

The Impact of Financial Management Information Systems on Financial Performance: A Field Study at the University of Saba Region

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Abstract

This study investigates the impact of system quality and information quality on financial performance in the University of Saba Region, Yemen based on the Information Systems Success (ISS) Model. Although the use of Financial Management Information Systems (FMIS) in higher education is on the rise, there is still a lack of empirical evidence on the impact of these dimensions on the financial performance of public universities in developing countries. A quantitative approach was employed through a structured questionnaire administered to employees in financial and administrative positions. Descriptive statistics, Pearson correlation and multiple linear regression were used to analyse data. The results show the moderate of system quality, information quality and financial performance. System quality and information quality have a significant positive effect on financial performance. System quality is a better predictor of financial performance. The findings point to the need to improve FMIS functionality, reliability and information quality to enhance financial planning, control and decision making. The study adds to the scarce FMIS literature in the higher education in developing countries by providing empirical evidence from a Yemeni public university and offers practical guidance for university administrators and policy makers interested in improving financial performance through continuous FMIS improvement and digitalisation.

Keywords: Financial Management Information System (FMIS)¹; System Quality²; Information Quality³; Financial Performance⁴.

1. Introduction

Public universities are under increasing pressure to improve accountability, improve financial control and optimise the value of scarce financial resources. Problems have been more acute in developing countries where institutional constraints, financial instability and resource limitations often limit efficient planning and resource allocation. Thus, the majority of public sector organizations have sped up their digital transformation agendas, by adopting Financial Management Information Systems (FMIS) that integrate accounting, budgeting, financial reporting and expenditure control in a single digital environment (Pimenta & Seco, 2021). The integrated FMIS improves access to financial information and strengthens internal control systems, thus increasing financial transparency and accountability (Dorotinsky and Watkins, 2013). In the same way, Hashim & Piatti (2018) asserted that digital financial platforms improve the managerial decision-making process through the timely, reliable and comprehensive financial

information provided. For example, Dener et al. (2011) argued that the success of the public financial management reforms is dependent on technological competence and institutional readiness. Rahman et al. (2024) argue that organisational capabilities, governance structures and information technologies are needed for sustainable digital financial reforms. However, the implementation of FMIS does not always lead to improved organizational performance as the benefits of such systems are mostly dependent on their quality and efficiency rather than the mere adoption of technology (DeLone & McLean, 2003).

The DeLone and McLean Information Systems Success Model (DeLone & McLean, 2003) is commonly used to explain the effectiveness of Financial Management Information Systems, and identifies system quality and information quality as the basic determinants of information system success. The model highlights the potential of information systems to generate organizational value through the provision of reliable system performance and quality information, along with the evaluation of these systems based on their technological implementation. Petter et al. (2008) confirmed that these quality dimensions have a direct effect on organizational benefits by enhancing user satisfaction, system utilization and effectiveness of decision making. Similarly, Al-Okaily et al. (2020) found that the success of accounting information systems is greatly dependent on the technical reliability and quality of the financial information available to users. Mardiana et al. (2015) found that system quality and information quality significantly contribute to information system success by increasing users' confidence and supporting organizational processes, respectively. Similarly, Seddon and Kiew (2017) and Aldholay et al. (2018) discovered that the better the quality of the information system, the better the institutional performance and user satisfaction in higher education. This implies that the value of FMIS to the organization is not only operational efficiency but also more general institutional benefits.

System quality and information quality are complementary dimensions of organizational effectiveness in Financial Management Information Systems. System quality refers to the technical capability of the system and includes its reliability, usability, accessibility, flexibility, and processing efficiency. Information quality refers to the accuracy, completeness, relevance and timeliness of the financial information generated by the system (Petter et al., 2008). Good systems enable finance officers to carry out the transactions correctly, generate effective reports and monitor the financial activities with more confidence, which leads to improved administrative efficiency and financial control (Alshikhi et al. 2018). The accuracy and timeliness of financial information for budgeting, expense tracking, and strategic resource allocation can be used to improve the accuracy and timeliness of evidence for managerial decision making (Al-Hattami & Kabra, 2021). The quality of accounting information systems that can improve organizational performance can be seen from providing reliable technological support for decision making, and the quality of information systems can increase user satisfaction and effective system utilization (Sunarta & Astuti, 2023). Accurate and accessible information can improve the user satisfaction and the effectiveness of the institution (Tam & Oliveira, 2019). The comparable evidence from the higher education institution also shows that the system performance and quality of information are very important to improve the efficiency of the administrative information systems and help the organizational performance (Rana et al., 2016; Amin et al., 2020).

2. Theoretical Framework

There is a need for a strong theoretical basis to explain how Financial Management Information Systems (FMIS) create value for organizations and improve financial performance. The Information Systems Success (ISS) Model proposed by DeLone and McLean (1992, 2003) is one of the most influential models

for measuring the effectiveness of information system in the current information systems theories. The model suggests that the information system success is dependent on the interaction of the system quality, information quality, system use, user satisfaction and organizational benefits (DeLone & McLean, 2003). Further research has continued to confirm its relevance in organizational contexts, as it explains how technological capabilities are transformed into organizational value (Petter et al., 2008; Aldholay et al., 2018; Urbach & Müller, 2012). More recent studies also demonstrated that information system success is not simply about technology adoption but rather the ability of systems to provide reliable functionality and meaningful information that supports organizational processes and strategic decision-making (Al-Mamary et al., 2015). Therefore, the ISS Model is an appropriate theoretical lens to examine the impact of FMIS on financial performance in public universities.

In this study, the ISS Model is used to illustrate how FMIS contributes to financial performance by combining financial planning, budgeting, accounting, reporting and control activities in a single digital environment. The FMIS implementation has improved the access to financial information; but the organizational benefits are derived only if the system supports effective managerial decision making and operational efficiencies. Recent studies of digital transformation in the public sector indicate that information systems improve institutional performance through greater transparency, accessibility to information, and administrative efficiency (Mergel et al., 2019; Vial, 2021). Similarly, research on digital financial systems has shown that a strong FMIS improves organizational capabilities in the area of improved financial monitoring, internal control, and evidence-based decision-making (Alnajjar, 2017).

The first construct we examine is system quality, the technical characteristic of an information system, such as reliability, usability, accessibility, flexibility, response time and efficiency. The ISS Model (DeLone & McLean, 2003) defines system quality as the technological ability to provide operational benefits to organisations. A good FMIS should allow the financial staff to easily carry out financial transactions, retrieve financial data and prepare reports without major technical challenges. System quality has been empirically proven to improve users' satisfaction, encourage system usage, and increase perceived organisational value (Aldholay et al., 2018; Chiu et al., 2023). Therefore, the expectation is that a higher quality of FMIS will improve financial performance through improved efficiency and effectiveness of financial management processes.

The second construct is information quality. Information quality is the accuracy, completeness, relevance, consistency and timeliness of the information produced by the system. High quality information is a key factor in financial management as it helps in budget planning, expenditure tracking, resource allocation and performance evaluation, by reducing the ambiguity of managerial decision making and improving the efficiency of accounting information systems (Al-Okaily et al., 2021). Empirical evidence suggests that the quality of information is a key factor in the performance of individuals and organizations because it allows the users to rely on the financial information in operational and strategic decisions. In line with the application of the ISS Model, research has indicated that information quality is a significant predictor of information system success, as reliable information improves system usefulness and organizational benefits (Alzahrani et al., 2017; Yakubu & Dasuki, 2018). Therefore, this study proposes that better FMIS information quality positively affects the financial performance through better financial planning, control and decision making.

The ISS Model asserts that the major organizational advantage of a successful FMIS implementation is improved financial performance. In a university environment, financial performance is measured by improved budgeting efficiency, expenditure control, resource utilization, accountability, and better

financial decision-making. Information systems are useful when technological resources are integrated in a way that fits organizational processes and institutional objectives (Vial, 2021; Verhoef et al., 2021). Thus, this study indicates that system quality and information quality are the major mediating mechanisms through which FMIS improves financial performance of Seba Region University. These theoretical relationships underlie the hypotheses developed in the next section.

3. Research problem

Financial Management Information Systems (FMIS) are increasingly adopted by universities to improve financial management, enhance financial reporting, strengthen internal control, and support decision-making. However, the existence of an FMIS does not necessarily guarantee improved financial performance, as its effectiveness largely depends on the quality of the system and the quality of the financial information it generates. Despite the growing importance of FMIS, there is limited empirical evidence regarding the extent to which system quality and information quality influence financial performance in Yemeni universities, particularly at Seba Region University. Therefore, this study seeks to examine the impact of FMIS quality, represented by system quality and information quality, on financial performance at Seba Region University.

Therefore, the research problem can be formulated in the following main question:

3.1 Main Research Question

1. What is the impact of Financial Management Information System on financial performance at Seba Region University?

3.2 Sub-Questions

1. What is the impact of System Quality on financial performance at Seba Region University?
2. What is the impact of Information Quality on financial performance at Seba Region University?

4. Research Hypotheses

4.1 Main Hypothesis

Financial Management Information System has a statistically significant positive impact on financial performance at the University of Saba Region ($\alpha = 0.05$).

4.2 Sub-Hypotheses

H1a: System quality has a statistically significant positive impact on financial performance at the University of Saba Region.

H1b: Information quality has a statistically significant positive impact on financial performance at the University of Saba Region.

5. Practical Framework

5.1 Study Methodology

The descriptive-analytical approach was followed because it aligns with the objectives of this research, and two types of data collection sources were used:

Secondary Sources: The study utilized scholarly books, previous studies, and research published in academic journals and websites that addressed the topic of internal control and tax evasion.

Primary Sources: A questionnaire was designed to assess the effectiveness of internal controls in reducing tax evasion using a five-point Likert scale, from the perspective of employees at the Marib Tax Office. The data collected were analysed using SPSS statistical software.

5.2 Study sample distribution

Table No 1. Distributed and returned questionnaires valid for analysis

Study population		Study Sample		Retrieved Questionnaires		Valid Questionnaires	
Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
70	%100	70	%100	70	%100	70	100%

The study population consisted of (70) employees of the University of Saba Region, represented by managers, department heads, and specialists. The questionnaire was given to the sample and the study sample was extensively surveyed. (70) questionnaires were returned (100%) and (0) questionnaires were not suitable for analysis. Thus, the analysed questionnaires were (100%) of the returned questionnaires, amounting to (70) questionnaires, as shown in Table (1).

Table No 2. Data screening.

Screening criterion	Result
Questionnaires distributed	70
Questionnaires returned	70
Valid questionnaires	70
Missing questionnaires	0
Response rate	100%
Cases with item-level missing data	0
Values outside the 1–5 scale	0

The dataset was screened before statistical analysis. All 70 questionnaires were complete, and no responses were found outside the permitted range of 1 to 5. Therefore, no cases were removed, and the final sample consisted of 70 respondents.

5.3 Demographic Characteristics of the Respondents

Table 3. Demographic Characteristics of the Study Sample (N = 70.)

Variable	Category	Frequency (n)	Percentage (%)
Job Position	General Manager	3	4.3
	Administration Director	19	27.1
	Head of Department	15	21.4
	Officer	33	47.1
	Total	70	100.0
Years of Experience	Less than 5 years	11	15.7
	5 to less than 10 years	37	52.9
	10 to less than 15 years	13	18.6
	15 years or more	9	12.9
	Total	70	100.0
Educational Qualification	Bachelor's Degree	41	58.6
	Master's Degree	19	27.1
	Diploma	10	14.3
	Total	70	100.0

Scientific Specialization	Accounting	40	57.1
	Management	12	17.1
	Economics	10	14.3
	Other	8	11.4
	Total	70	100.0

The demographic characteristics of the 70 respondents that were included in the study are shown in Table 3. In terms of job position, the largest proportion of the sample were officers (47.1%), followed by administration directors (27.1%), heads of departments (21.4%) and general managers (4.3%). The distribution indicates that most of the respondents are in operational and middle-management positions, which provide good insights into the Financial Management Information System (FMIS) implementation and use. Regarding years of experience, the majority of respondents (52.9%) had between 5 and less than 10 years of professional experience, 18.6% had between 10 and less than 15 years, 15.7% had less than 5 years and 12.9% had 15 years or more. This implies that most of the respondents have adequate professional experience to assess the effectiveness of the FMIS and its effect on financial performance. The biggest group of respondents in terms of educational qualification was those with a bachelor's degree (58.6%), followed by those with a master's degree (27.1%), while diploma holders comprised 14.3% of the sample. The dominance of university graduates means that the respondents have the appropriate educational background to understand and evaluate financial management information systems. Concerning scientific specialization, the majority of the respondents were specialized in accounting (57.1%) followed by management (17.1%), economics (14.3%) and other disciplines (11.4%). Accounting professionals constituted a large proportion of the respondents which adds to the credibility of the findings as they are directly involved in financial management activities and are in a better position to evaluate the impact of Financial Management Information System on financial performance at the University of Saba Region.

5.5 Reliability Analysis of the Research Instrument

Table 4. Cronbach Alpha coefficient to measure the stability of the resolution

N of Items	Cronbach's alpha	Interpretation
18	0.889	Good

The overall questionnaire alpha of .88

The Cronbach's alpha value of 0.889 indicates a good internal consistency reliability as it is higher than the generally accepted threshold of 0.70 for exploratory and confirmatory research. This indicates that the items of the questionnaire are very consistent in measuring the intended constructs and produce stable and reliable responses. The coefficient obtained also indicates a high degree of the interrelation of items, which indicates the coherence of the instrument of measurement. The high reliability coefficient shows that the instrument is suitable for gathering data on the dimensions of the Financial Management Information System (FMIS), namely system quality and information quality, and the dependent variable, financial performance, at the University of Saba Region. Thus, the data collected can be regarded as reliable for further statistical analysis such as descriptive statistics, correlation analysis and regression analysis for testing hypothesis.

5.5 Descriptive Analysis of the Study Variables

Table 5. Five-Point Likert Scale and Interpretation of Mean Scores.

Response Option	Score	Mean Score Range	Level of Importance
Strongly Agree	5	4.21 – 5.00	Very High
Agree	4	3.41 – 4.20	High
Neutral	3	2.61 – 3.40	Medium
Disagree	2	1.81 – 2.60	Low
Strongly Disagree	1	1.00 – 1.80	Very Low

Table 5 shows the five-point Likert scale used to measure respondents' perceptions of the study variables. The response options were on a Likert scale from Strongly Disagree (1) to Strongly Agree (5) with higher scores indicating a higher level of agreement with the questionnaire statements. To facilitate the interpretation of the descriptive statistics, the mean scores were grouped into five levels of importance. Mean values of 4.21–5.00 mean very high level of agreement, 3.41–4.20 high level of agreement, 2.61–3.40 medium level of agreement, 1.81–2.60 low level of agreement and 1.00–1.80 very low level of agreement. This classification provides a common ground for the interpretation of the respondents' assessment of the dimensions of the Financial Management Information System (FMIS) viz. system quality and information quality and financial performance so that meaningful analysis and discussion of the study findings can be achieved.

Table 6. Descriptive Statistics for System Quality.

Questions		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation
1.The Financial Management Information System (FMIS) is user-friendly.	N	12	0	23	16	9	3	1.263
	%	17.10%	14.30%	32.90%	22.90%	12.90%		
2. The university's FMIS operates reliably, without recurring technical issues.	N	13	15	21	13	8	3.17	1.262
	%	18.60%	21.40%	30.00%	18.60%	11.40%		
3. The system processes financial transactions and user requests within a reasonable timeframe, without causing delays that impact daily financial operations.	N	10	6	22	19	3	3.16	1.112
	%	14.30%	22.90%	31.40%	27.10%	4.30%		

4. The university's FMIS is available whenever financial staff need to access it.	N	9	15	23	17	6	3.06	1.153
	%	12.90%	21.40%	32.90%	24.30%	8.60%		
5. The university's FMIS integrates effectively with other financial functions within the university.	N	8	18	22	15	7	3.07	1.159
	%	11.40%	25.70%	31.40%	21.40%	10.00%		
6. The system maintains stable performance, even when processing large volumes of financial transactions or when multiple users access the system simultaneously.	N	6	10	29	15	10	2.81	1.12
	%	8.60%	14.30%	41.40%	21.40%	14.30%		

Table 6 shows the descriptive statistics of the perception of the System Quality dimension of the Financial Management Information System (FMIS) at the University of Saba Region. The analysis included frequencies, percentages, arithmetic mean, standard deviation, level of agreement and ranking for each of the six items. The mean scores for all six items ranged from 2.81 to 3.17, indicating medium levels of agreement. This suggests that respondents perceived the quality of the university's financial management information system to be moderate. The first place was taken by the statement "The university's FMIS operates reliably, without recurring technical issues" of the six statements with the highest mean score ($M = 3.17$, $SD = 1.262$). This means that respondents tend to see the system as relatively reliable but there is still scope for improvement to improve the continuous performance of the system. The statement "The system processes financial transactions and user requests within a reasonable timeframe, without causing delays that impact daily financial operations" ($M = 3.16$, $SD = 1.112$) followed and indicated a moderate level of satisfaction with the system's processing speed. Similarly, system integration with other financial functions ($M = 3.07$) and system availability when needed by financial staff ($M = 3.06$) were also rated as medium, indicating an acceptable, but improvable, level of system functionality. The average score for the item on the user-friendliness of the FMIS was 3.00, suggesting that respondents neither strongly agree nor strongly disagree that the system is easy to use. On the other hand, the least scored statement was "The system offers stable performance, even when processing large volumes of financial transactions or multiple users accessing the system at the same time" with a mean of 2.81 ($SD = 1.120$). The result shows that the system stability with high workloads is the most difficult challenge of the system quality dimensions. These results generally suggested the acceptable level of technical performance of the Financial Management Information System, but system stability, usability and operational efficiency need

to be further improved; this would improve users' perception on system quality and may also contribute to improved financial performance.

Table 7. Descriptive Statistics for Information Quality

Questions		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation
1. The financial information generated by the Financial Management Information System (FMIS) is characterized by accuracy and objectivity.	N	7	17	23	13	10	2.97	1.191
	%	10.00%	24.30%	32.90%	18.60%	14.30%		
2. The Financial Management Information System (FMIS) provides timely financial information.	N	9	14	21	15	N11	2.93	1.255
	%	12.90%	20.00%	30.00%	21.40%	15.70%		
3. Financial information produced by the FMIS is relevant to users' responsibilities and information needs.	N	14	19	16	15	6	3.29	1.253
	%	20.00%	27.10%	22.90%	21.40%	8.60%		
4. The Financial Management Information System (FMIS) provides clear financial reports that are crucial for financial decision-making.	N	8	24	13	12	13	3.03	1.318
	%	11.40%	34.30%	18.60%	17.10%	18.60%		
5. Financial information generated by the FMIS is characterized by	N	13	13	16	22	6	3.07	1.266
	%	18.60%	18.60%	22.90%	31.40%	8.60%		

clarity and ease of interpretation.								
6. The financial information generated by the FMIS contains sufficient detail to support the university's financial activities.	N	7	11	19	21	12	2.71	1.218
	%	10.00%	15.70%	27.10%	30.00%	17.10%		

Table 7 shows the descriptive statistics for the Information Quality dimension of the Financial Management Information System (FMIS). The results summarize respondents' evaluations of the quality of the financial information produced by the system on six measurement items. The results show that all items were evaluated at a medium level, the mean score was between 2.71 – 3.29. This means that the quality of information produced by the FMIS was satisfactory and not outstanding according to the respondents. The highest rated statement was “Financial information produced by the FMIS is relevant to the users' responsibilities and information needs” with mean score of 3.29 (SD = 1.253) and ranked number one. This finding indicates that respondents feel that the system generally provides information to support their work responsibilities and operational needs. The second highest ranked statement was “Financial information produced by the FMIS is characterized by clarity and ease of interpretation” (M = 3.07, SD = 1.266) and closely followed by “The FMIS produces clear financial reports which are essential for financial decision-making” (M = 3.03, SD = 1.318). The results of this study suggest that the system generally provides financial information which is understandable and useful for management's decision making. The item measuring accuracy and objectivity of financial information scored a mean of 2.97 whilst the timeliness of financial information scored a mean of 2.93 which both indicated moderate agreement amongst the respondents. The lowest rated item was “The financial information generated by the FMIS contains sufficient detail to support the university's financial activities” with a mean score of 2.71 (SD = 1.218). This finding implies that the respondents perceive the financial information as being at a level of detail that needs to be refined further in order to more effectively support operational and strategic financial activities. The findings generally indicate that the university's FMIS provides moderately good financial information. Improved completeness, timeliness and accuracy of information could increase the usefulness of the system and allow more effective financial management and decision making.

Table 8. Descriptive Statistics for Financial Performance

Questions		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std. Deviation
1. The university uses its financial resources efficiently to achieve its	N	12	12	24	15	7	3.1	1.218
	%	17.10%	17.10%	34.30%	21.40%	10.00%		

institutional objectives.								
2. The university effectively plans and manages its financial budget.	N	12	19	17	14	8	3.19	1.266
	%	17.10%	27.10%	24.30%	20.00%	11.40%		
3. The university maintains effective control over its financial expenditures and financial resources.	N	12	15	23	13	7	3.17	1.215
	%	17.10%	21.40%	32.90%	18.60%	10.00%		
4. Financial reports are prepared and made available within the required timeframes.	N	8	16	23	14	9	3	1.192
	%	11.40%	22.90%	32.90%	20.00%	12.90%		
5. The university achieves its planned financial objectives within the available financial resources.	N	7	18	22	13	10	3.00 (rounded from 2.99)	1.198
	%	10.00%	25.70%	31.40%	18.60%	14.30%		
6. The university effectively monitors and evaluates its financial performance against its financial plans and objectives.	N	9	13	13	17	18	2.69	1.378
	%	12.90%	18.60%	18.60%	24.30%	25.70%		

Table 8. Descriptive Statistics of the Financial Performance Dimension at the University of Saba Region. The table summarizes the respondents' opinions on six indicators of the university's financial performance. The results showed that all six indicators were measured at a medium level, with mean scores ranging from 2.69 to 3.19, which means that respondents perceived that the financial performance of the university was moderate. The statement "The university effectively plans and manages its financial

budget” ranked first among the six statements with the highest mean score ($M = 3.19$, $SD = 1.266$). This result implies that respondents tend to agree that the university is performing well in the planning and management of its financial resources. The statement “The university controls its financial expenditures and financial resources effectively” ranked second ($M = 3.17$, $SD = 1.215$) indicating that the respondents have a moderate level of confidence in the financial control practices of the university. Similarly, the statement on efficient utilization of financial resources got a mean score of 3.10 indicating that the respondents moderately agree that the available financial resources are efficiently used to achieve institutional goals. The average score for financial reporting within the required timeframes was 3.00. The average score for achieving planned financial objectives within available financial resources was similar ($M = 2.99$). These results suggest that the respondents consider these aspects of financial performance as acceptable, but improvable. The lowest rating was for the statement “The university effectively monitors and evaluates its financial performance against its financial plans and objectives”, with a mean of 2.69 ($SD=1.378$). This result indicates performance monitoring and evaluation as the weakest area of financial performance, and underscores the need for stronger monitoring mechanisms and more systematic performance evaluation procedures. In general, the results indicate that the financial performance of the University of Saba Region is considered to be moderate on all aspects that were measured. The findings suggest that strengthening financial planning, improving monitoring and evaluation systems, improving financial reporting practices and enhancing the effectiveness of financial resource management may lead to improved organizational financial performance. The results provide a descriptive basis for the subsequent inferential analyses examining the effects of system quality and information quality on financial performance, addressing the study’s research questions and testing hypotheses H1a and H1b.

5.6 Assumption Testing

Table 9. Normality Test.

Variable	Kolmogorov–Smirnov (Sig.)	Shapiro–Wilk (Sig.)	Interpretation
Financial Performance	0.200	0.101	Data are normally distributed

Table 10. Results of the Normality Test of the Dependent Variable Financial Performance the Kolmogorov–Smirnov test ($p = 0.200$) and Shapiro–Wilk test ($p = 0.101$) had significance levels greater than 0.05, which indicates that the data were not significantly different from normal distribution. Thus, the normality assumption is fulfilled and parametric statistical methods can be used, e.g. Pearson correlation and multiple linear regression.

5.7 Correlation Analysis

Table 11. Pearson Correlation Matrix.

Variables	1	2	3
1. Financial Performance	1		
2. Information Quality	$R = 0.319^{**}$ $P = 0.007$	1	
3. System Quality	$R = 0.373^{**}$ $P = 0.001$	$R = 0.200$ $P = 0.097$	1

$p < .01$

Table 11 shows that Financial Performance is positively and significantly related to Information Quality ($r = 0.319$, $p = 0.007$) and System Quality ($r = 0.373$, $p = 0.001$). These findings suggest that financial performance is positively associated with the quality of the Financial Management Information System. Also, the correlation between the two independent variables is weak and statistically non-significant ($r = 0.200$, $p = 0.097$) and therefore multicollinearity is not expected to be a problem.

5.8 Multiple Regression Analysis:

Table 12. Multiple Linear Regression Results for Testing the Effects of System Quality and Information Quality on Financial Performance.

Predictor	B	Beta	t	Sig.	Decision
Information Quality	0.261	0.254	2.282	0.026	Supported
System Quality	0.358	0.322	2.890	0.005	Supported

Table 13. Model Summary for Predicting Financial Performance from System Quality and Information Quality

R	R ²	Adjusted R ²	F	Sig.
0.448	0.201	0.177	8.435	0.001

The multiple regression analysis reveals that the overall regression model is statistically significant ($F = 8.435$, $p = 0.001$) and that System Quality and Information Quality jointly explain variations in Financial Performance. The model yielded a multiple correlation coefficient of $R = 0.448$ and R^2 value of 0.201. This shows that about 20.1% of the variance in Financial Performance can be explained by the two independent variables. With respect to the individual predictors, System Quality ($B = 0.358$, $\beta = 0.322$, $t = 2.890$, $p = .005$) has a positive and significant effect on Financial Performance. Similarly, Information Quality also shows a positive and statistically significant effect on Financial Performance ($B = 0.261$, $\beta = 0.254$, $t = 2.282$, $p = 0.026$). Both p -values are below the 0.05 level of significance and thus both hypotheses are supported.

5.9 Hypothesis Testing

Table 14. Summary of Hypothesis Testing.

Hypothesis	Result	Decision
H1a: System quality has a statistically significant positive impact on financial performance at the University of Saba Region.	$\beta = 0.322$, $p = .005$	Supported
H1b: Information quality has a statistically significant positive impact on financial performance at the University of Saba Region.	$\beta = 0.254$, $p = 0.026$	Supported

The regression results offer empirical support for both hypotheses proposed. System Quality and Information Quality positively and significantly affect the Financial Performance of the University of Saba Region. Both variables are explaining the financial performance significantly. However, the standardized effect of System Quality ($\beta = .322$) is higher than the standardized effect of Information Quality ($\beta = .254$), which means that improving system reliability, availability and operational efficiency has a greater effect on financial performance than improving information quality.

6. Discussion and Results

The analysis used 70 valid questionnaires from financial and administrative employees at the University of Saba Region, producing a 100% response rate with no missing or invalid cases. The 18-item instrument showed good internal consistency (Cronbach's $\alpha = 0.889$). Normality was supported for financial performance by the Kolmogorov–Smirnov test ($p = 0.200$) and Shapiro–Wilk test ($p = 0.101$), permitting Pearson correlation and multiple regression. Descriptive results showed moderate perceptions of system quality, information quality, and financial performance. System-quality means ranged from 2.81 to 3.17. Reliability without recurring technical problems was rated highest ($M = 3.17$, $SD = 1.262$), followed by reasonable transaction-processing time ($M = 3.16$, $SD = 1.112$). Integration with other financial functions ($M = 3.07$), availability ($M = 3.06$), and user-friendliness ($M = 3.00$) were also moderate. Stable performance during high transaction volumes or simultaneous access was weakest ($M = 2.81$, $SD = 1.120$), identifying workload stability, usability, accessibility, integration, and operational efficiency as areas requiring improvement. Information-quality means ranged from 2.71 to 3.29. Relevance to users' responsibilities was strongest ($M = 3.29$, $SD = 1.253$), followed by clarity and ease of interpretation ($M = 3.07$, $SD = 1.266$) and clear reports for financial decision-making ($M = 3.03$, $SD = 1.318$). Accuracy and objectivity ($M = 2.97$, $SD = 1.191$) and timeliness ($M = 2.93$, $SD = 1.255$) were moderate, while sufficient detail for financial activities was lowest ($M = 2.71$, $SD = 1.218$). The FMIS therefore provides generally relevant and understandable information, but completeness, accuracy, timeliness, and detail remain improvable. Financial-performance means ranged from 2.69 to 3.19. Budget planning and management ranked highest ($M = 3.19$, $SD = 1.266$), followed by expenditure and resource control ($M = 3.17$, $SD = 1.215$) and efficient resource use ($M = 3.10$, $SD = 1.218$). Timely reporting ($M = 3.00$, $SD = 1.192$) and achievement of planned objectives within available resources ($M = 2.99$, $SD = 1.198$) were moderate. Monitoring and evaluating performance against financial plans and objectives were weakest ($M = 2.69$, $SD = 1.378$), indicating a need for stronger monitoring and evaluation. Financial performance correlated positively and significantly with information quality ($r = 0.319$, $p = 0.007$) and system quality ($r = 0.373$, $p = 0.001$). The correlation between the two predictors was weak and non-significant ($r = 0.200$, $p = 0.097$), indicating distinct constructs and no reported multicollinearity concern. The regression model was significant ($R = 0.448$, $R^2 = 0.201$, adjusted $R^2 = 0.177$; $F = 8.435$, $p = 0.001$), with system quality and information quality jointly explaining 20.1% of the variance in financial performance. System quality had a positive significant effect ($B = 0.358$, $\beta = 0.322$, $t = 2.890$, $p = 0.005$), supporting H1a, while information quality also had a positive significant effect ($B = 0.261$, $\beta = 0.254$, $t = 2.282$, $p = 0.026$), supporting H1b, revealing that "system quality" was the strongest predictor; this indicates that technical performance—characterized by reliability, accessibility, ease of use, efficiency, and stability—serves as the cornerstone for enhancing financial planning, control, and decision-making. The significant effects of both dimensions support the propositions of the Information Systems Success Model, which argues that organizational benefits are achieved when information systems provide reliable technical functionality and high-quality information. The findings therefore indicate that FMIS contributes to financial performance through both the quality of the system and the quality of the information it generates. Nevertheless, a substantial proportion of the variance in financial performance remained unexplained (79.9%), suggesting that additional organizational, managerial, and technological factors may also influence financial performance outcomes. Overall, the results provide evidence that FMIS quality is an important factor associated with financial performance, although continued improvements in system functionality and information quality remain necessary. System functionality and information quality remain necessary.

7. Conclusions

This study concludes that the quality of the Financial Management Information System is significantly and positively associated with financial performance at the University of Saba Region. Both system quality and information quality were assessed at moderate levels, as was financial performance, indicating that the FMIS provides a functional basis for university financial operations but has not yet reached a level of consistently strong performance. The descriptive findings identify system stability under heavy workloads, user-friendliness, information detail, information timeliness, and financial-performance monitoring as areas requiring particular attention.

The inferential analysis supports both proposed sub-hypotheses. System quality had a positive and significant effect on financial performance ($\beta = 0.322$, $p = 0.005$), while information quality also had a positive and significant effect ($\beta = 0.254$, $p = 0.026$). System quality was the stronger predictor, and the two variables jointly explained 20.1% of the variance in financial performance. The study therefore provides empirical support for the Information Systems Success Model in the context of a Yemeni public university and demonstrates that FMIS benefits depend on the quality of both the system's technical functioning and the financial information it produces. Because most variation in financial performance remained unexplained by the model, the findings also indicate that additional organizational, managerial, and technological factors should be considered in future research.

8. Recommendation

1. The University of Saba Region should concentrate on the continuous improvement of the technical quality of its Financial Management Information System, by enhancing the reliability, usability, processing efficiency and operational stability of the system, as these characteristics have the most significant impact on financial performance.
2. To improve the quality of financial information generated by the FMIS, the accuracy, completeness, timeliness and relevance of the information need to be improved so that managers can make better financial decisions.
3. The university should adopt an approach of continuous evaluation and improvement of the FMIS that involves regular evaluation and user feedback to identify the weaknesses and ensure that the system evolves according to the requirements of the organization.
4. Technological progress must go hand in hand with investment in staff development. Continuous professional training will improve the ability of employees to use
5. The university leadership should promote the integration of the FMIS into strategic financial planning and decision-making processes so that information produced by the system becomes a central resource for budgeting, monitoring and financial control.
6. Future research should extend the proposed model by including more organizational and technological factors such as user competence, organizational support, top management commitment, system integration, and digital transformation readiness to develop a more comprehensive explanation of financial performance in higher education institutions

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