



CHAPTER IV

RESULTS AND DISCUSSION

This chapter presents data, statistical analysis, and interpretation of the study, aiming to clarify its significance and provide insights for future research. The researchers aim to answer questions about the developed system and provide insights for future studies. The assessment includes levels of respondents' evaluation of the system, including functionality, usability, efficiency, security, compatibility, maintainability, and portability.

Evaluation and Scoring

System performance and quality can be assessed using ratings ranging from poor to excellent. The levels of scoring are as follows:

Table 3. Level of Scoring and Verbal Interpretation

Levels of Scoring	Range of Average Weighted Mean	Categorical Response	Verbal Interpretation
5	4.21 - 5.00	Excellent (E)	Excellent
4	3.41 – 4.20	Very Good (VG)	Very Good
3	2.61 – 3.40	Good (G)	Good
2	1.81 – 2.60	Satisfactory (S)	Satisfactory
1	1.00 – 1.80	Poor (P)	Poor

**Table 4. Respondents Frequency and Percentage based on Gender**

Sex	Frequency	Percentage (%)
Male	16	64
Female	9	36
Total	25	100%

Table 5. Age of Respondents

Age Range	Frequency	Percentage (%)
18 – 22	11	44
23 – 27	12	48
28 – 32	0	0
33 & above	2	8
Total	25	100%

Table 6. General Users and IT Professionals

Respondents	Frequency	Percentage (%)
General Users	15	60
IT Professionals	10	40
Total	25	100%

**Table 7. Respondents Level of Acceptance Based on Functional Suitability**

Functional Suitability	IT Professionals		General Users	
	Mean	Verbal interpretation	Mean	Verbal interpretation
Functional Completeness	4.70	Excellent	4.33	Excellent
Functional Correctness	4.80	Excellent	4.47	Excellent
Functional Appropriateness	4.90	Excellent	4.67	Excellent
Overall Weighted Mean	4.80	Excellent	4.49	Excellent

Table 7 presents the evaluation of the system's functional suitability by IT Professionals and General Users. The overall weighted means are 4.80 and 4.49, respectively, which are both verbally interpreted as "Excellent (E)." The data indicate that the system effectively meets functional expectations, with no significant differences between the two groups' assessments.

Table 8. Respondents Level of Acceptance Based on Usability

Usability	IT Professionals		General Users	
	Mean	Verbal interpretation	mean	Verbal interpretation
Appropriateness Recognizability	4.70	Excellent	4.8	Excellent
Learnability	4.80	Excellent	4.53	Excellent
User Interface Aesthetics	4.80	Excellent	4.47	Excellent
Operability	4.70	Excellent	4.53	Excellent
User Error Protection	4.60	Excellent	4.60	Excellent
Overall Weighted Mean	4.72	Excellent	4.59	Excellent

Table 8 presents the evaluation of the system's usability by IT Professionals and General Users. IT Professionals rated the system with an overall weighted mean of 4.72, while General Users gave an overall weighted mean of 4.59, both verbally interpreted as



"Excellent." All usability aspects received the highest ratings, classified as "Excellent." These results highlight the system's usability strengths, particularly in ease of learning and recognizability.

Table 9. Respondents Level of Acceptance Based on Efficiency

Efficiency	IT Professionals		General Users	
	Mean	Verbal interpretation	Mean	Verbal interpretation
Time Behavior	4.80	Excellent	4.53	Excellent
Resource Utilization	4.80	Excellent	4.27	Excellent
Capacity	4.60	Excellent	4.20	Very Good
Overall Weighted Mean	4.73	Excellent	4.33	Excellent

Table 9 shows the evaluation of the system's efficiency by IT Professionals and General Users. IT Professionals gave a mean score of 4.73, while General Users gave a mean score of 4.33, both deemed "Excellent." The highest score was given to time behavior, indicating strong system performance in handling time behavior requirements.

Table 10. Respondents Level of Acceptance Based on Security

Security	IT Professionals		General Users	
	Mean	Verbal interpretation	Mean	Verbal interpretation
Confidentiality	4.70	Excellent	4.33	Excellent
Integrity	4.90	Excellent	4.80	Excellent
Authenticity	4.70	Excellent	4.67	Excellent
Accountability	4.90	Excellent	4.33	Excellent
Overall Weighted Mean	4.80	Excellent	4.53	Excellent

Table 10 presents the evaluation of the system's security by IT Professionals and General Users. The overall weighted means are 4.80 and 4.53, respectively, both verbally interpreted as "Excellent." Accountability and Integrity received the same highest score



from IT Professionals (4.90, Excellent), while General Users rated Integrity (4.80, Excellent) as the top criteria, highlighting reliable security.

Table 11. Respondents Level of Acceptance Based on Compatibility

Compatibility	IT Professionals		General Users	
	Mean	Verbal interpretation	Mean	Verbal interpretation
Co-Existence	4.50	Excellent	4.47	Excellent
Interoperability	4.80	Excellent	4.67	Excellent
Overall Weighted Mean	4.65	Excellent	4.57	Excellent

Table 11 outlines the evaluation of the system's compatibility by IT Professionals and General Users. IT Professionals provided an overall weighted mean of 4.65, and General Users gave 4.57, both verbally interpreted as "Excellent." These results indicate that the system demonstrates solid compatibility in co-existence and interoperability across both groups.

Table 12. Respondents Level of Acceptance Based on Maintainability

Maintainability	IT Professionals		General Users	
	Mean	Verbal interpretation	Mean	Verbal interpretation
Modifiable	4.50	Excellent	4.27	Excellent
Testability	4.80	Excellent	4.47	Excellent
Overall Weighted Mean	4.65	Excellent	4.37	Excellent

Table 12 presents the evaluation of the system's maintainability by IT Professionals and General Users. The overall weighted means are 4.65 and 4.37, respectively, both verbally interpreted as "Excellent." The results highlight the system's strong maintainability, particularly in testability, with consistent assessments from both groups.

**Table 13. Respondents Level of Acceptance Based on Portability**

Portability	IT Professionals		General Users	
	Mean	Verbal interpretation	Mean	Verbal interpretation
Adaptability	4.60	Excellent	4.33	Excellent
Installability	4.90	Excellent	4.73	Excellent
Replaceability	4.60	Excellent	4.27	Excellent
Overall Weighted Mean	4.70	Excellent	4.44	Excellent

Table 13 provides the evaluation of the system's portability by IT Professionals and General Users. The overall weighted means are 4.70 and 4.44, respectively, both verbally interpreted as "Excellent." Installability received the highest score from IT Professionals (4.90, Excellent) and 4.73 remarked also as Excellent from General Users, highlighting reliable portability.