability.

H4 =Cloud based accounting adoption significantly enhances the social performance of organisation.

H5 =Improved social performance contributes positively to the overall sustainability.

Figure-1 illustrates the conceptual framework developed for this study

Figure-1: Conceptual framework



Source: Author's own

4. Methodology

4.1 Research Design

This study adopts a quantitative research approach, to investigate the influence of cloud-based accounting systems on organisational sustainability. This framework is designed to gather data via a structured questionnaire and examine the correlation between key variables using statistical tools.

4.2 Target Audience

The target audience included a diverse array of professionals such as accountants, auditors, chief financial officers, finance controllers and academicians with expertise in accounting and finance in Odisha. To ensure the ethical standards, this research guaranteed the respondents that, their participation would be completely voluntary and their responses would be kept anonymous and confidential.

4.3 Questionnaire Design

A customised questionnaire was developed by a group of accounting specialist using Google form. All the questions were constructed using a 5-point Likert scale. To guarantee the relevance and comprehensiveness of the questionnaire, validation techniques were implemented.

4.4 Tools Used

The questionnaire was validated for relevance and comprehensiveness, and the data was analysed using smart PLS and SPSS software. Smart PLS and SPSS software's were chosen for their complementary strengths. SPSS excels in descriptive and preliminary data analysis,

providing a clear understanding of the data set while smart PLS is ideal for advanced structural equational modelling (SEM) and robust evaluation of complex relationship between constructs. Therefore, SPSS was used for descriptive analysis whereas smart-PLS was employed for testing structural relationship between CBA adoption and sustainability outcomes. The measurement model was evaluated for validity testing and the structural model was tested with path coefficients to access the significance of relationships.

4.5 Survey Process

Initially, 300 questionnaires were circulated among professionals working in different sectors in Odisha. Out of those questioners circulated, a total of 253 responses were received. To ensure the representativeness and quality of the data, these answers were closely examined. Further examination revealed that 36 of these responses were either contradictory or incomplete. In addition, concerns about bias related to respondent demographics or answer patterns led to the exclusion of 20 responses. A total of 217 responses were deemed appropriate, which were then included in the final analysis. Table 2 provides an overview of survey response process including the distribution and final analysis of the questionnaire.

Table 2: Response summary

Category	Number of Respondents
Questionnaires distributed	300
Questionnaires returned	253
Incomplete or contradictory responses	36
Excluded due to bias	20
Included in final analysis	217

Source**:** Author's own calculation

5. Data Analysis

5.1 Demographic Profile

The demographic data analysis indicates a balanced representation of male and female respondents of this study. 51.8% of the total represent male while 48.2% are female. The age distribution indicates that majority of respondents fall within the age range of 25–34 (34.2%) following the age group of 34–44 (33.8%) The 18–24 (17.6%) and 45 above (14.4%) age groups have fewer respondents. In terms of educational background, 45.5% of the respondents hold a bachelor's degree. The responses are fairly distributed across industry sectors, with the government sector having a slight advantage (28.5%) over the private (27.6%), non-profit (27.1%), and self-employed (16.7%) sectors. Regarding working experience, a significant number of respondents have between five and ten years of experience (42.2%), followed by those who have between one and five years (28.9%) and over ten years (28.9%). Lastly, in terms of annual income, the majority (43.6%) falls within ₹1,00,000 - ₹5,00,000 slab. Table 3 presents the demographic characteristics of the respondents, highlighting the key factors that may influence their views on Cloud-based accounting and sustainability.

Table 3: Demographic Profile

Respondents' characteristics		Frequency	Percentage (%)
Gender	Male	112	51.8
	Female	105	48.2
Age	18-24	38	17.6
	25-34	74	34.2

	34-44	73	33.8
	45 and above	31	14.4
Academic Qualification	Bachelor's Degree	99	45.5
	Master's Degree	90	41.4
	Professional Certification	28	13.1
Industry Sector	Government	62	28.5
	Private	60	27.6
	Non-profit	59	27.1
	Self-employed	36	16.7
Experience	1 - 5 years	63	28.9
	5 - 10 years	92	42.2
	More than 10 years	62	28.9
Annual Income	Less than ₹1,00,000	10	4.6
	₹1,00,000- ₹5,00,000	95	43.6
	₹5,00,001 ₹10,00,000	86	39.4
	More than ₹10,00,000	27	12.4

Source: Author's own calculation

5.2 Measurement Model Evaluation

5.2.1 Convergent Validity

Convergent validity accesses the degree to which items within a single construct are correlated and measure the same underlying concept. it is considered satisfied when the item loadings exceed a threshold of 0.70, indicating that the items strongly represent their construct and explain at least 50% of the variance (AVE greater than 50) (Blunch,2012). Table 4 presents the factor loadings for various constructs within the study. Factor loadings refer to the correlation coefficient between observed variable and their underlying construct. A high factor loading generally greater than 0.70 indicates that the observed variable is strongly related to the constructs in the measure. As shown Table 4constructs ECO1, SOC5 and SUS4 exhibit notably low factor loadings of 0.069, 0.022 and 0.085, respectively. Therefore, theses constructs have been eliminated from the research model.

In accordance with the accepted standards as supported by Lee (2009), an additional validation measure was carried out to confirm the convergent validity of the constructs. According to Hu and Bentler (1999), this validation criterion requires an Average Variance Extracted (AVE) value of 0.50 or above, which means that the latent variables have to explain at least 50% of the variance in the indicator variables they are correlated with. Table 4, clearly indicates that every construct (other than ECO1, SOC5 and SUS4) has item loadings that are higher than the specified threshold, highlighting their strong convergent validity. Furthermore, Table 5showsthe reliability of the model constructs, measured by Cronbach's alpha, composite reliability, and average variance extracted (AVE). All the construct meets or surpasses the pre-established threshold point of 0.50 for AVE values, which adds even more evidence to support the validity of the constructs being examined (Venkatesh,2009).

Using Cronbach's alpha and composite reliability measures, the reliability of the scale was carefully evaluated for each of the five major components in the study. These included adaptation (ADPT), economic impact (ECO), environmental impact (ENV), social impact (SOC) and sustainability (SUST). Each component of the model demonstrated adequate convergent validity. All factor loadings were above 0.63 (Table 4). Furthermore, reliability was confirmed. Composite reliability scores exceeded the acceptable threshold of 0.60. All AVEs surpassed 0.50 (Yu,2011). The assertion that the items meet the required criterion is further supported by the composite reliability scores. Additionally,

Cronbach's alpha scores were greater than 0.50 (Table 5) (Sarstedt,2015).

Table 4: Factor loadings

Model Constructs	Items	Factor Loadings
Adaption Of CBA (Four Items)	ADP1	0.736
	ADP2	0.787
	ADP3	0.839
	ADP4	0.902
Environmental Impact (Five Items)	ENV1	0.882
	ENV2	0.909
	ENV3	0.819
	ENV4	0.694
	ENV5	0.913
Economic Impact (Six Items)	ECO1	0.069
	ECO2	0.865
	ECO3	0.732
	ECO4	0.884
	ECO5	0.854
	ECO6	0.853
Social Impact (Six Items)	SOC1	0.835
	SOC2	0.794
	SOC3	0.639
	SOC4	0.71
	SOC5	0.022
	SOC6	0.782
Sustainability (Four Items)	SUS1	0.777
	SUS2	0.759
	SUS3	0.798
	SUS4	0.085

Source: Author's calculation

Table 5: Reliability of constructs

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
ADPT	0.675	0.822	0.606
ECO	0.894	0.922	0.705
ENV	0.899	0.927	0.718
SOC	0.809	0.868	0.570
SUST	0.834	0.890	0.670

Source: Author's calculation

5.2.2 Discriminant Validity

Discriminant validity was assessed by comparing the square root of the Average Variance Extracted (AVE) for each construct with the correlation scores between that construct and other constructs in the

model, as described by Henseler et. al (2015). This approach ensures that the model achieves a favourable discriminant score. Table 6, demonstrates the discriminant validity of the constructs, calculated using the Fornell-Larcker criterion. This helps assess whether the constructs in the model are distinct and measure different concepts. Every item met this criterion, as seen in Table 6, demonstrating strong discriminant validity. Discriminant validity was analysed using both the Fornell-Larcker and cross-loadings criteria. The evaluation additionally confirmed that every item demonstrated a higher loading on its targeted construct in relation to all other constructs within the model (Fornell and Larcker,1981). In Table 6 diagonal elements represents the square roots of the AVE while Off-diagonal components were correlations between other constructs. Each parameter exceeded the off-diagonal elements in corresponding rows and columns (Yuliana,2022).

Table 6: Discriminant validity using Fornell-Larcker criterion

	ADPT	ECO	ENV	SOC	SUST
ADPT	0.778				
ECO	0.740	0.839			
ENV	0.769	0.807	0.847		
SOC	0.701	0.834	0.839	0.755	
SUST	0.737	0.714	0.828	0.645	0.818

Source: Author's calculation

5.3 Structural Model Evaluation

After specifying the measurement model, Partial Least Squares Structural Equation Modelling (PLS-SEM) was employed to evaluate the structural model (Wold et al.,1984). This assessment involved examining the statistical significance of structural path model. Each hypothesis was found to be significant. This conclusion is based on the analysis of p-values and t-statistic results. To be more specific, all the six hypotheses were determined to have the anticipated direction of influence and were statistically significant at a p-value < 0.05 as shown in Figure-2. Table 7 gives an overview of the results, summarizing these findings.
The hypothesis testing results, which are shown in Table 7, explain the relationships between the variables.

The results indicate that Cloud-based accounting adoption significantly enhances the environmental performance of the organization which in turn positively influences to the overall sustainability, which supports hypotheses H1and H2, respectively. Additionally, the adoption of Cloud-based accounting also boosts the organization's economic performance which contributes positively to the overall sustainability, thereby supporting hypotheses H3 and H4. Furthermore, Cloud-based accounting adoption enhances the social performance of the organization which also positively impacts to the overall sustainability aligning with hypotheses H5 and H6. Figure-2 shows the structural model of this research.

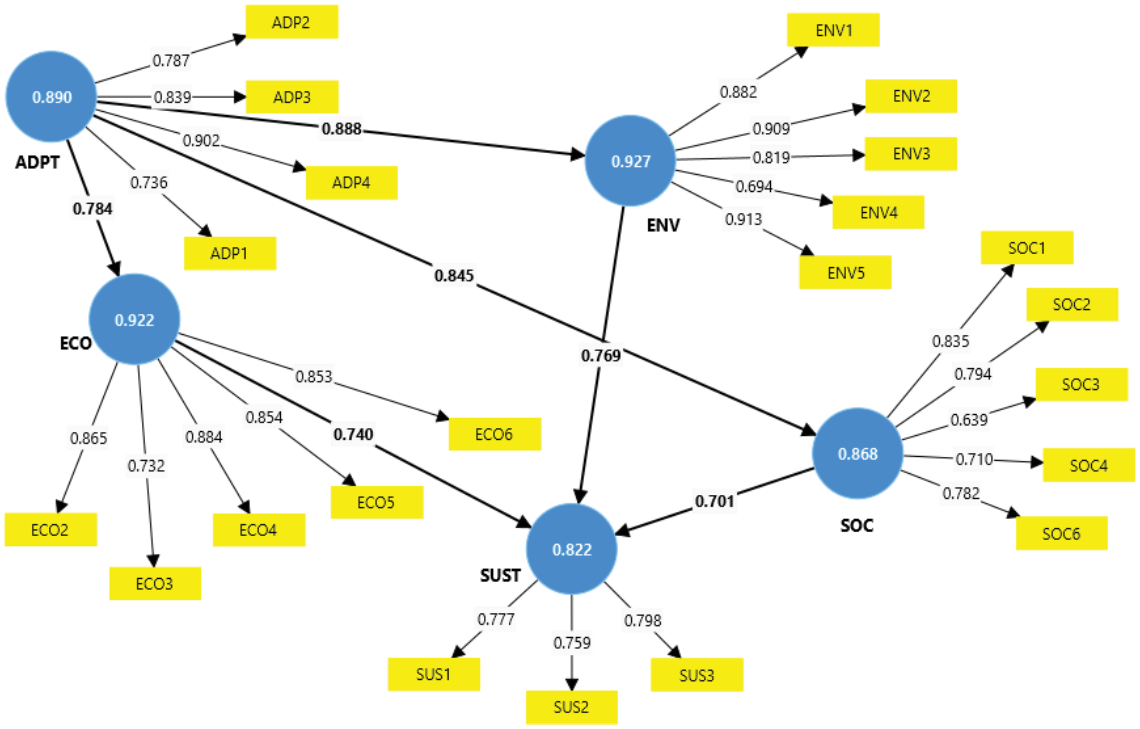
Table 7: Hypothesis testing

Hypothesis	Casual Path	Adjusted R square	t- value	p- value	Hypothesis supported
H1	ENV -> ADPT	.776	27.394	0.00	Yes
H2	SUST -> ENV	.568	16.888	0.00	Yes
H3	ECO -> ADPT	.603	18.059	0.00	Yes

H4	SUST -> ECO	.529	15.603	0.00	Yes
H5	SOC -> ADPT	.691	22.007	0.00	Yes
H6	SUST -> SOC	.488	14.315	0.00	Yes

Source: Author's calculation

Figure-2: Structural research model



6. Results and Discussion

The study examines the association between sustainability indicators and cloud-based accounting (CBA) system adoption with an emphasis on economic, environmental and social aspects of sustainability. The structural equation modelling (SEM) analysis evaluated six distinct hypotheses.

The hypothesis showed the interrelations among several constructs, investigating the associations between environmental issues, economic considerations, social aspects and sustainability outcomes within the framework of cloud-based accounting systems. Each hypothesis examined the association between two major constructs.

According to the adjusted R-square values, t-values and p-values, the findings exhibited a strong correlation between these constructs. This results also aligns with previous studies which highlighted the importance of interconnected environmental, economic and social factors in the adoption of cloud-based accounting system (Kamble et al.,2018; Li and Cui,2020v). Previous researchers have highlighted the critical role of these sustainability dimensions in promoting widespread adoption of CBA solutions (AI-Sharafi et al.,2023).

Merrill et al (2019) discovered that firms are emphasizing environmental sustainability, are likely to accelerate digital transformation initiatives including the adoption of CBA to minimise their ecological footprints. Moreover, recent studies have also highlighted the social impact of CBA like research by Olawale et al. (2024) have demonstrated that CBA system enhances workplace corporation and inclusion by facilitating remote access to financial information, which is crucial in the contemporary and hybrid work settings. The findings of this study align with the broader sustainability framework reinforcing the interconnectedness between different aspects of sustainability. This research is in line with previous results, illustrating the interdependence of these sustainability characteristics and their combined impact on the integration of cloud-based accounting.

7.Conclusion

The integration of cloud technology in accounting practices significantly impacts sustainable business practices. This research analysed the integration of sustainability and cloud-based accounting systems for environmental, social and economic perspectives. The empirical investigation using smart PLS validated a robust correlation between the adoption of cloud-based accounting and enhanced sustainable outcomes, encompassing reduced environment impacts, strengthened economic resilience and improved social inclusion. Cloud-based accounting has significant benefits from environment, economic and social viewpoints signifying pathway towards more sustainable corporate practices. Businesses can address the limitations of conventional accounting practices and achieve sustainable objectives by adopting cloud-based solutions. This study underscores the need of incorporating sustainability considerations into accounting practices while laying down a foundation for future studies as organisations are increasingly embracing technology-driven solutions. The strategic implementation of CBA solutions has potential to enhance sustainability across several sectors.

The findings of this research have significant implications for both practitioners and scholars. Organisations may use the findings from the research to include cloud-based accounting technology in their sustainability initiative. Managers must prioritize the implementation of CBA solutions that enhances economic, environmental and social sustainability while focusing the enhancement of data security, regulatory complaints and digital inclusiveness. Moreover, training and development programs for employees to professionally use cloud-based accounting systems will optimise the sustainability outcome of these technology. This research offers valuable insights for accountants, governments and other stakeholders seeking to use cloud-based accounting systems for sustainable development. The findings of this research have the potential to influence policy-making investment decisions and strategic planning in order to promote socially responsible, economically feasible and environmentally sound accounting practices. Theoretically, this study also adds to the existing corpus of knowledge by offering deeper understanding of the relationships between sustainability and cloud-based accounting. It highlights the interconnections among various sustainability factor including social, environmental and economic aspects. The development of conceptual framework model and theories emerging from this research can guide future studies and promote academic engagement in the field of technology, sustainability and accounting.

While the study provides valuable insights into how CBA influences sustainability, there are significant drawbacks to consider. A primary limitation is that, this research concentrates on a single location, Odisha which make constrained the generalizability of its implications. The accuracy of the findings

may also be affected due to the response bias from self-reported data. Future researches could address these limitations by including a wider range of geographical locations. Looking ahead, several opportunities exist for advancing cloud-based accounting and sustainability accounting practices. Standardised framework for accessing and reporting ESG performance can be developed by practitioners and scholars. Future researchers may also investigate the effects of CBA implementation on sustainability across various sectors and nations. Additionally, future researches could also examine the role of organisational culture and leadership on the implementation of CBA solutions together with the effect of digital transformation on sustainability at macroeconomics scale.

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