

Review of: "A Case Study of the Management Information System in the Coffee Industry in SW Ethiopia"

Stephen Frimpong¹

¹ University of Missouri - Columbia

Potential competing interests: No potential competing interests to declare.

Coffee is the number one foreign exchange earning export commodity of Ethiopia, and one of the most traded agricultural commodities in the world market. Understanding the MIS in the industry is, therefore, important for policy and programing and stakeholders.

The author studied management information system (MIS) in the Ethiopian coffee industry. Unfortunately, the paper is unclear and extremely hard to read. Even though the entire paper is saddled with this challenge, I point out a few of these challenges. I also provide excerpts from other similar papers in the MIS field, which the author cited, as a guide. Now, let's look at two successive typical paragraphs at the beginning of the author's introduction:

Paragraph 1:

"A newly-developed business and organizational management concept, management information systems (MIS), is an integrated system of people, machines, programs, and procedures that provides information to support transactions, operations, and decision-making within an organization for effective/efficient management. Then, simplifying the management of complex, enormous, and unmanaged data to carry out business operations at numerous organizational levels was very important (Adhikari, 2023). Agriculture, which produces food and a variety of biological and industrial products, is crucial for supplying human needs. Approximately one in ten people globally experience hunger, and many more experience food insecurity, micronutrient deficiencies, and diet-related illnesses despite yearly improvements in agricultural productivity (Zhao et al., 2023). For example, in the case of coffee, intensive studies of the farmers, manufacturers, wholesalers, and retailers in the upstream, midstream, and downstream of the product platform are necessary (Arre et al., 2021). Coffee is thought to provide you with more energy before an activity and relieve exhaustion and lethargy. Because coffee is seen as a stimulant (added energy) before engaging in intense activities during the day and a sleepiness reliever, people who enjoy drinking coffee tend to make it their favorite beverage or regularly use it (Laumal et al., 2019). Coffee beans, one of the major products in northern Thailand, are used to make coffee goods. While Arabica coffee is often grown and harvested in this region due to the height and local climatic conditions. It is a widely consumed beverage that has been sold for a long time and is experiencing steady market expansion (Arre et al., 2021). Hence, a system for classifying, evaluating, transmitting, and disseminating the information needed by decision-makers is referred to as a management information system (MIS). It includes people, machines, equipment, procedures, and legislation. It is a collection of tools that are used to gather, process, store, retrieve, and deliver data to the beneficiaries utilizing a variety of communication channels.

Higher management concerns, training, human resources, material resources, and software were selected as the aspects of MIS, which indicate the need for creating MIS (Atheeb & Musehibe, 2021)."

Paragraph2:

"The agricultural sector can start creating processed goods that can be used in various ways, changing the paradigm and thinking that it is exclusively about farming. Because they have up until now only used comparatives, farmers or other important participants in the supply chain are also unsure of how to boost competition (Panggabean et al., 2022). Prioritizing agricultural development activities is necessary to increase output capacity. This entails increasing the area of land used for a number of essential commodities and government support for agricultural growth (Panggabean et al., 2022)."

Each of the highlighted sections contains a completely different idea. At the basics, a paragraph must have a topic sentence and supporting sentences. In the second paragraph immediately preceding the first paragraph in the introduction section, there seems to be no coherence and markers. Also, almost every sentence in the paragraph is a topic sentence, and thus, carries a new idea but there are no supporting sentences to develop the ideas. Also, the basics tenets of scientific writing— problem statement, objectives, methods, and results are absent from the paper. The paragraphs are extremely incoherent and indecipherable.

The author cites some good papers. I have heavily lifted excerpts from two of these papers as reference for the author to improve the readability and organization of the paper. First, the work of: **Bhandari, H.P (2022). Effect of Management Information System (MIS) on Decision-Making in the Academic Sector. *The OCEM Journal of Management, Technology & Social Sciences*, 2(2), 126-146**

"The current era is the information era; people are running on society 5.0, where machines are integrated with humans for a healthy, comfortable, easy, and long life. In general, information is blood, and MIS is body; blood flows for life which can be compared with the flow of information on the organization as per the requirement for decision-making to grow the organization to meet its desired outcome. The overall objective of this research is to assess the effect of MIS on decision-making among academic institutions..."

This study also discusses the concept, attributes, characteristics, types of MIS, and the MIS model, and finally, highlights the effect of MIS in decision-making in academic institutions. At the same time, different models and figures are presented to enrich the discussion and to highlight the status of each MIS and DSS information system in an organization's decision-making process.

2. OBJECTIVES AND RESEARCH QUESTION

..., it has some minor objectives highlighting the findings or outcomes during the research.

- *To identify highly cited journals on the impact of MIS in the decision-making process.*
- *To identify the research method applied in the review articles...*

3. REVIEW OF LITERATURE

The author has collected 23 articles on management information system and decisionmaking for the literature review, including related books and other online resources. Out of them, important 15 articles are incorporated to review the literature.”

In the above excerpt, the authors clearly organized their paper in terms of problem statement, specific objectives, and the methodological approach for fulfilling the stated objectives.

Another paper that can guide the authors to improve their scientific writing process in the field of MIS is a paper by **Groeneveld, D., Tekinerdogan, B., Garousi, V. et al. A domain-specific language framework for farm management information systems in precision agriculture. *Precision Agric* 22, 1067–1106 (2021).**

<https://doi.org/10.1007/s11119-020-09770-y>, which the authors cite. I lift portions of the paper as a guide:

“In recent years, the agricultural sector has changed radically due to rapid technological developments. In parallel, the agricultural sector faces the challenge of fulfilling several goals and societal values at the same time while also expecting to be sustainable and economically viable on a long-term basis. Precision agriculture can help meet these difficult challenges but requires the development of large scale software that meets the stakeholder requirements. Similar to the motivations for other application domains, DSLs can leverage the development of precision agriculture systems, thereby reducing the conceptual gap, increasing the productivity and quality of the developed software systems...”

In this paper, a domain-specific language (DSL) framework for the design and development of precision-agriculture software is proposed and evaluated.”

Clearly, the first paragraph highlights the research problem and has a topic sentence and supporting idea: *Unsustainability of agriculture meeting several goals due to parallel structural shifts of agriculture and technology*. In the second paragraph, the authors start to look at the specific aspect of **farm management information systems to focus the study on: domain-specific language (DSL)**. MIS is broad. The author must, likewise, look at specific aspects or knowledge gap(s).

The author can follow the guides from these papers. The author may also collaborate with other colleagues in the field to help improve the work. It is almost impossible to judge the technical soundness of the paper unless the author improves the readability of the paper.