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Information management system as a panacea for business decision-making and strategy development in Katsina Central Market

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Abstract

Information management system (IMS) is regarded as the process of collecting, storing, and disseminating information to support decision making and strategy development. An effective IMS enables businesses to identify opportunities, threats, and trends, making informed decisions and developing effective strategies. Therefore, in the context of Katsina Central Market, IMS is crucial for businesses to understand customer needs, track sales and revenue, and monitor inventory and supply chain. This study examines the role of IMS in business decision making and strategy development in Katsina Central Market. The study adopts a mixed-methods approach, combining both qualitative and quantitative data collection and analysis methods. The research population consists of businesses operating in Market. A sample of 20 businesses is selected using a stratified sampling technique. Four business owners were selected from each business selected (4 x20 =80). Data was collected through four-point scale (Likert) scale questionnaires and interview. The data is analyzed using descriptive statistic (simple percentage) and thematic analysis. The findings from the study revealed that an effective IMS is crucial for an effective strategies and decisions making. The majority of businesses agree that IMS is essential for understanding customer needs and preferences. However, only a few businesses have implemented IMS in their business, and most of the businesses were reported to rely on manual methods for data collection and analysis. The study recommends the Implementation of IMS, Regular market research and analysis, Data analytics training for businesses, Establishment of a market information center and Collaboration between businesses and market associations to share information and best practices.

Keywords: Corporate culture, employee retention, working environment, Bank of Namibia

Introduction

In today's fast-paced and competitive business environment, access to accurate and timely information is crucial for making informed decisions and staying ahead of the competition. This is particularly true for businesses operating in traditional markets, such as Katsina Central Market, where the lack of modern information management systems (IMS) can hinder decision-making and strategy development. However, the market seems to be facing challenges such as inadequate information management, leading to poor business decision making and strategy development. Business decision making is regarded as a process of selecting a course of action to achieve organizational goals and objectives. It encompasses identifying problems, gathering information, evaluating alternatives, and choosing the best option (Harrison, 2015). However, Brito, (2017) revealed that an effective decision making is critical to business success, as it enables business owners to respond to changing environments, manage risk, and capitalize on opportunities.

Chen et al., (2018) viewed IMS as a process of collecting, storing, and disseminating information to support decision making and strategy development. Therefore, an effective IMS can support businesses to identify opportunities, threats, and trends, making informed decisions and developing effective strategies (Holsapple et al., 2014). Yet, Ali (2019) highlighted that a systematic strategy for an effective decision consists of several activities, the process is made of up the following five different stages: Identifying and defining the problem, Searching and developing for an alternative solution, Evaluating the expected results of each alternative, Selection of the best substitute and Implementation of the decision and follow-up.

Katsina Central Market is one of the largest and most important markets in northern Nigeria, providing a platform for thousands of traders from the Niger Republic to buy and sell goods. However, the market's traditional nature and limited use of technology can make it challenging for traders to access reliable information, leading to inefficiencies and missed opportunities. According to Ali (2019) business environment is unpredictable, dynamic, unstable and, necessitates the growing demand for accurate, relevant, complete, timely and, economical information needed to drive the decision-making process. Therefore, the advent of IMS is believed to have transformed the way businesses operate, providing a platform for efficient data collection, storage, and analysis (Marker., 2021). This indicate that IMS can support traders in Katsina Central Market to better manage their operations, make informed decisions, and develop effective strategies. Establishment of an effective IMS within a business entity can promote the seamless dissemination of information and updates to both business owners and customers, thereby enhancing their accessibility to the desired content (Crexendo, 2023). By leveraging IMS, business entity can effectively streamline their data management processes by eliminating extraneous information and focusing solely on the data that is pertinent and prioritized. This can promote enhanced decision-making across many domains of the businesses, ultimately culminating in the expansion and achievement of the business (Lewis, 2019 & Rainer., 2017). Moreover, Despite the potential benefits of IMS, its adoption and utilization in traditional markets like Katsina Central Market remain limited.

The study's background is rooted in the need to examine the current state of information management in Katsina Central Market, investigate the impact of IMS on business decision-making and strategy development and identify the challenges and opportunities associated with IMS adoption in traditional markets. By exploring these areas, the study seeks to contribute to the existing body of knowledge on IMS and its applications in traditional markets, providing insights for traders, market authorities, and policymakers to improve the efficiency and competitiveness of Katsina Central Market.

Objectives

The following are the main objectives of the study:

1) To examine the role of an IMS in enhancing business strategy and decision-making in Katsina Central Market.
2) To determine whether business owners and market management adopt IMS for strategy development and market management

Research Questions

The following two research question were raised

1. Does the implementation of an IMS influence the strategy and speedy business decision-making among traders in Katsina Central Market?

2. Does business owners and market managements in katsina market employ IMS in their business activities?

Methodology

The study employed a mixed-methods research design to collect both quantitative and qualitative data from the participants in which a survey was employed to measure the perception of role of IMS in business decision-making and strategy development in Katsina Central Market.

Sample and Sampling Technique

The target population for the study comprised of businesses operating in Katsina Central Market. A sample of 20 businesses is selected using a stratified sampling technique and four business owners were selected from each business selected (4 x20 =80).

Instrumentation: The questionnaire was designed to have three sections, in which Section A is made up of respondent's background information; Section B of the questionnaire is made of up eight (8) questions with four scale options (Strongly Agree, Agree, Disagree and Strongly Disagree) against each statement for respondents to choose according to their perceptions (Likert, 1932)., and an interview was conducted concurrently to provide a qualitative data that gives insights into the experiences and perspectives of business owners.

Data collection

After obtaining the necessary clearance from the authority and the participants concerned. The researchers then proceed with the data collection, in which a total number of 80 questionnaires was administered to 80 randomly selected business owners; however, a period of 2-weeks was allowed to fill-in the questionnaires. The entire data collection process was recorded to be successful as 76 participants out of the 80 responded to the questionnaires administered to them. A brief interview conducted with all participants was recorded using phone recorder at the point of questionnaires collection.

Data Analysis, Presentation and Discussion of Findings

Having used closed-ended and Likert scale approaches in the instrument for data collection in section A and B respectively, the study employed descriptive statistics (frequencies and percentages) for the analysis of data collected from the study sample. Furthermore, for the analysis of data collected during interview (qualitative data), the researcher adopted inductive thematic analysis method that involves process where coding and theme development are directed by the content of the data. The following processes were adhered to ensure accuracy in the inductive analysis (Guest, MacQueen and Namey, 2012).

- listened to the responses one after the other severally and became familiar with what the data entails.
- Generated the initial codes.
- Identified and reviewed themes for further analysis.
- Comprehensive analysis made based on the various themes identified.

To research questions, a step-by-step processes of data analyses were followed. Starting with sorting out the questionnaires, which revealed that, majority (76) of the participants completed the questionnaires given to them. Data from section A of the questionnaires were summarized, analyzed and presented in the frequency distribution format as shown in Table 1.1.

Furthermore, data from Section B of the questionnaire was summarized based on the participant's response to each statement in the questionnaire as shown in Table 1.2, and analysis of the data was made using percentage and presented using bar chart as illustrated in figure 1.1 and 1.2. Data from the interview conducted was analyzed and presented using inductive thematic analysis approach.

Distribution of background information of the Respondents

The background information solicited and presented was about gender, age, and year of business experience in Katsina market. The background information was deemed necessary because the researcher wanted to ensure that all business owners with different background characteristics were represented in the study, so as to ensure that the findings were not only for a particular group or category of respondents.

Table 4.1 shows the distribution of respondents according to different attributes.

Attributes	Category	Frequency	Percentage
Gender	MALE	65	85.53%
	FEMALE	11	14.47%
Age	18-24	15	19.74%

	25-34	38	50.00%
	35-50 Above	23	30.26%
Years of Business experience in katsina market	1-5yeras	17	22.36%
	5-10 years	32	42.11%
	10 years above	27	35.53%

The findings presented in the Table 1.1, reveal that majority of the participants 85.53% are males, while the remaining 14.47% are females. It also shows that most of the participants (50.00%) fall within the age range of 25 to 34 years old, while the remaining 19.74% and 30.26% are found to have fallen within the age ranges of 18 to 24 years old and 35-50 years above, respectively. Likewise, the results of the analysis of the participants' business experiences shows that, all the participants had business experiences ranging from 12 month to ten years, in which majority (42.11%) of them are identified to have 5 to 10 years' experience followed by 35.53% with 10 years and above of experiences in business while the remaining participants, 22.36% were discovered to have experiences of between 1-5 years.

Table 1.2: Distribution of Participants' Response on Section B of the questionnaire

S/N	Statement	Response category	Frequency	Percentage
1.	Information Management System (IMS) is essential for making informed business decisions	**SA**	27	35.53%
		A	42	55.26%
		SD	03	3.95%
		D	04	5.26%
2.	Information Management System (IMS) can help me to better understand my customers' needs and preferences.	**SA**	41	53.95%
		A	33	43.42%
		SD	00	0.00%
		D	02	2.63%
3.	The use of Information Management System (IMS) can improve the accuracy of my business decisions	**SA**	29	38.15%
		A	46	60.53%
		SD	00	0.00%
		D	01	1.32%
4.	Katsina Central Market management adopt Information Management System (IMS) to promote the market's development.	**SA**	01	1.32%
		A	05	6.58%
		SD	43	56.57%
		D	27	35.53%
5.	Information Management System (IMS) can provide me with opportunities to explore new business ideas and strategies in.	**SA**	36	47.36%
		A	38	50.00%
		SD	01	1.32%

	D	01	1.32%
6. Information Management System (IMS) is critical for developing effective business strategies	**SA**	50	65.79%
	A	21	27.63%
	SD	01	1.32%
	D	04	5.26%
7. Most of the Business owners have knowledge and training on how to use Information Management System (IMS) in katsina market	**SA**	06	7.89%
	A	05	6.58%
	SD	39	51.32%
	D	26	34.21%
8. Many business owners and market management in katsina central market employ Information Management System (IMS) in their dealings.	**SA**	05	6.58%
	A	10	13.16%
	SD	40	52.63%
	D	21	27.63%

The analysis presented in Table 1.2, shows that a majority of the participants agreed with the statement 1, 2, 3, 5 and 6. Meanwhile, most of the participants were identified to have disagreed with the statements 4, 7 and 8. The responses were further illustrated in the bar chart as shown in Figure .1.1 and 1.2 as follows:

Figure 1: Illustration of Participants' Responses According to the statements in the questionnaire with relevant to research question 1.

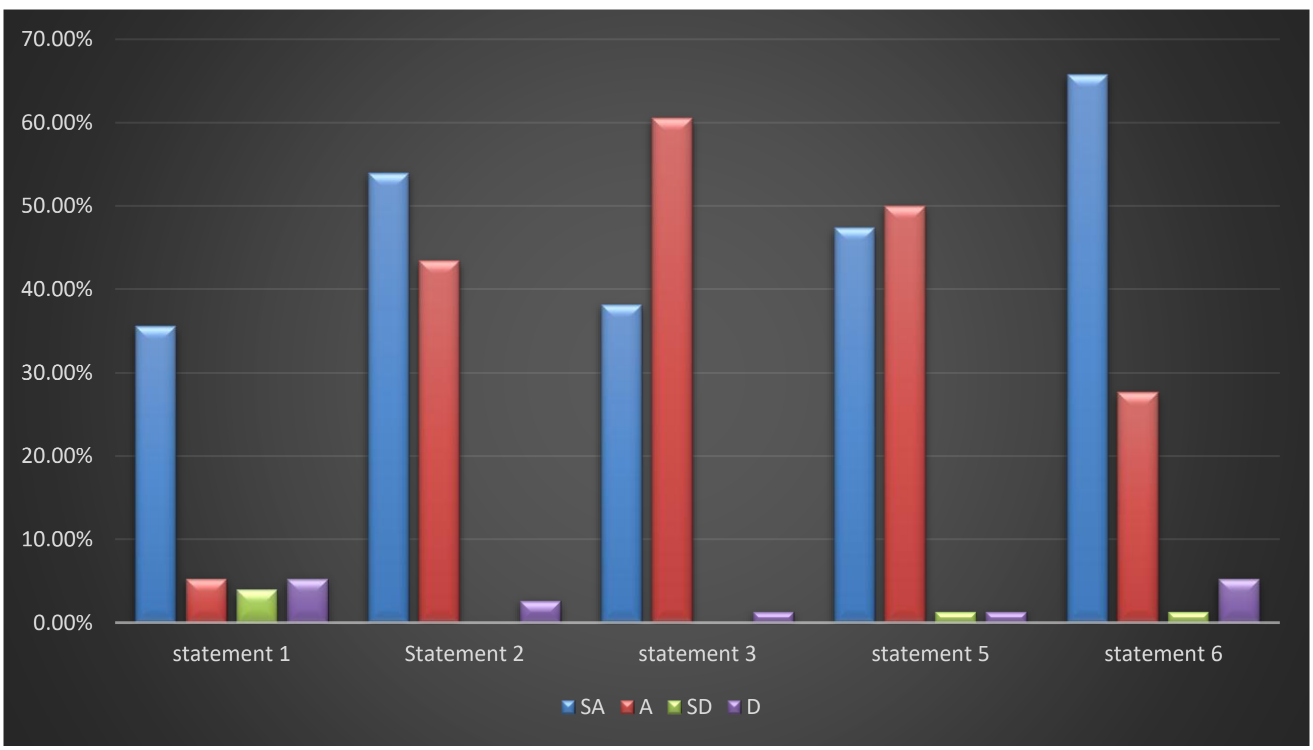
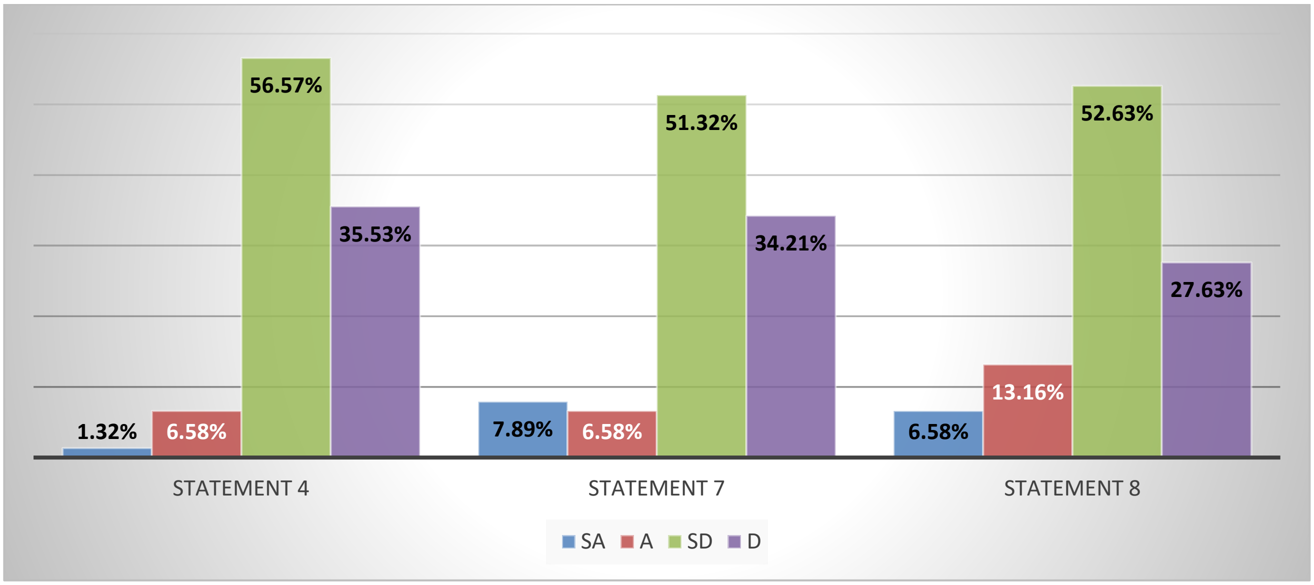


Figure 1.2: Illustration of Participants' Responses According to the statements in the questionnaire with relevant to research question 2.



Meanwhile, to support all the findings from both figure 1.1 and 1.2, a qualitative data collected from interview was analyzed using thematic analysis and conclusion of the findings were made, as discussed below.

During the collection of the questionnaires an interview was conducted to ascertain a wider Participants' views towards the impacts of the IMS on the business strategy and decision making. For the analysis of the data collected during the interview, all the participants responses were sorted and it was found that 76 (95.00%) out of the 80 participants responded to the interview based on their various perception and experiences in relation to the questions asked. In order to be familiar with what the data entails, the responses recorded played and replayed severally, and initial code was generated which allows the researchers to came up with the following three themes for the purpose of data analysis; (1) Effective Business Strategy, (2) Business decision-making

Theme Effective Business Strategy and Theme Business decision-making: The majority of the participants representing half of the total respondents are of the opinion that when IMS is been implemented it can provide business owners with an opportunity to have basic knowledge and ideas about their customers' needs and that can allow them to execute accurate and effective business strategy for a better decision-making. In which some of the participants stated that;

> *"IMS will allow me to know my customer's needs and that can help me to plan my business according to what my customers want ", "IMS can be use to identify a particular product with high demand in market, so when going to the market I can buy more of the goods with high demand and quality", "Adoption of IMS can allow me to have a record of all the stocks and sales, this will help me to decide on what to supply whenever am*

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going to the market" "*IMS enables me to understand customer needs, track sales, profit, and monitor inventory and supply chain*".

These perceptions are in line with the results of the analysis presented in figure1.1, which revealed that majority of the participants shared the same view in support of statements 1,2, 3, 5 and 6.

Discussion of Findings

Research Question One: Does the implementation of an IMS influence the strategy and speedy business decision-making among traders in Katsina Central Market? To answer research question, results from the analysis in figure .1.1 and thematic analysis of interview response (Themes: Effective Business Strategy and Business decision-making) shows that majority of the participants strongly believed that when IMS is effectively implemented it can play very significant role in boosting business strategy and decision-making in Katsina Central Market.

Research Question Two: Does business owners and market managements in katsina market employ IMS in their business activities? This can be answered based on the results of the analysis in figure .1.2. The result from the analyses discovered that majority of the participants agreed with the statement 4, 7 and 8 which shows that majority of the business owners and the market management authority don't use IMS to support business activities, even though, they believed in its effectiveness. General findings from both research questions (1 and 2) of the study revealed that an effective IMS is crucial for businesses in Katsina Central Market to make informed decisions and develop effective strategies. Because, majority of businesses owners (80%) agree that information management is essential for understanding customer needs and preferences for a better strategy and decision making in a business, this is in line with the findings from a study conducted by Holsapple et al., (2014) which highlighted that effective IMS can support businesses to identify opportunities, threats, and trends, making informed decisions and developing effective strategies. However, it was also discovered that only a few businesses have implemented IMS, and most businesses rely on manual methods for data collection and analysis.

Conclusion

In conclusion, the summary of the research analysis and findings affirmed that IMS can be regarded as a panacea for business decision making and strategy development in Katsina Central Market.

Recommendations

The study recommends the Implementation of IMS, Regular market research and analysis, Data analytics training for businesses, Establishment of a market information center and Collaboration between businesses and market associations to share information and best practices.

Moreover, the researchers also recommended that future research should investigate the impact of IMS on business performance in Katsina Central Market and it should also explore the challenges and opportunities of IMS in the market.

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