



## Management Information System Integration, Digital Marketing Strategies and Sales Growth of Selected Food and Beverage SMEs in Binan Laguna

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### ABSTRACT

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The study aimed to assess the predictive capability of management information system (MIS) integration and digital marketing strategies on sales growth in food and beverage SMEs in Biñan, Laguna. It examined the relationship between MIS integration, digital marketing strategies, and sales growth through a descriptive-correlational study involving 65 registered SMEs, with a total population of 77. Key findings indicated strong agreement (average weighted mean of 3.31) among respondents regarding the value of MIS integration, and effectiveness (average weighted mean of 3.15) of digital marketing strategies. Sales growth was perceived as very high (average weighted mean of 3.35). However, statistical analysis revealed that MIS integration did not significantly relate to digital marketing strategies or sales growth. The study identified a modest relationship between digital marketing strategies (e.g., email marketing, social media) and sales growth, with email marketing showing statistical significance ( $p = 0.005$ ). Overall, the model explained 21.9% of the variability in sales growth, suggesting other influential factors beyond the studied variables. While MIS was deemed beneficial for SMEs and certain digital marketing strategies were important for success, the study found no significant predictive relationships between MIS integration, digital marketing, and sales growth in the context of Biñan's food and beverage SMEs. This highlights the complexity of business dynamics and the need for broader considerations beyond these specific factors.

### KEYWORDS:

Management Information System Integration, Digital Marketing Strategies, Sales Growth of SMEs

### INTRODUCTION

Food and beverage enterprises serve as vibrant catalysts for community involvement, cultural preservation, and economic growth. Notwithstanding their beneficial effects, sustainability may be threatened by issues like competition, shifting consumer preferences, and unstable economic conditions. It becomes imperative to address these issues if the industry is to continue having a positive impact on the market.

The food and beverage industry has undergone a significant transformation with the advent of digital marketing technologies. The traditional modes of reaching

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customers, such as word-of-mouth publicity, have been superseded by the need for a robust digital marketing strategy (Suriya Raja, 2023). This shift is crucial in a landscape where consumers increasingly rely on digital channels for information and communication. The impact of social media, coupled with the rise of smartphone usage, necessitates businesses to adapt and invest in diverse digital marketing channels. Visibility in the digital space is now as essential as the quality of food offerings. As we delve into the exploration of the impact of digital marketing on businesses in the food and beverage industry, it becomes evident that a comprehensive and strategic approach is not just beneficial but imperative for sustained success in this competitive environment. The food and beverage (F&B) sector is an active and dynamic one that is vital to local economies, especially when it comes to Small and Medium-sized Enterprises (SMEs). Small and medium-sized enterprises (SMEs) have a big influence on the local food scene and economic development. Garcia and Santos' (2021) recent study highlights the unique opportunities and problems faced

by SMEs in the food and beverage (F&B) industry. These characteristics include rivalry in the market, shifting consumer tastes, and resource limitations. These difficulties highlight how crucial it is to comprehend how digital marketing tactics and Management Information System (MIS) integration may affect the sales growth of certain F&B SMEs. Johnson and Lee (2020) conducted research on the effectiveness of digital marketing strategies in the F&B industry, focusing on social media marketing and influencer partnerships. Their findings emphasize the growing importance of online engagement and brand visibility for F&B businesses seeking to remain competitive in today's digital landscape. Additionally, a study by Chen and Wang (2019) investigated the impact of Management Information System (MIS) integration on sales performance in SMEs. Their research underscores the critical role of MIS in optimizing operational processes and decision-making, highlighting its potential to drive sales growth in the F&B sector. These studies collectively establish a research territory that emphasizes the significance of digital marketing strategies, MIS integration, and their impact on sales growth within the food and beverage industry, particularly for Small and Medium-sized Enterprises (SMEs).

The integration of Management Information Systems (MIS) is crucial for improving operational efficiency and decision-making processes in the context of small and medium-sized enterprises (SMEs) in the Food and Beverage (F&B) industry. MIS integration is the process of integrating technology to improve communication, handle data more efficiently, and optimize different business processes. The importance of MIS in enhancing order processing, inventory management, and general resource allocation is highlighted by research by Tan and Ooi (2019). As businesses increasingly rely on networks, insights into networking, as emphasized by Janani (2021), become pertinent for SMEs aiming to harness the benefits of collaboration and data sharing.

Digital marketing tactics are becoming more widely acknowledged as essential resources for SMEs looking to prosper in a cutthroat industry. These methods cover a wide range of internet actions targeted at attracting clients, growing market share, and endorsing items for F&B SMEs. A study by Wong and Chung (2020) found that online advertising, content marketing, and social media marketing are examples of digital marketing methods that have been successful in raising brand awareness and consumer engagement in the food and beverage industry. As SMEs navigate the intricacies of the dynamic market, the collaborative synergy between Information Technology (IT) departments and digital marketing strategies becomes essential for fostering customer-centric practices, generating revenue, and developing innovative products and services (Janani, 2021).

For F&B SMEs, increasing sales is the ultimate goal, and there are a number of elements that can help them reach this goal, such as MIS integration and successful digital marketing techniques. The interdependence of these factors is emphasized by research by Chen & Wang (2018), which shows how a well-integrated MIS supports data-driven decision-making, which in turn guides focused digital marketing initiatives. It's critical to comprehend the precise drivers of sales growth in the food and beverage industry, taking into account elements such as consumer trends, product innovation, and customer experience. As highlighted by Lockett (2018), customer satisfaction and innovative technological strategies intertwine as crucial elements for the success of SMEs. In order to offer practical insights that might direct F&B SMEs toward sustainable and efficient business practices, this study will investigate the comprehensive relationship between MIS integration, digital marketing techniques, and sales growth.

This study built on the work of previous scholars, such as Johnson et al. (2019) and Brown & Miller (2020), and acknowledged the growing recognition of the impact of MIS integration and digital marketing on business tactics and outcomes. Their research examined the effects of digital marketing strategies on customer engagement, how marketing goals and MIS capabilities align, and how consumer behavior and brand loyalty are affected by digital marketing in the food and beverage sector. The study emphasized the value of customer relationships and experiences and shows how MIS integration can improve customer satisfaction and streamline operations, both of which are essential for food businesses to maintain community engagement.

In examining the existing literature, it is apparent that research has extensively explored the individual impacts of Management Information System (MIS) integration and Digital Marketing Strategies on business performance. However, a notable gap exists in the specific exploration of how these elements interact, especially within the context of SMEs in the food and beverage industry. This study aims to fill these gaps by providing a localized understanding of their intersection and influence on Sales Growth in selected enterprises in Binan Laguna.

Hence, this study endeavored to unveil the intricate dynamics within selected food and beverage enterprises, shedding light on the mutually beneficial relationship between Management Information System (MIS) integration, Digital Marketing Strategies, and Sales Growth. This study dissected the complex connections among these elements, offering insights into how their interplay shapes the competitive landscape and sustainable growth of these enterprises. This included assessing the impact of MIS

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integration and Digital Marketing Strategies on operational efficiency, exploring their influence on customer engagement, and understanding how these factors collectively contribute to Sales Growth. The findings of this study would help practitioners with actionable insights and advance academic research in the rapidly evolving food and beverage sector. Furthermore, the study laid the groundwork for future research directions, such as exploring the scalability of MIS solutions and delving into the evolving landscape of digital marketing tools, to continually inform decision-making in this dynamic industry.

### METHODS

The study employed the descriptive-correlational method of research with the help of survey questionnaires as the main source of data. Through this design, this study gave emphasis on the relationships between MIS integration, digital marketing strategies, and sales growth in the particular context of selected food and beverage enterprises in Binan, Laguna.

The significance of this research design lay in its ability to explore relationships between variables without imposing artificial manipulations, which is in line with the organic environments of these businesses. A similar industry context was studied by Rodriguez et al. (2021) in one of the more recent studies that has shown how useful descriptive correlational designs are for revealing complex relationships between marketing strategies, technological integration, and business outcomes.

The study aimed to determine the management information system integration, digital marketing strategies and sales growth of selected food and beverage SMEs in Binan Laguna. The respondents of the study were the managers and staff in selected food and beverage businesses consisting of 77 as total populations. The sample size was 65 using the Slovin formula considering a margin of error of 5% with the confidence level of 95 percent. A Simple random sampling technique was used in the study.

The research utilized a self-administered questionnaire as the primary data collection instrument. The questionnaire was structured into three parts to comprehensively address the study's objectives. Part I focused on the integration of Management Information Systems (MIS) in the selected food and beverage SMEs, Part

II assessed the effectiveness of digital marketing strategies, and Part III examined the corresponding sales growth levels.

The content and appropriateness of the questionnaire were validated through consultation with the thesis adviser, ensuring its alignment with the study's objectives. To further ensure relevance, opinions from experts in the fields of business, research and statistics.

The reliability of the study depends on the statistician to understand the aptness of the scale to know if the anticipated result was subjected to statistical formula after gathering the data. Their suggestions and criticisms were applied prior to the distribution of the questionnaire. The reliability of the survey questionnaire was evaluated using Cronbach's Alpha, with values of 0.172 for management information system and 0.328 for digital marketing, indicating moderate levels of internal consistency. However, the reliability coefficient for sales growth rate was -0.052, which suggested low internal consistency for this variable.

In the prelude to data collection, the researcher sought permission from the Director of the Graduate School of UPHSL to conduct the study. Subsequently, the list of potential respondents was acquired through data obtained from the Binan Municipality's Business Permit and Licensing Office (BPLO department). Following this, the researcher communicated with the identified individuals to ascertain their availability and willingness to participate in the research by answering the provided questionnaire.

Clear instructions were incorporated into the survey questionnaires to guide respondents before the actual administration of the questionnaire. The distribution of the questionnaires was facilitated through the use of Google Forms, offering a convenient and efficient means of data collection. Upon completion of the data gathering process, the collected data were meticulously tabulated and subjected to statistical treatment. The subsequent analysis and interpretation of the data aimed to derive meaningful insights and conclusions relevant to the objectives of the study.

### RESULTS AND DISCUSSION

Discussion to determine and investigate the management information system integration of the selected food and beverage SMEs enterprise in Biñan City, Laguna. These are the gathered data which were analyzed and interpreted for the better understanding of the study. The framework of the analysis and interpretation is guided by the problem statement.

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**Table 1. Composite Table of Management Information System Integration of the Selected Food and Beverage SMEs Enterprise in Biñan City, Laguna**

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. MIS tools and platform	3.54	Strongly Agree	1
2. Adaptability and scalability	3.10	Agree	4
3. Value addition	3.19	Agree	3
4. Operational efficiency	3.41	Strongly Agree	2
<b>Overall Weighted Mean</b>	<b>3.31</b>	<b>Strongly Agree</b>	

As presented in Table 1, the indicators concerning the summary of Management Information System (MIS) integration in selected Food and Beverage SMEs Enterprise in Biñan City, Laguna was interpreted as "Strongly Agree" with an average weighted mean of 3.31. This means that strong agreement among respondents highly value the MIS tool and platform as well as perceived to be highly beneficial for the organization.

Indicator 1, focusing on "MIS tools and platform," achieved the highest weighted mean of 3.54, ranking first. Following closely is Indicator 4, which evaluates "Operational efficiency," obtaining a weighted mean of 3.41 and ranking second. Indicator 3, assessing "Value addition," achieved a weighted mean of 3.19, ranking third. Lastly, Indicator 2, focusing on "Adaptability and scalability,"

obtained a weighted mean of 3.10, ranking fourth.

The findings of this study are consistent with prior research conducted by Smith et al. (2020), Jones (2019), and Lee et al. (2021), which highlight the positive impact of MIS integration on organizational efficiency and performance. Smith et al. (2020) emphasized the role of MIS tools and platforms in enhancing operational processes and decision-making within organizations. Similarly, Jones (2019) found that MIS integration leads to significant improvements in operational efficiency and resource allocation. Additionally, Lee et al. (2021) underscored the importance of MIS in adding value to organizational offerings and fostering adaptability in dynamic business environments. These findings reinforce the significance of MIS integration in driving organizational success and competitiveness.

**Table 2. The Composite Table of Digital Marketing Strategies used by Selected Food and Beverage SMEs Enterprise in Biñan City, Laguna**

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. E-mail marketing	3.10	Agree	3
2. Social media	3.34	Strongly Agree	1
3. Affiliate marketing	2.87	Agree	4
4. Search engine optimization	3.29	Strongly Agree	2
<b>Overall Weighted Mean</b>	<b>3.15</b>	<b>Agree</b>	

As presented in table 2, the indicators concerning the summary of the Digital Marketing Strategies used by selected Food and Beverage SMEs Enterprise in Biñan City, Laguna was interpreted as "Agree" with an average weighted mean of 3.15. This means that a combination of these digital marketing strategies is important for the success of the Food and Beverage SMEs Enterprise in Biñan City, Laguna, with a particularly strong emphasis on social media and search engine optimization.

Indicator 2, focusing on "Social media," achieved the highest weighted mean of 3.34, ranking first. Following closely is Indicator 4, which evaluates "Search engine optimization," obtaining a weighted mean of 3.29 and ranking second. Indicator 1, assessing "E-mail marketing," obtained a weighted mean of 3.10, ranking third. Indicator 3, focusing on "Affiliate marketing," achieved the lowest weighted mean of 2.87, ranking fourth.

The findings of this study align with prior research

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conducted by Garcia et al. (2020), Smith and Johnson (2019), and Tan et al. (2021), which emphasize the significance of social media marketing and search engine optimization in enhancing brand visibility, customer engagement, and conversion rates within SMEs. Garcia et al. (2020) highlighted the role of social media platforms in facilitating direct communication with customers and building brand loyalty, consistent with the findings of Indicator 2 in this study. Smith and Johnson (2019) underscored the importance of search engine optimization in improving website visibility

and driving organic traffic, supporting the results of Indicator 4. Additionally, Tan et al. (2021) emphasized the effectiveness of e-mail marketing in nurturing customer relationships and driving sales, aligning with the findings of Indicator 1. These findings underscore the importance of leveraging social media and search engine optimization strategies to enhance digital marketing performance within SMEs, thereby fostering brand growth and customer engagement.

**Table 3. The Composite Table of Level of Sales Growth of the Selected Food and Beverage SMEs Enterprise in Biñan City, Laguna**

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. Sales growth rate	3.42	Very High (Strongly Agree)	2
2. Sales target	3.08	High (Agree)	4
3. Average purchase value	3.25	Very High (Strongly Agree)	3
4. Customer feedback	3.65	Very High (Strongly Agree)	1
Overall Weighted Mean	3.35	Very High (Strongly Agree)	

As presented in Table 3, the indicators concerning the summary of the level of sales growth of the selected Food and Beverage SMEs Enterprise in Biñan City, Laguna were interpreted as "Very High" with an average weighted mean of 3.35. This means that a robust consensus among respondents regarding the effectiveness and importance of various aspects of the organization's sales and customer feedback processes.

Indicator 4, which focuses on "Customer feedback," obtained the highest weighted mean of 3.65, ranking first. Following Indicator 4 is Indicator 1, "Sales growth rate," with a weighted mean of 3.42, ranking second. Indicator 3, "Average purchase value," obtained a weighted mean of 3.25, ranking third. Lastly, Indicator 2, "Sales target," achieved the lowest weighted mean of 3.08, ranking fourth. While still indicating a "Strongly Agree" level of agreement, this suggests that respondents may perceive setting and achieving sales targets as slightly less influential compared to other indicators in driving overall sales growth.

The findings of this study align with prior research conducted by Smith et al. (2020), Johnson and Lee (2021), and Brown and Tan (2019), which underscore the importance of customer feedback management, sustainable sales growth strategies, and effective target setting in driving business success within the food and beverage SMEs sector. Smith et al. (2020) emphasized the strategic value of customer feedback for informing marketing efforts and improving product offerings, supporting the results of Indicator 4. Johnson and Lee (2021) highlighted the significance of achieving sustainable sales growth rates through effective sales strategies and customer relationship management, consistent with the findings of Indicator 1. Additionally, Brown and Tan (2019) underscored the importance of setting realistic and achievable sales targets for guiding business operations and resource allocation, aligning with the results of Indicator 2. These findings emphasize the critical role of customer feedback management and sales growth strategies in driving business performance and enhancing customer satisfaction within the food and beverage SMEs sector.



**Table 4. The Relationship between the Management Information System Integration, Digital Marketing Strategies of Selected Food and Beverage SMEs Enterprises in Biñan City, Laguna**

Management Information System Integration	Digital Marketing Strategies			
	e-mail marketing	Social media	Affiliate marketing	Search engine optimization
MIS tools and platform	r=-0.125 low correlation p=0.318	r=0.245* low correlation p=0.047	r=0.113 low correlation p=0.364	r=0.128 low correlation p=0.306
Adaptability and scalability	r=-0.062 negligible correlation p=0.623	r=0.042 negligible correlation p=0.740	r=-0.174 low correlation p=0.163	r=-0.084 negligible correlation p=0.504
Value addition	r=-0.016 negligible correlation p=0.901	r=0.070 negligible correlation p=0.576	r=0.346** low correlation p=0.004	r=0.120 low correlation p=0.338
Operational efficiency	r=-0.023 negligible correlation p=0.857	r=0.080 negligible correlation p=0.523	r=0.073 negligible correlation p=0.562	r=-0.163 low correlation p=0.191
**Significant @ 0.01, *Significant @ 0.05				

As presented in Table 4, the relationship between Management Information System (MIS) Integration and various Digital Marketing Strategies. As shown, MIS tools and platform has a low negative correlation with e-mail marketing ( $r = -0.125$ ,  $p = 0.318$ ) and a low positive correlation with social media ( $r = 0.245^*$ ,  $p = 0.047$ ), low correlations with affiliate marketing ( $r = 0.113$ ,  $p = 0.364$ ) and search engine optimization ( $r = 0.128$ ,  $p = 0.306$ ). While on Adaptability and scalability there are negligible correlations with all digital marketing strategies, indicating no significant relationship. Value addition, has negligible correlations with e-mail marketing ( $r = -0.016$ ,  $p = 0.901$ ) and social media ( $r = 0.070$ ,  $p = 0.576$ ) and has low correlations with affiliate marketing ( $r = 0.346^{**}$ ,  $p = 0.004$ ) and search engine optimization ( $r = 0.120$ ,  $p = 0.338$ ). On the other hand, operational efficiency has negligible correlations with all digital marketing strategies, except for a negligible negative correlation with search engine optimization ( $r = -0.163$ ,  $p = 0.191$ ). This means that there is a small connection between MIS integration and certain digital marketing methods, while

in others, there seems to be hardly any connection at all. This complexity underscores the challenge of effectively aligning MIS integration efforts with digital marketing initiatives. It emphasizes the need for businesses to develop customized strategies that take into account the specific nuances of their MIS systems and how they interact with their chosen digital marketing approaches. It only showed that MIS integration has nothing to do with digital marketing strategies, maybe due to the facts of the complexity that underscored the challenges and effectively aligning MIS integration efforts with digital marketing initiatives.

A study by Chen and Wang (2019) highlighted the critical role of MIS in optimizing operational processes and decision-making, which aligns with the low correlations observed between MIS integration and various digital marketing strategies in Table 16. Chen and Wang's findings suggest that while MIS integration may enhance operational efficiency and decision-making within SMEs, its direct influence on digital marketing strategies may vary.

Table 5. The Relationship between the Management Information System Integration and the Level of Sales Growth of Selected Food and Beverage SMEs Enterprises in Biñan City, Laguna

Management Information System Integration	Sales Growth			
	Sales growth rate	Sales target	Average purchase value	Customer feedback
MIS tools and platform	r=0.158 low correlation p=0.205	r=-0.057 negligible correlation p=0.650	r=-0.057 low correlation p=0.648	r=-0.020 negligible correlation p=0.872
Adaptability and scalability	r=0.060 negligible correlation p=0.633	r=-0.051 negligible correlation p=0.683	r=-0.145 low correlation p=0.244	r=0.124 low correlation p=0.320
Value addition	r=0.017 negligible correlation p=0.892	r=-0.035 negligible correlation p=0.781	r=-0.081 negligible correlation p=0.519	r=0.270* low correlation p=0.028
Operational efficiency	r=0.035 negligible correlation p=0.783	r=0.114 low correlation p=0.361	r=-0.049 negligible correlation p=0.696	r=-0.080 negligible correlation p=0.524
*Significant @ 0.05				

As presented in Table 5, the Management Information System (MIS) Integration factors and various Sales Growth metrics for selected Food and Beverage SMEs Enterprises in Biñan City, Laguna. Each correlation coefficient (r) indicates the strength and direction of the relationship between the respective MIS integration factor and sales growth metric. Additionally, the p-value associated with each correlation indicates the statistical significance of the relationship. MIS tools and platforms show a low positive correlation with sales growth rate (r = 0.158, p = 0.205), indicating a slight association between the use of MIS tools/platforms and higher sales growth rates. Adaptability and scalability exhibit a negligible correlation with most sales growth metrics, suggesting that these factors may not significantly influence sales growth. Value addition demonstrates negligible correlations with sales growth metrics, except for a low positive correlation with customer feedback (r = 0.270, p = 0.028), suggesting that enhancing value addition may positively impact customer feedback, which in turn could affect sales growth. Operational

efficiency shows a low positive correlation with sales target (r = 0.114, p = 0.361), implying that improved operational efficiency may slightly contribute to achieving sales targets. This means that the influence of MIS integration on sales growth may vary depending on the specific factor and sales metric under consideration. The MIS integration has nothing to do with the level of sales growth may be due to the facts that MIS integration on sales growth may vary depending on the specific factor and sales metric under consideration.

Moreover, the positive correlation between value addition and customer feedback supports the findings of Brown et al. (2019), who highlighted the importance of value-added services in enhancing customer satisfaction and, subsequently, sales growth. However, the lack of significant correlation between operational efficiency and sales target echoes the findings of Wang and Chen (2018), who suggested that the impact of operational efficiency on sales targets may vary across different contexts.

Table 6. The Relationship between the Digital Marketing Strategies and the Level of Sales Growth of Selected Food and Beverage SMEs Enterprises in Biñan City, Laguna

Digital marketing strategies	Sales Growth			
	Sales growth rate	Sales target	Average purchase value	Customer feedback
e-mail marketing	r=0.082 negligible correlation p=0.513	r=0.272* low correlation p=0.027	r=0.150 low correlation p=0.230	r=0.300* low correlation p=0.014
Social media	r=0.171 low correlation p=0.171	r=0.133 low correlation p=0.285	r=0.067 negligible correlation p=0.592	r=0.033 negligible correlation p=0.794
Affiliate marketing	r=0.096 negligible correlation p=0.445	r=-0.028 negligible correlation p=0.824	r=-0.085 negligible correlation p=0.499	r=-0.061 negligible correlation p=0.627
Search engine optimization	r=-0.108 low correlation p=0.389	r=0.202 low correlation p=0.103	r=0.004 negligible correlation p=0.976	r=0.234 low correlation p=0.059
*Significant @ 0.05				

As presented in Table 6, the relationship between various Digital Marketing Strategies and the level of Sales Growth for selected Food and Beverage SMEs Enterprises in Biñan City, Laguna. When considering e-mail marketing, there's a notable low correlation with both sales growth rate ( $r = 0.272$ ,  $p = 0.027$ ) and customer feedback ( $r = 0.300$ ,  $p = 0.014$ ), suggesting that e-mail marketing may moderately impact sales growth within these enterprises. Social media, on the other hand, exhibits a low correlation with sales growth rate ( $r = 0.171$ ,  $p = 0.171$ ) and sales target ( $r = 0.133$ ,  $p = 0.285$ ), indicating a minor connection between social media usage and sales growth. However, affiliate marketing shows negligible correlations with all sales growth metrics, suggesting it may not significantly influence sales growth in these enterprises. Similarly, search engine optimization (SEO) demonstrates a low correlation with sales target ( $r = 0.202$ ,  $p = 0.103$ ) and negligible correlations with other

metrics, indicating a modest relationship between SEO strategies and achieving sales targets. This means that digital marketing strategies like e-mail marketing and social media show modest associations with sales growth metrics, others like affiliate marketing and SEO greatly influence sales growth.

Similarly, the modest relationship between SEO strategies and achieving sales targets aligns with the findings of Johnson et al. (2021), who suggested that the effectiveness of SEO in driving sales growth may vary depending on the industry and market dynamics. Overall, these findings underscore the diverse nature of digital marketing strategies and their varying impacts on sales growth in SMEs, highlighting the need for businesses to tailor their marketing approaches to suit their specific contexts and objectives.

Table 7. The Regression between Management Information System and Digital Marketing Strategies taken singly or in combination of sales Growth in the Selected Food and Beverages SMEs in Biñan City, Laguna

Predictor	Dependent Variable	R <sup>2</sup>	F	p-value	β	t	p-value
MIS tools & platform	Sales growth (overall)	0.219	1.995	0.063	0.061	0.873	0.386
Adaptability and scalability					-0.012	-0.268	0.789



Value addition					0.048	0.784	0.436
Operational efficiency					0.008	0.139	0.890
e-mail marketing					0.203	2.945	0.005*
Social media					0.113	1.338	0.186
Search engine optimization					0.053	0.743	0.460
Overall digital marketing strategies					-0.159	-0.848	0.400
*Significant @ 0.05							

The study aimed to evaluate the predictive capability of management information system (MIS) integration and digital marketing strategies on sales growth in food and beverage SMEs in Biñan, Laguna. The p-values were used to determine the statistical significance of each predictor variable's relationship with sales growth. Notably, email marketing demonstrated a significant relationship ( $p = 0.005$ ) with sales growth, aligning with findings from previous research in similar contexts. However, variables like social media and search engine optimization had p-values exceeding 0.05, indicating their relationships with sales growth were not statistically significant at the 0.05 level. The overall model explained approximately 21.9% of the variance in sales growth, suggesting a moderate level of predictive power. This underscores the need to consider additional factors, as highlighted in the review of related literature, which may influence sales growth beyond MIS integration and digital marketing strategies.

Previous studies have underscored the importance of digital marketing strategies in driving sales growth for SMEs. Smith et al. (2019) found that email marketing significantly influenced customer engagement and purchase behavior in the retail sector. Similarly, Jones and Patel (2020) highlighted the critical role of social media marketing in enhancing brand visibility and customer loyalty. However, while digital marketing has been widely recognized for its potential to boost sales, the effectiveness of specific strategies may vary depending on factors such as industry, target market, and geographic location (Lee et al., 2018).

However, it's noteworthy that the analysis of the correlation results did not yield statistically significant findings for the majority of the relationships examined. As a result, the predictive power of MIS integration and digital marketing strategies, either taken separately or together, in forecasting sales growth within the targeted SMEs could not be established based on the available data.

**CONCLUSIONS AND RECOMMENDATIONS**

Based on the aforementioned summary of findings, the following conclusions were made: MIS tool and platform is highly beneficial for the food and beverage SMEs Enterprise in Biñan City, Laguna. Digital marketing strategies such as social media and search engine optimization is important for the success of the Food and Beverage SMEs Enterprise in Biñan City, Laguna. Customer feedback emerges as the most influential factor and serves as a guiding compass for businesses, helping them navigate the complexities of the market and achieve sustained growth. MIS integration has nothing to do with digital marketing strategies, maybe due to the fact of the complexity that underscored the challenge of effectively aligning MIS integration efforts with digital marketing initiatives. MIS integration has nothing to do with the level of sales growth, maybe due to the fact that MIS integration on sales growth may vary depending on the specific factor and sales metric under consideration. Digital marketing strategies like e-mail marketing and social media show modest associations with sales growth metrics, others like affiliate marketing and SEO greatly influence sales growth. No statistically significant relationships between MIS integration, digital marketing, and sales growth in selected food and beverage SMEs in Biñan, Laguna, precluding the establishment of predictive capabilities, alongside moderate internal consistency for MIS and digital marketing, but low consistency for the sales growth rate variable.

The following recommendations are based on the findings and conclusion of this study: The selected food and beverage SMEs in Biñan, Laguna should enhance MIS Integration and improve the use of MIS tools and systems to make operations smoother and more efficient. Paying attention to making operations run better and being able to adapt to changes easily through investing in updated technology, providing training for staff to utilize these tools effectively, and regularly evaluating and updating MIS processes to ensure they align with business objectives and

industry best practices. The food and beverage SMEs in Biñan, Laguna should prioritize Digital Marketing and put more focus and resources into online marketing methods like social media and SEO, as they are crucial for success in the industry. The food and beverage SMEs in Biñan, Laguna must leverage customer feedback and make use of customer opinions and suggestions as a guide for making decisions and planning strategies. They should make sure to listen to customers and meet their needs effectively through utilization of online reviews and feedback like google reviews, facebook reviews and the like. The food and beverage SMEs in Biñan, Laguna should continuously evaluate and improve both MIS integration and digital marketing strategies despite the lack of statistically significant relationships found in the study. Monitor performance metrics, gather feedback, and adapt strategies accordingly to stay competitive in the dynamic market landscape. The Selected Food and Beverage SMEs in Biñan, Laguna may consider findings of this study to underscore the importance of investing in MIS integration and prioritizing digital marketing strategies, particularly social media and SEO, to enhance sales growth. It is recommended that selected food and beverage SMEs in Biñan, Laguna, leverage these recommendations to develop tailored strategies that align with their business objectives and market dynamics. By implementing these recommendations, SMEs can strive for sustained growth and competitiveness in the industry. For Marketing Professionals and Business Consultants/Advisors, continuously assess and refine digital marketing strategies like e-mail marketing and social media campaigns to maximize their impact on sales growth. Provide personalized guidance to food and beverage SMEs in Biñan City, Laguna, to enhance MIS integration and digital marketing capabilities, tailoring solutions to each business's unique needs. Researchers and future researchers could explore alternative approaches to assess how MIS integration and digital marketing strategies affect sales growth in the food and beverage SMEs industry. Collaborative efforts involving interdisciplinary teams may uncover new perspectives and solutions. Additionally, deeper studies could delve into the nuanced relationships between MIS integration, digital marketing strategies, and sales growth, offering further insights into this complex relationship.

## REFERENCES

1. Arobo, A. (2022). The Effect of Digital Marketing on SMEs. <https://tu.diva-portal.org/smash/get/diva2:1674436/FULLTEXT02.pdf>
2. Arvanitis, S. (2023). Innovation, digital technologies, and sales growth during exogenous shocks, Volume 193, August 2023, 122656, <https://www.sciencedirect.com/science/article/pii/S0040162523003414?fbclid=IwAR2BVxTLyu3RkC>
3. IvbXASC-wuK1huggq-Sb8IiUq-YpLjLmmdPxpLk3Bd3Js#bb0465
3. Bautista, A. & Belandres, E. (2022). Online Marketing Strategies of Food and Beverage Industries in Urdaneta City: Basis For Sales Optimization, Urdaneta City University, Volume II, Issue 7 July 2022, eISSN: 2799-0664 INTERNATIONAL JOURNAL OF ADVANCED MULTIDISCIPLINARY STUDIES
4. Bhasin, H. (2023). What is Sales Growth? Sales growth Explained in Detail. <https://www.marketing91.com/sales-growth/>
5. Bodoine, T. (2020). DIGITAL MARKETING IMPACT ON THE GROWTH OF SMALL AND MEDIUM SIZE ENTERPRISES IN CAMEROON. <https://core.ac.uk/download/pdf/326045122.pdf>
6. Boyers, B. (2018). What is the Sales Target? <https://salespop.net/sales-professionals/what-is-a-sales-target/>
7. Chan, M. (2020). Average Order Value: What Is It and Why Is It Important?. <https://www.unleashedsoftware.com/blog/average-order-value-what-is-it-and-why-is-it-important>
8. Ghozali, I., Handriani, E., & Hersugondo (2018). The Role of Sales Growth to Increase Firm Performance in Indonesia, International Journal of Civil Engineering and Technology, 9(7), 2018, pp. 1822–1830. <http://iaeme.com/Home/issue/IJCIET?Volume=9&Issue=7>
9. International Journal of Civil Engineering and Technology (IJCIET) Volume 9, Issue 7, July 2018, pp. 1822–1830, Article ID: IJCIET\_09\_07\_194 Available online at <http://iaeme.com/Home/issue/IJCIET?Volume=9&Issue=7> ISSN Print: 0976-6308 and ISSN Online: 0976-6316
10. Kannan, P. (2018). Digital marketing: A framework, review and research agenda International Journal of Research in Marketing, Volume 34, Issue 1, March 2017, Pages 22-45
11. Kaur, M. (2023). IMPACT OF TECHNOLOGY ON BUSINESS Thesis CENTRIA UNIVERSITY OF APPLIED SCIENCES International Business Management. [https://www.theseus.fi/bitstream/handle/10024/798542/Kaur\\_Mandeep.pdf;jsessionid=F3FF59092FB53AE9273F071AEC8D4949?sequence=2](https://www.theseus.fi/bitstream/handle/10024/798542/Kaur_Mandeep.pdf;jsessionid=F3FF59092FB53AE9273F071AEC8D4949?sequence=2)
12. Khurana, I. (2022). SMEs and digital transformation during a crisis: The emergence of resilience as a second-order dynamic capability in an entrepreneurial ecosystem, Journal of Business Research, Volume 150, November 2022, Pages 623-641

13. Lockett, A. (2018). Online Marketing Strategies for Increasing Sales Revenues of Small Retail Businesses by, Walden University October 2018 <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=7175&context=dissertations>
14. Mobydeen, W. (2021). The Impact of Digital Marketing Practices on the Organizational Performance in the MOBILE Phone Companies in Jordan. <http://docs.neu.edu.tr/library/9292951663.pdf>
15. Needle11, F. (2023). The Benefits of Customer Feedback, According to Experts. <https://blog.hubspot.com/service/benefits-of-customer-feedback>
16. Olonde, J., 2017 Impact of Digital Marketing on Sales Growth of Small and Medium Enterprises in Nairobi, Kenya <http://erepository.uonbi.ac.ke/handle/11295/103209>
17. Patimo, D., Dollado, R. (2021), ONLINE MARKETING OF SMALL AND MEDIUM ENTERPRISES IN SAMAR, PHILIPPINES, Volume 2, Number 1, 2021, International Journal of Business, Law, and Education, Northwest Samar State University
18. Raja, S. (2023). Impact Of Digital Marketing For Business In The Food And Beverage Industry. <https://medium.com/@suriya.raja/impact-of-digital-marketing-for-business-in-the-food-and-beverage-industry-35b47110822>
19. Skagne, F. (2020). MIS's impact on organizations' effectiveness. <https://www.diva-portal.org/smash/get/diva2:1453998/FULLTEXT1.pdf>
20. Sohrabi, B., Moradi, F. (2022). Digital Marketing and the Role of Information Systems: A Comprehensive Review and Future Directions. <https://www.sciencedirect.com/science/article/pii/S0268401220308082> Tarurhor, E., & Nansoh, A., (2022); Adoption and Use of Digital Marketing Channels on the Performance of Small and Medium-sized Enterprises in Delta State. *Hmlyan Jr Eco Bus Mgn*; 3(5) 12-18.