

JAVANESE CULTURAL VALUES THE DESIGN AND IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEMS IN MSMEs

**Candra Pramula Pinandita¹, Berlina Yudha Pratiwi², Dwi Indriani Fidiastutik
Wijaya³**

^{1,2,3}Polytechnic of Jember

¹candra.pramula@polije.ac.id ²berlina_y@polije.ac.id, ³indriani_fidiastutik@polije.ac.id

Abstract: *The Javanese community, which is the majority in Kediri, has unique and profound cultural values that have shaped their way of life, social interactions, and even business practices for generations. Values such as cooperation, empathy, harmony, and deliberation often serve as the foundation for interaction and business management. Based on the explanation above, the urgent research gap is the lack of in-depth understanding of how Javanese cultural values can be specifically and explicitly harmonized in the design and implementation process of accounting information systems in SMEs. This research aims to deeply explore how Javanese cultural values, firmly held MSMEs "Sambal Pecel Bu Siti Kediri", influence and can be harmonized in the design and implementation of AIS. Javanese cultural values are an important foundation in the life of Javanese society, shaping worldviews, ethics, and daily behavior. This research is a qualitative study based on the philosophy of post-positivism, used to examine objects in their natural conditions. shows that the design and implementation of the AIS in the MSMEs "Sambal Pecel Bu Siti" can be driven by two factors, namely Javanese cultural values and experience. The findings can be explained using the yccy theory, which states that each organization has different ways of operating. The majority of MSMEs actors understand and practice Javanese cultural values such as guyub (cooperation), nrima ing pandum (accepting with sincerity), tepa slira (empathy), and andap ashor (humility). Thus, integrating Javanese cultural values into the design and implementation of the AIS at MSMEs "Sambal Pecel Bu Siti" not only makes operations more efficient but also enhances a sense of ownership and business ethics based on culture. The system that has been built not only serves as a financial control tool but also to preserve noble values in the context of modern business.*

Keywords: *Culture; Cultural Values; Accounting Information System*

Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in Indonesia's economy, serving as the backbone that supports economic growth, creates jobs, and drives innovation across various sectors. Its presence is widespread, ranging from micro-scale home businesses to medium-sized enterprises that are beginning to penetrate larger markets. However, despite their significant contributions, many MSMEs still face challenges in financial and operational management, one of which is the implementation of an effective accounting information system (AIS). A well-designed AIS can help MSMEs improve efficiency,

financial data accuracy, and strategic decision-making.^{1, 2}. In East Java, especially in Kediri, MSMEs like "Sambal Pecel Bu Siti Kediri" are a positive example of the vitality of this sector, having been in operation for a long time. However, despite their enormous potential, MSMEs often face challenges in efficient financial and accounting management. In today's digital era, accounting information systems (AIS) are crucial to support informed decision-making and ensure business continuity. However, the implementation of AIS in MSMEs does not always run smoothly, especially when dealing with strong local cultural contexts^{3, 4}.

¹ W Subroto, N Sakti, and Novita Aprilia, 'The Role of Small and Medium Enterprises (SMEs) in Supporting the People's Economy in Indonesia', *International Journal of Research and Scientific Innovation*, 2025 <<https://doi.org/10.51244/ijrsi.2024.11120036>>.

² Yunduk Jeong and Suk-Kyu Kim, 'A Study of Event Quality, Destination Image, Perceived Value, Tourist Satisfaction, and Destination Loyalty among Sport Tourists', *Asia Pacific Journal of Marketing and Logistics*, 32 (2019), 940-60 <<https://doi.org/10.1108/apjml-02-2019-0101>>.

³ Lilik Ambarwati and F Fatmawati, 'PENGARUH SISTEM INFORMASI AKUNTANSI TERHADAP KINERJA UMKM DAERAH ISTIMEWA YOGYAKARTA', *Jurnal Riset Akuntansi Dan Bisnis Indonesia*, 2021 <<https://doi.org/10.32477/jrabi.v1i1.320>>.

⁴ Edy Sujana, Ni Wayan Sri Tresna Egawati, and I Purnamawati, 'The Mediating Role of Accounting Information Systems in Determining MSME Performance', *Jurnal Ilmiah Akuntansi*, 2023 <<https://doi.org/10.23887/jia.v8i2.65915>>.

The Javanese, who make up the majority in Kediri, have strong and distinctive cultural beliefs that have influenced their social interactions, way of life, and even business activities over many generations. *Guyub, tepa selira, rukun,* and *nrima ing pandum* are some examples of values that frequently serve as the foundation for business interactions and management.⁵ Traditional financial recording practices in MSMEs in Java are often carried out simply, sometimes even without a formal system, relying on memory, trust, and close personal relationships. This phenomenon raises an interesting question: how do these Javanese cultural values interact, influence, or even conflict with the design and implementation of AIS, which tend to be oriented

toward efficiency, standardization, and formality?

Financial management at MSMEs “Sambal Pecel Bu Siti Kediri,” which is well-known for its sambal pecel product, may still be based on conventional techniques developed from local knowledge. AIS adoption can serve as a springboard for more contemporary and open management; nevertheless, the system's ability to adjust or align with the owner's and employees' cultural values will determine how well it is implemented⁶. Creating AIS without considering the cultural environment may lead to resistance or less-than-ideal utilization. On the other hand, AIS may be more readily adopted, utilized, and even more accountable in line with local

⁵ Nur Laila Yuliani, Naufal Afif, and Serafica Btari Christiyani Kusumaningrum, ‘Empowering BUMDes Guyub Rukun: Branding Strategies and Digital Marketing for Tourism Village’, *Community Empowerment*, 2025
<<https://doi.org/10.31603/ce.10553>>.

⁶ Made Arie Wahyuni, Gusti Ayu Ketut Rencana Sari Dewi, and Luh Asri Savitri, ‘Organizational Culture That Moderates the

Influence of Individual Behavior on the Success of Accounting Information System Implementation in the Context of Planned Behavior Theory’, *Proceedings of the 5th International Conference on Tourism, Economics, Accounting, Management and Social Science (TEAMS 2020)*, 2020
<<https://doi.org/10.2991/aebmr.k.201212.048>>.

knowledge if Javanese cultural values are incorporated into the system's design and implementation process.

There is a significant lack of research on how local Javanese cultural values can be specifically matched with AIS design and implementation, especially for MSMEs, even though the need for AIS in MSMEs is well recognized and there have been studies on how culture affects the adoption of information technology. These studies are typically broad and don't go into great detail about the cultureware and humanware components of AIS implementation. They have not particularly looked at how local Javanese cultural values might be incorporated not just into the external implementation process but also into the AIS design itself. The evidence indicates that AIS design frequently continues to use a

universal approach that lacks significant cultural modification.

Numerous studies have found that national or corporate culture affects the uptake and success of information systems⁷. These studies frequently concentrate on aspects related to technology acceptability or user resistance. These studies are typically organizational or macro in nature, even though they acknowledge the impact of culture. Researchers have not specifically looked at how special Javanese cultural values (like *tepa selira*, *rukun*, and *guyub*) or the concept of trust-based accountability can be shown and used in AIS features, interfaces, or workflows. Only a few studies look into how "Jawanism" can be included in AIS design, apart from just seeing it as something that helps or hinders its use. The influence of culture is typically discussed in existing research as an independent variable

⁷ S Zubaidah, 'Pengaruh Sistem Informasi Akuntansi Dan Pemanfaatan Teknologi Informasi Terhadap Kualitas Laporan Keuangan Pada Organisasi', 4.2 (2020), 243–

47
<<https://repositori.uma.ac.id/handle/123456789/15421>>.

rather than as a component that may be integrated or harmonized in system design.

The urgent research need is to better understand how Javanese cultural values can be clearly included in the design and use of AIS in MSMEs, especially in businesses like “Sambal Pecel Bu Siti Kediri” that depend a lot on local knowledge. This research aims to examine and formulate strategies for harmonising Javanese cultural values in the design and implementation of an Accounting Information System (AIS) at MSME Sambel Pecel Bu Siti Kediri. More specifically, the objectives of this research. The research aims to identify the relevant and dominant Javanese cultural values that influence the operations and business practices of UMKM Sambel Pecel Bu Siti Kediri. This includes the exploration of values such as familial ties, cooperation, prudence,

deliberation, and balance that may influence how this MSME manages its finances.

This analysis will involve examining the alignment and potential conflicts between the characteristics of conventional AIS, which are generally standardised and tend to overlook the local context, and the identified Javanese cultural values at MSME Sambel Pecel Bu Siti Kediri. This analysis will examine the extent to which existing AIS features can be accepted or conflict with the habits and perspectives of MSME actors.

Literature Review

Javanese Cultural Values

The Javanese are one of the largest ethnic groups in Indonesia, with an incredibly rich cultural heritage⁸. Javanese culture plays an important role in directing and guiding human behavior by prioritizing cooperation and togetherness. Javanese cultural

⁸ Ghefra Rizkan Gaffara, Dayu Ariesta Kirana Sari, and Nanda Saputra, ‘Javanese Cultural Heritage Building (Case Study: Joglo House)’, *Lakhomi Journal Scientific*

Journal of Culture, 2021
<<https://doi.org/10.33258/lakhomi.v2i4.533>>.

values are an important foundation in Javanese society, shaping worldviews, ethics, and daily behavior. These values are deeply rooted in philosophical teachings such as harmony, balance, and spirituality. They are often embodied in concepts such as "*rukun, guyub, tepa slira, and nrima*."^{9, 10}

The Javanese cultural values identified can be categorized into several main themes, notably harmony and balance, which reflect the importance of sustaining harmony among humans, God, other individuals, and the natural environment¹¹. The maintenance of peace, conflict avoidance, and the attainment of a peaceful state exemplify this concept. *Rukun* and *Guyub* promote a lifestyle centered on mutual support and cooperation.

Cooperation extends beyond physical activities to encompass moral and social support as well. Politeness and ethics. Javanese society places significant emphasis on manners, politeness, and ethical interactions¹². This respect is evident in language use, body language, and communication methods that align with social hierarchy and age. Acceptance (*Nrima*) and patience foster an attitude of sincerely embracing all experiences, whether joyful or sorrowful¹³. This reverence signifies not a passive surrender but an attitude characterized by humility and patience when confronting life's challenges. Spirituality and Belief Systems Javanese society exhibits a significant spiritual dimension, characterized by a unique syncretism that integrates Hindu-

⁹ D Irawanto, Phillip Ramsey, and James Ryan, 'Challenge of Leading in Javanese Culture', *Asian Ethnicity*, 12 (2011), 125-39 <<https://doi.org/10.1080/14631369.2011.571829>>.

¹⁰ Soya Sobaya, Martini Dwi Pusparini, and Siti Achiria, 'Javanese Local Wisdom Values for Development from an Islamic Perspective', *Journal of Islamic Economics Lariba*, 2023

<<https://doi.org/10.20885/jielariba.vol9.is.s1.art4>>.

¹¹ Suryo Adi Sahfutra and S Maharani, 'Axiological Dimensions of the Value of Harmony for Javanese Society', *Andalas International Journal of Socio-Humanities*, 2022 <<https://doi.org/10.25077/aijosh.v4i2.38>>.

¹² Sahfutra and Maharani.

¹³ Sobaya, Pusparini, and Achiria.

Buddhist and Islamic elements. This value promotes introspection, the pursuit of life's meaning, and a connection to the Creator¹⁴. ...

Accounting Information Systems

AIS is a system designed to collect, process, store, and disseminate important financial information to assist in business decision-making¹⁵. In the context of MSMEs in Indonesia, especially those from Javanese society, the implementation of AIS often faces problems not only from technology or human resources but also from culture. This case study shows that the success of AIS implementation is not sufficient if it only relies on a technical approach but must also consider the social and cultural

aspects inherent to its users. Rejection of the system, or incompatibility in its usage, is often caused by differences between how the system is designed and the values held by the business actors¹⁶.

According to the interpretive perspective in information systems theory, technology is not neutral and the same for everyone but is always understood through local culture, values, and experiences. AIS designed without considering local norms, such as respect for seniority, consensus in decision-making, or the importance of maintaining social relationships (*rasa*), can lead to user resistance in communities that uphold Javanese cultural values^{17, 18}.

¹⁴ Elly Kismini, Rini Iswari, and Fajar Fajar, 'The Role of Education in Preserving Javanese Ethical Values', *Komunitas*, 2023 <<https://doi.org/10.15294/komunitas.v15i1.41691>>.

¹⁵ Y Kumari and others, 'THE SOCIAL IMPACT OF EMERGING TECHNOLOGIES: A COMPARATIVE STUDY OF AI ADOPTION ACROSS CULTURES', *ShodhKosh: Journal of Visual and Performing Arts*, 2024 <<https://doi.org/10.29121/shodhkosh.v5.i4.2024.2599>>.

¹⁶ T Cadden and others, 'Understanding the Influential and Mediating Role of Cultural

Enablers of AI Integration to Supply Chain', *International Journal of Production Research*, 60 (2021), 4592–4620 <<https://doi.org/10.1080/00207543.2021.1946614>>.

¹⁷ Longwei Zheng and others, 'Interpreting Institute Culture Dynamics of Technology Adoption: A Downscaling Dynamic Model', *Educational Technology Research and Development*, 71 (2023), 919–47 <<https://doi.org/10.1007/s11423-023-10219-y>>.

¹⁸ Said Al-Gahtani, E Baker, and Geoffrey Hubona, 'Cultural Impacts on Acceptance and Adoption of Information Technology in

A system design that overly focuses on the individual or Western-style efficiency can conflict with the more collective work methods and social harmony present in Javanese society. Therefore, system adaptation that takes these values into account is necessary for better acceptance and effective use^{19, 20}.

Several studies have shown the importance of integrating local values in the development of accounting information systems. The research²¹ shows that accounting information systems that integrate local cultural values can make users more active, increase trust in the system, and reduce errors in reports. Meanwhile, emphasizes that a cultural approach in accounting systems encourages the strengthening of social accountability in the context of

SMEs. Therefore, the harmonization between AIS and Javanese cultural values is not only important but urgent so that the implemented accounting system is truly meaningful, contextual, and sustainable²².

Research Methodology

Qualitative case studies with a postpositivist approach are an appropriate method for researching how Javanese cultural values influence the implementation of Accounting Information Systems (AIS) in SMEs. This approach is relevant because it focuses on complex phenomena, rich in meaning, and dependent on the unique context of each SME, allowing researchers to explore the "how" and "why" of a cultural value manifesting in daily business practices.

Postpositivism acknowledges that our understanding of reality is limited and influenced by subjectivity and that social reality is always constructed from interactions

a Developing Country', *J. Glob. Inf. Manag.*, 18 (2010), 35-58
<<https://doi.org/10.4018/jgim.2010070102>>.

¹⁹ Al-Gahtani, Baker, and Hubona.

²⁰ Zheng and others.

²¹ V Binh, Nhat-Minh Tran, and M Vu, 'The Effect of Organizational Culture on the

Quality of Accounting Information Systems: Evidence From Vietnam', *SAGE Open*, 12 (2022)
<<https://doi.org/10.1177/21582440221121599>>.

²² Binh, Tran, and Vu.

between individuals, which aligns with the exploration of cultural values that have diverse interpretations.

This approach influences data collection to be more flexible and in-depth, using various methods such as semi-structured interviews, observations, and document analysis for data triangulation. The researcher will focus on understanding the meaning behind each informant's response and recording the context in detail, often returning for data clarification. In data interpretation, analysis is conducted thematically to identify patterns, acknowledge various informant perspectives, and encourage the researcher's self-reflection on personal biases. The goal is to develop a rich and contextual understanding, potentially even generating new theories directly derived from field data.

According to²³, this study is qualitative and based on the postpositivist philosophy. The study

examines natural object conditions, with the researcher serving as the primary instrument. Purposive and snowball sampling are used for data sources, triangulation is used for data collection, inductive and qualitative data analysis is used for data analysis, and the study's findings prioritize meaning over generalization²⁴. Case studies are carried out to investigate situations involving people, cultural groupings, and daily life²⁵. The purpose of this study was to investigate the situation at MSMEs "Sambal Pecel Bu Siti," which is particularly connected to the AIS and has a history of using local wisdom culture to operate its operations. To get reliable information, this investigation method is conducted by speaking with informants who are the proprietors of the "Sambal Pecel Bu Siti" company²⁶.

²³ L. Busetto, W. Wick, and C. Gumbinger, 'How to Use and Assess Qualitative Research Methods', *Neurological Research and Practice*, 2 (2020) <<https://doi.org/10.1186/s42466-020-00059-z>>.

²⁴ Jhon W. Cresswell, *Research Design Qualitative, Quantitative, and Mixed Methods Approaches* (London United Kingdom: SAGE Publications Ltd, 2014).

²⁵ Cresswell.

²⁶ Dwi Rahma Fitriani, Atik Tri Andari, and Wiwik Mukholafatul Farida, 'NILAI

The object of the research is the primary focus of the study. This study focuses on the design and implementation of AIS, including the use of IFAC's conception for decision-making and planning activities ²⁷. The subject of this research refers to the person or thing that serves as the primary focus for gathering relevant facts or information. This study focuses on the MSMEs "Sambal Pecel Bu Siti" as a design and implementation site.

The author's chosen informants include MSMEs' internal parties and users. MSMEs' creator or owner, Bu Siti, is one of their internal parties. Along with the owner, Pak Djoko, the manager who helps Bu Siti is also an internal party informant. We chose both informants because they had direct involvement in the planning and

execution of AIS. The workers chosen by Bu Fitria are locals who have been employed at MSMEs "Sambal Pecel Bu Siti" since she started her company.

In this study, two types of research data were used: secondary data, which was gathered through documentation by reading several literature reviews and other source materials from which comments on the information system's architecture would subsequently be produced. The practice of conducting in-depth, semi-structured interviews with chosen informants yields primary data ²⁸. The objective is to ascertain the informants' comprehension of Javanese cultural values and how these values manifest themselves in the general work practices of MSMEs. The description of the questions includes the following:

1. Are there values or principles that this MSME strongly upholds in its collaborative work? "(Encourage them to mention Gotong Royong, Andhap Asor, etc.).

BUDAYA LOKAL DALAM PRAKTIK AKUNTANSI MANAJEMEN (PAM) DI UMKM', 14.April (2025), 40-51 <<https://doi.org/https://doi.org/10.33795/jaeb.v14i01.7139>>.

²⁷ M Aleqab, M Nurunnabi, and D Adel, 'Mind the Gap: Accounting Information Systems Curricula Development in

Compliance With IFAC Standards in a Developing Country', *Journal of Education for Business*, 90 (2015), 349-58 <<https://doi.org/10.1080/08832323.2015.1068155>>.

²⁸ Cresswell.

2. Could you please provide an example of how the value of Gotong Royong is reflected in daily work here?" "Could you please provide an example of how the value of Gotong Royong is reflected in daily work here?"
3. What can you tell me about the value of Andhap Asor? Is this value firmly upheld in interactions between employees or with superiors?
4. Are there examples where the principles of Nrimo or Legowo are applied when facing difficulties or mistakes at work?" "Are there examples where the principles of Nrimo or Legowo are applied when facing difficulties or mistakes at work?"

How do you view Unggah-Ungguh (etiquette/manners) in the workplace relationships in this MSME? "How do you view etiquette in the workplace within this MSME?"

Data analysis in qualitative research involves the preparation and organization of data for analysis, followed by the reduction of data into themes via coding and code condensation, and ultimately presenting the data through visuals,

tables, or talks (Creswell, 2007). The data analysis in this study commences with the organization of the data, achieved by converting interview recordings into written transcripts, which facilitates the subsequent processes. The next phase is data reduction, which involves simplifying the data by analyzing interview findings and categorizing similar questions to aid in exploring the design and implementation of the local wisdom AIS used. The final step involves presenting the studied and acquired research data to draw conclusions that are appropriate, relevant, and aligned with existing reality.

Result and Discussion

The study of AIS design and implementation in MSMEs by earlier researchers yielded relevant findings. Previous studies focused primarily on this topic²⁹. In the context of MSMEs in Java, how can the admirable ideals of Javanese

²⁹ Siti Musdalifah and Wiwit Hariyanto, 'AIS Revolutionizes MSMEs, Enhancing Global Financial Transparency', *Indonesian*

Journal of Law and Economics Review, 2024
<<https://doi.org/10.21070/ijler.v19i2.1079>>.

culture be successfully incorporated to guarantee that AIS is not only operational but also recognized and long-lasting? The results of earlier studies indicate that the architecture of AIS, which makes it easier for team members or business units to share information and duties, reflects the cultural element of cooperation, which promotes cooperation and mutual aid³⁰. In the context of MSMEs in Java, *Paseduluran* (Family) can be used to promote an appreciation for the importance of AIS, making users feel involved in the implementation process; *Andhap Ashor* (Humble/Polite) is a value that is crucial in the communication process between AIS developers and MSMEs actors; and *Nrima* (Accepting with

Sincerity) can be interpreted as being ready to accept change and adapt to new systems.

The results of earlier studies on AIS have important ramifications for MSME owners and managers³¹. We can use the results of earlier studies to ensure financial reporting limits, allocate resources for current AIS, and make better decisions. These results suggest that a thorough grasp of the traits, requirements, and constraints of MSMEs is essential to the success of AIS in these businesses. Adaptation, personalization, and a human-centered approach are just as crucial to the success of AIS in MSMEs as technology³². A successful AIS in MSMEs is one that is not only cost-effective but also compatible with

³⁰ Mufti Agung Wibowo and others, 'Digital Procurement Transformation: Case Study in Central Java', *International Journal of Advanced Engineering, Management and Science*, 2024 <<https://doi.org/10.22161/ijaems.105.17>>.

³¹ Rafael Martínez-Peláez and others, 'Role of Digital Transformation for Achieving Sustainability: Mediated Role of Stakeholders, Key Capabilities, and

Technology', *Sustainability*, 2023 <<https://doi.org/10.3390/su151411221>>.

³² Nadia Sari, 'ANALYSIS OF ACCOUNTING INFORMATION SYSTEM RECEIVING AND SPENDING OF BOS IN THE COVID-19 ERA', *BALANCE: JOURNAL OF ISLAMIC ACCOUNTING*, 3.1 SE-Articles (2022) <<https://doi.org/10.21274/balance.v3i1.5648>>.

regional work practices and cultural norms, making it a true instrument that promotes the expansion and sustainability of the company.

The owner's involvement in designing the implementation of the AIS is one of the internal factors that influence a family business. It is acknowledged by several researchers that the degree of owner-manager involvement in business operations is the primary determinant of AIS implementation in family firms (IMA 2024). The same thing happened at the Home Industry MSMEs "Sambal Pecel Bu Siti" in Kediri Regency, East Java, which works in the culinary industry. Bu Siti, a 65-year-old housewife, first started the company in 2003. Before establishing her current business, Mrs. Siti's first venture was selling "Sego Pecel Tumpang." Mrs. Siti sells daily from 7:00 am until 1:00 pm. Bu Fitria, MSMEs neighbor and husband,

helped her with her business. Over time, Mrs. Siti expanded her business, marketing her "Sambal Pecel" throughout the Kediri Regency. Current circumstances show that the business owner's involvement in all facets of the business, including procedural, technological, data, and human factors, is crucial to the success of all MSMEs "Sambal Pecel Bu Siti" business activities. This type of situation is really rather common, as stated ³³, who explains that companies with full family control are only able to hire family members based on family interests rather than meritocracy.

AIS are designed to collect, record, manage, store, and report financial data and other relevant information to support the decision-making process in an organization ³⁴. This refers to the AIS, which is formed as a result of the learning process based on experience. For

³³ Fitriani, Andari, and Farida.

³⁴ Maggie Lee and others, 'The Implementation of Artificial Intelligence in Organizations: A Systematic Literature

Review', *Inf. Manag.*, 60 (2023), 103816
<<https://doi.org/10.1016/j.im.2023.103816>>.

informants, the implementation of AIS is not knowledge obtained from formal education but comes from experience gained over 22 years of running their business. The following is a statement

"Opo kui mas Sistem Informasi Akuntansi? Ora mudeng aku mas. Aku yo ora weroh opo kui Sistem Informasi Akuntansi. Ngelola usaha bareng bojo mas, keputusan bareng bareng karo bojo. Golek rewang seng cedak kene wae mas, sak RT seng gemi, tleten. Catet kebutuhan blonjo ditulis neng kertas mas, ora mudeng sistem. Duit ya diputer mas, bathi ne bakulan diputar dienggo kulakkan.masalah urus ijin usaha ya gak ora paham mas. Seng penting bakulan entuk bathi. Iso cukup dienggo kebutuhan"

Translation "What is an accounting information system, sir? I don't understand, sir. I don't know about accounting information systems. My husband and I manage the business together, sir. My husband and I make decisions together. We are looking for employees who live nearby, and the most important quality we seek is discipline. To record shopping needs, it is written manually, not using a system. I don't understand the system. We resell the earned money and use the trading profit as capital.

I don't understand the business permit issue, sir. The important thing is that sales make a profit".

The statement explains that he has never studied accounting information systems through formal education. He carries out AIS, including decision-making and financial report recording, by independently learning from past experiences. If there is something that is not appropriate, it will be fixed again. This process supports previous research that says that designing and implementing AIS helps make better decisions, organize resources for existing AIS, and ensure problems in financial reports.

AIS generally records every transaction related to business activities. The standard is all transactions related to cash, purchases, sales, receivables, and payables. The recommended working system for MSMEs is a bookkeeping system for a certain period, which includes transaction recording and documenting every

transaction related to business activities³⁵. The recording of transactions related to her business has indeed not yet been implemented for various cash transactions, purchases, sales, receivables, and payables. Decision-making is related to long-term and short-term decisions; both types of decision-making are carried out by Mrs. Siti and her husband, as explained in the following statement.

"Ngene mas, nek enek transaksi masuk hasil bakulan sambal pecel tak catet neng buku folio. Kadang yo lali mas. nek kadung repot ora kecatet duit kui. Kadang yo lali duit kui nyelehne neng ndi. Ora mudeng transfer mas. nek enek wong tuku bayar e kontan. Blonjo kulakaan nganggo duit modal, kadang ya kecampur karo duit pribadi mas. enek pelanggan utang sambal pecel, kadang ya lali ora kecatet. Ngandalkne ingatan wae mas."

Translation : Here's the thing, sir: if there is an incoming transaction from selling "sambal pecel," I record it in a folio book. Sometimes I forget. If I'm busy, the incoming

money isn't recorded. Sometimes I also forget to put in the money from the sale. I don't understand transfers, sir; if someone pays, it's always in cash. Buying sambal pecel ingredients uses capital money, always mixed with personal money. There are customers who owe sambal pecel; I forget it's not recorded. I only rely on my memory, sir.

The statement indicates that the short-term decision is to record all transactions made by Bu Siti and Pak Djoko. Both of them also decided to manage their business by integrating the AIS with other systems (such as inventory or sales management) in long-term decision-making to obtain a more comprehensive business picture.

MSMEs Sambal Pecel Bu Siti has not recorded its business finances correctly due to a lack of knowledge about accounting and human resources in the financial field. All business transactions are only recorded as incoming and outgoing

³⁵ Mukhamad Sholikudin, Anisa Lilatul Nikmah, and Irda Agustin Kustiwi, 'Peran Sistem Informasi Akuntansi Dalam Pemanfaatan Teknologi Terhadap Pembukuan Digital Pada UMKM Kampung

Kue', *MUQADDIMAH: Jurnal Ekonomi, Manajemen, Akuntansi Dan Bisnis*, 2023 <<https://doi.org/10.59246/muqaddimah.v2i2.703>>.

by Bu Siti. Meanwhile, the other employees are in the production department. Bu Siti records the transactions either in a folio book or on small notes. The main goal is to identify the remaining business funds so that they do not mix with personal money. The focus is on keeping the business running, being debt-free, and ensuring smooth employee salary payments. Meanwhile, financial information such as net profit, production costs, and other financial data are not given much attention.

Internalization of Javanese Culture with AIS

Integrating Javanese culture into AIS might sound strange, but it can create a harmonious, honest, and efficient atmosphere, especially in SMEs that value local traditions. Javanese culture with its philosophy can provide a strong ethical and behavioral foundation in financial management.

Guyub, as one of the main pillars of Javanese culture, is not just about helping but also about

togetherness, active participation, and collective responsibility to achieve common goals. In the context of AIS implementation, this value becomes very relevant and can provide a solid foundation for success. In the context of AIS in SMEs, cooperation means collaborating between various departments (such as accounting, sales, and purchasing) to ensure complete and accurate data. All parties have a shared responsibility to maintain the integrity of the system and information. This condition can be seen through the implementation of the recording collaboration between Bu Siti and Pak Djoko. Bu Siti provided the following explanation for this implementation:

"Mesti tak catet mas. Nyatet duit masuk bakulan aku mas, bapake nyatet blonjo kulakan. Ngene iki digarap bareng bareng karo bapake mas. ngono iseh padu karo bapake. Bedo pendapat nyatet e. Ngono kui nek wes padu dogoleki jalan tengah e".

Translation: "Always keep a record. I record the incoming money from sales." My husband records the summary

of expenses or outgoing money. Sometimes my husband and I still have different opinions when it comes to recording. As a result, we reached a compromise for decision-making.

The statement contains meaning in the recording of transaction evidence. Cooperation is required for both incoming and outgoing transactions, as well as for managing debts and receivables, to achieve a business's goals. By prioritizing mutual cooperation, organizations, especially MSMEs with strong Javanese cultures, can build an Accounting Information System (AIS) that is not only technologically advanced but also reflects the spirit of togetherness.

Andhap Asor is a noble value in Javanese culture that teaches humility, politeness, openness, and the importance of individuals recognizing their appropriate roles. In the implementation of Accounting Information Systems (AIS), adopting the value of *Andhap Asor* can be the key to creating processes that run smoothly, collaboratively, and

efficiently. Such an approach helps minimize friction between parties and ensures that shared goals are achieved effectively. Bu Siti experience with Pak Djoko financial reporting demonstrates this condition. This implementation is explained by Bu Siti as follows:

"Aku karo Bapake terbuka mas masalah duit. Bathi bakulan piro piro tetep ngomong lan laporan karo bapake. Bapake blonjo kulakan yo ngono mas, masalah duit turah opo kurang lapor karo mas. ben podo podo enak e. Karyawanku ya terbuka masalah produksi rusak, cacat terbuka. Ben podo podo enake "

Translation: My husband and I are always open about money matters. I always discuss the profits from sales with my husband. My husband also buys those materials; if there's any change, he gives it to me so we both benefit. My employees also communicate openly about issues related to defective or damaged products. We all stand to gain from this.

The statement means that AIS, by implementing best practices focused on data accuracy, transparency, and accountability, indirectly adopts the values of humility in the organization's

financial management. Caution in recording, honesty in reporting, and openness to audits and system improvements reflect the essence of humility and adherence to ethical principles highly esteemed in Javanese culture to create trustworthy governance.

Narima Ing Pandum (accepting things as they are, being grateful) in the context of AIS creates a favorable and productive atmosphere, making it more capable of adapting, being innovative according to the system's capabilities, and adhering to data integrity. One aspect of adapting to system limitations is demonstrating flexibility in response to change. When there are updates, upgrades, or even migrations to a new AIS, the attitude of "narima ing pandum" encourages a willingness to learn and adapt to changes. Instead of excessive rejection or unproductive complaints, the focus is on effectively utilizing the new system. I. This was conveyed in his statement as the owner of the MSMEs sambal pecel Bu Siti:

Sebenare aku ra mudeng teknologi mas, mergo saiki kebutuhan teknologi dibutuhne, gelem ora gelem aku yo kudu beradaptasi. Contoh e pemasaran lewat online, gawe rekapan duit mlebu metu. Aku wes ra mudeng mas, iki seng ngelola online Fitria seng paham teknologi. Saiki mulai ngurus sertifikasi halal. Ngurus ijin usaha. Manut mas aturane pemerintah. Seng penting ora ganggu produksiku sambal pecel.
Translation: Actually, I don't understand technology, sir. Because technology is now a primary necessity, whether I like it or not, I have to follow it. For instance, I create income and expenditure reports and engage in online marketing. I no longer understand, sir. Fitria, who is well-versed in technology, manages everything. Fitria is now taking charge of halal certification and overseeing business permits. We have to follow government regulations, and most importantly, we must not disrupt the production of sambal pecel.

The explanation reflects that Mrs. Siti must adapt to technology. Technology enables SMEs to manage inventory, finances, and marketing efficiently. Bu Siti's products are marketed through digital platforms such as Shopee and Tokopedia, and

MSMEs can reach foreign markets without having to open physical branches, as well as create opportunities for exporting local products. The government requires SMEs to be legally established, one of which is SMEs. Bu Siti obtained a legal business license for her company and also registered for a halal certificate to ensure the quality and safety standards of her products. This certificate is not only a legal requirement but also enhances consumer trust and the competitiveness of MSME products.

Tepa Slira is one of the noble values in Javanese culture that literally means "measuring oneself" or "making oneself the measure." The deeper meaning is compassion, empathy, tolerance, and the ability to understand and consider the feelings or impact of our actions on others. This is an attitude of care to avoid hurting or harming others, both in words and actions.

AIS the application of *tepa slira* is very important to create a good working atmosphere, smooth

processes, and reliable results. AIS, a user-friendly system design, incorporates *tepa slira* and prioritizes the comfort and capabilities of its users. The message was conveyed Bu Siti employee, Fitria.

Ngene mas, aku ya ngajari Bu Siti carane nggunakne aplikasi iki. Milih aplikasi contohne Kasir Online seng cepet dipahami karo wong sepuh. Kudu dituntun alon alon. Salah sijine ngecek duit masuk, iki kudu bener bener diajari. Saiki wes tak gawekne pembayaran Qris. Ben gak diapusi karo pelanggan.

Translation: Here, sir, I also taught Mrs. Siti how to use the application. I chose an application that is easy for the elderly to understand, for example, Kasir Online. It must be taught slowly, one of which is incoming money. The topic really needs to be taught. I will now create a payment method using QRIS.

The explanation reflects that Mrs. Fitria creates a harmonious work environment and efficient processes by using applications that are simple to understand for all groups. One of them is using language that is simple to understand with common and easily comprehensible terms. This is one of

the principles to avoid complicating users with unnecessary language.

Research Result

The results of this study indicate that the harmonization of Javanese cultural values can encourage the design and implementation of AIS in MSMEs. The image below illustrates the overall results of this study.

Figure 1 Conceptual Framework

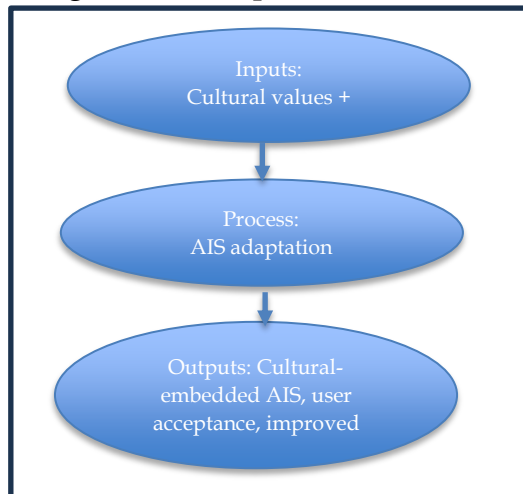


Figure 1 shows that the design and implementation of the AIS at MSMEs Sambal Pecel Bu Siti can be driven by two factors, namely Javanese

cultural values and experience. This scenario can be explained using contingency theory, which states that each organization has different ways of operating^{36, 37}. The majority of MSMEs actors understand and practice Javanese cultural values such as *guyub* (cooperation), *nrima ing pandum* (accepting with sincerity), *tepa slira* (empathy), and *andap ashor* (humility). These values are practiced in social life and serve as guidelines in running a business, including in financial recording and reporting.

The influence of cultural values on accounting behavior observed among MSMEs actors includes their reluctance to manipulate financial statements because they believe that fortune is predetermined (*nrima*)^{38, 39}. The reluctance to use a formal-based accounting system is due to the belief

³⁶ Irawanto, Ramsey, and Ryan.

³⁷ Fitriani, Andari, and Farida.

³⁸ R Zahid, V Demir, and Muhammad Kaleem Khan, 'Accounting in the Shadows of Tradition: The Role of National Culture', *Management Decision*, 2024

<<https://doi.org/10.1108/md-12-2022-1748>>.

³⁹ Stephen Salter, Hong Kim Duong, and Gaurav Gupta, 'The Future of National Culture in Accounting Research', *Journal of International Accounting Research*, 2024 <<https://doi.org/10.2308/jiar-2022-043>>.

that modern systems are too rigid and do not align with local values. Lastly, family members engage in mutual cooperation in record-keeping, assisting each other in managing the business's finances. Constraints in the implementation of AIS in the cultural context include the mismatch between the logic of modern systems and local cultural values (flexibility and familial ties). Limitations in digital literacy and accounting create obstacles, leading MSMEs actors to feel that the system's implementation emphasizes formal aspects too much and diminishes the sense or intuition associated with traditional business practices. Researchers discovered that we cannot unilaterally harmonize cultural values and accounting systems. The system needs to be designed conceptually, not just imposed from the outside, meaning that the designers and

providers of accounting applications need to understand the cultural characteristics of users so that it can be accepted and run sustainably ⁴⁰.

Conclusion

Research on the harmonization of Javanese cultural values in the design and implementation of AIS at MSMEs "Sambal Pecel Bu Siti" shows that integrating local cultural values into the accounting system is not only possible but also enhances effectiveness. The interview results show that the management of the "Sambal Pecel Bu Siti" business is strongly influenced by Javanese cultural values such as *guyub* (togetherness), *nrima ing pandum* (accepting with sincerity), *tepa slira* (empathy), and *andap ashor* (humility). These values indirectly shape accounting behavior that is honest, simple, and full of responsibility.

⁴⁰ Khubatul Jannah, 'APPLICATION OF INVENTORY ACCOUNTING INFORMATION SYSTEM AN EFFORT TO IMPROVE INTERNAL CONTROL MATERIAL WAREHOUSE AT MODJOPANGGOONG SUGAR PLANT,

TULUNGAGUNG', *BALANCE: JOURNAL OF ISLAMIC ACCOUNTING*, 1.01 SE-Articles (2020)
<<https://doi.org/10.21274/balance.v1i01.3291>>.

Second, in the practice of implementing a digital-based AIS, it is gradually being applied, particularly in recording daily transactions, managing raw material stocks, and sales summaries. However, the system used tends to be simple to align with Mrs. Siti's understanding and the employees who are accustomed to traditional approaches.

Third, the research found that the AIS works better when its interface is made more relatable to the local culture, like using Javanese words, local images, and organizing financial information in ways that match traditional practices (such as keeping weekly records like in Javanese markets). The informal training conducted at the production house also reflects the approach of *tepo seliro* and *andhap asor*, where the owner does not impose changes but rather provides space for gradual adaptation.

Thus, integrating Javanese cultural values into the design and use of the AIS at MSMEs "Sambal

Pecel Bu Siti" not only makes operations more efficient but also enhances a sense of ownership and business ethics based on culture. The system built is not only a financial control tool but also a means to preserve noble values in the context of modern business.

References

- Al-Gahtani, Said, E Baker, and Geoffrey Hubona, 'Cultural Impacts on Acceptance and Adoption of Information Technology in a Developing Country', *J. Glob. Inf. Manag.*, 18 (2010), 35-58
<<https://doi.org/10.4018/jgim.2010070102>>
- Aleqab, M, M Nurunnabi, and D Adel, 'Mind the Gap: Accounting Information Systems Curricula Development in Compliance With IFAC Standards in a Developing Country', *Journal of Education for Business*, 90 (2015), 349-58
<<https://doi.org/10.1080/08832323.2015.1068155>>
- Ambarwati, Lilik, and F Fatmawati, 'PENGARUH SISTEM

- INFORMASI AKUNTANSI
TERHADAP KINERJA UMKM
DAERAH ISTIMEWA
YOGYAKARTA', *Jurnal Riset
Akuntansi Dan Bisnis Indonesia*,
2021
<<https://doi.org/10.32477/jrabi.v1i1.320>>
- Binh, V, Nhat-Minh Tran, and M Vu,
'The Effect of Organizational
Culture on the Quality of
Accounting Information Systems:
Evidence From Vietnam', *SAGE
Open*, 12 (2022)
<<https://doi.org/10.1177/21582440221121599>>
- Busetto, L, W Wick, and C
Gumbinger, 'How to Use and
Assess Qualitative Research
Methods', *Neurological Research
and Practice*, 2 (2020)
<<https://doi.org/10.1186/s42466-020-00059-z>>
- Cadden, T, Denis Dennehy, Matti
Mäntymäki, and Raymond
Treacy, 'Understanding the
Influential and Mediating Role of
Cultural Enablers of AI
Integration to Supply Chain',
*International Journal of Production
Research*, 60 (2021), 4592–4620
<<https://doi.org/10.1080/00207543.2021.1946614>>
- Cresswell, Jhon W, *Research Design
Qualitative, Quantitative, and Mixed
Methods Approaches* (London
United Kingdom: SAGE
Publications Ltd, 2014)
- Fitriani, Dwi Rahma, Atik Tri
Andari, and Wiwik Mukholafatul
Farida, 'NILAI BUDAYA LOKAL
DALAM PRAKTIK AKUNTANSI
MANAJEMEN (PAM) DI
UMKM', 14.April (2025), 40–51
<<https://doi.org/https://doi.org/10.33795/jaeb.v14i01.7139>>
- Gaffara, Ghefra Rizkan, Dayu
Ariesta Kirana Sari, and Nanda
Saputra, 'Javanese Cultural
Heritage Building (Case Study:
Joglo House)', *Lakhomi Journal
Scientific Journal of Culture*, 2021
<<https://doi.org/10.33258/lakhomi.v2i4.533>>
- Irawanto, D, Phillip Ramsey, and
James Ryan, 'Challenge of
Leading in Javanese Culture',
Asian Ethnicity, 12 (2011), 125–39

- <<https://doi.org/10.1080/14631369.2011.571829>>
- Jannah, Khubatul, 'APPLICATION OF INVENTORY ACCOUNTING INFORMATION SYSTEM AN EFFORT TO IMPROVE INTERNAL CONTROL MATERIAL WAREHOUSE AT MODJOPANGGOONG SUGAR PLANT, TULUNGAGUNG', *BALANCE: JOURNAL OF ISLAMIC ACCOUNTING*, 1.01 SE-Articles (2020)
<<https://doi.org/10.21274/balance.v1i01.3291>>
- Jeong, Yunduk, and Suk-Kyu Kim, 'A Study of Event Quality, Destination Image, Perceived Value, Tourist Satisfaction, and Destination Loyalty among Sport Tourists', *Asia Pacific Journal of Marketing and Logistics*, 32 (2019), 940-60
<<https://doi.org/10.1108/apjml-02-2019-0101>>
- Kismini, Elly, Rini Iswari, and Fajar Fajar, 'The Role of Education in Preserving Javanese Ethical Values', *Komunitas*, 2023
- <<https://doi.org/10.15294/komunitas.v15i1.41691>>
- Kumari, Y, Subha Galavilli, Kookutla Aruna, Suresh Parla, Sudhamsetti Naveen, and Arpana Raj, 'THE SOCIAL IMPACT OF EMERGING TECHNOLOGIES: A COMPARATIVE STUDY OF AI ADOPTION ACROSS CULTURES', *ShodhKosh: Journal of Visual and Performing Arts*, 2024
<<https://doi.org/10.29121/shodhkosh.v5.i4.2024.2599>>
- Lee, Maggie, H Scheepers, Ariel Lui, and E Ngai, 'The Implementation of Artificial Intelligence in Organizations: A Systematic Literature Review', *Inf. Manag.*, 60 (2023), 103816
<<https://doi.org/10.1016/j.im.2023.103816>>
- Martínez-Peláez, Rafael, Alberto Ochoa-Brust, Solange Rivera, V Félix, R Ostos, Héctor Brito, and others, 'Role of Digital Transformation for Achieving Sustainability: Mediated Role of Stakeholders, Key Capabilities, and Technology', *Sustainability*,

- 2023
<<https://doi.org/10.3390/su151411221>>
- Musdalifah, Siti, and Wiwit Hariyanto, 'AIS Revolutionizes MSMEs, Enhancing Global Financial Transparency', *Indonesian Journal of Law and Economics Review*, 2024
<<https://doi.org/10.21070/ijler.v19i2.1079>>
- Sahfutra, Suryo Adi, and S Maharani, 'Axiological Dimensions of the Value of Harmony for Javanese Society', *Andalas International Journal of Socio-Humanities*, 2022
<<https://doi.org/10.25077/aijos.h.v4i2.38>>
- Salter, Stephen, Hong Kim Duong, and Gaurav Gupta, 'The Future of National Culture in Accounting Research', *Journal of International Accounting Research*, 2024
<<https://doi.org/10.2308/jiar-2022-043>>
- Sari, Nadia, 'ANALYSIS OF ACCOUNTING INFORMATION SYSTEM RECEIVING AND SPENDING OF BOS IN THE COVID-19 ERA', *BALANCE: JOURNAL OF ISLAMIC ACCOUNTING*, 3.1 SE-Articles (2022)
<<https://doi.org/10.21274/balance.v3i1.5648>>
- Sholikudin, Mukhamad, Anisa Lilatul Nikmah, and Irda Agustin Kustiwi, 'Peran Sistem Informasi Akuntansi Dalam Pemanfaatan Teknologi Terhadap Pembukuan Digital Pada UMKM Kampung Kue', *MUQADDIMAH: Jurnal Ekonomi, Manajemen, Akuntansi Dan Bisnis*, 2023
<<https://doi.org/10.59246/muqaddimah.v2i2.703>>
- Sobaya, Soya, Martini Dwi Pusparini, and Siti Achiria, 'Javanese Local Wisdom Values for Development from an Islamic Perspective', *Journal of Islamic Economics Lariba*, 2023
<<https://doi.org/10.20885/jielariba.vol9.iss1.art4>>
- Subroto, W, N Sakti, and Novita Aprilia, 'The Role of Small and Medium Enterprises (SMEs) in

- Supporting the People's Economy in Indonesia', *International Journal of Research and Scientific Innovation*, 2025
<<https://doi.org/10.51244/ijrsi.2024.11120036>>
- Sujana, Edy, Ni Wayan Sri Tresna Egawati, and I Purnamawati, 'The Mediating Role of Accounting Information Systems in Determining MSME Performance', *Jurnal Ilmiah Akuntansi*, 2023
<<https://doi.org/10.23887/jia.v8i2.65915>>
- Wahyuni, Made Arie, Gusti Ayu Ketut Rencana Sari Dewi, and Luh Asri Savitri, 'Organizational Culture That Moderates the Influence of Individual Behavior on the Success of Accounting Information System Implementation in the Context of Planned Behavior Theory', *Proceedings of the 5th International Conference on Tourism, Economics, Accounting, Management and Social Science (TEAMS 2020)*, 2020
<<https://doi.org/10.2991/aebmr.k.201212.048>>
- Wibowo, Mufti Agung, Yasip Khasani, Ari Siswati, Jaya Ramadey, Abdul Aziz, Irsal Fauzi, and others, 'Digital Procurement Transformation: Case Study in Central Java', *International Journal of Advanced Engineering, Management and Science*, 2024
<<https://doi.org/10.22161/ijaems.105.17>>
- Yuliani, Nur Laila, Naufal Afif, and Serafica Btari Christiyani Kusumaningrum, 'Empowering BUMDes Guyub Rukun: Branding Strategies and Digital Marketing for Tourism Village', *Community Empowerment*, 2025
<<https://doi.org/10.31603/ce.10553>>
- Zahid, R, V Demir, and Muhammad Kaleem Khan, 'Accounting in the Shadows of Tradition: The Role of National Culture', *Management Decision*, 2024
<<https://doi.org/10.1108/md-12-2022-1748>>
- Zheng, Longwei, Tong Liu, A Islam, X Gu, and A Islam, 'Interpreting

Institute Culture Dynamics of
Technology Adoption: A
Downscaling Dynamic Model',
*Educational Technology Research
and Development*, 71 (2023), 919-47
<<https://doi.org/10.1007/s11423-023-10219-y>>

Zubaidah, S, 'Pengaruh Sistem
Informasi Akuntansi Dan
Pemanfaatan Teknologi Informasi
Terhadap Kualitas Laporan
Keuangan Pada Organisasi', 4.2
(2020), 243-47
<<https://repository.uma.ac.id/handle/123456789/15421>>