



## RESEARCH ARTICLE

## ASSESSMENT OF INTERNAL REVENUE INTEGRATED SYSTEM (IRIS) OF THE BUREAU OF INTERNAL REVENUE: BASIS FOR A SYSTEM ENHANCEMENT

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## ARTICLE DETAILS

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## ABSTRACT

This quantitative study aims to determine the significant relationship of the respondents' profile and the indicators such as functionality, reliability, efficiency, usability, maintainability and portability of the Internal Revenue Integrated System (IRIS) of the Bureau of Internal Revenue. The research instrument includes the demographical profile question for the respondents includes their age and years in service at the Bureau of Internal Revenue. It includes 57 questions and a 5-point Likert scale and the research instrument is based on the ISO 9126 Software Engineering Standard was administered to the 41 frontliners of Revenue District No. 55 – San Pablo City. Findings of the study conclude and shows that there is no significant relationship in the profile of the respondents which is the age and years in service compare to the indicators of the Internal Revenue Integrated System (IRIS) such as functionality, reliability, usability, efficiency, maintainability and portability. Using the mean the result shows that the system has an average of moderately to very acceptable verbal interpretation. Spearman rho was used to test the significant relationship between respondents' profile and the indicators of the Internal Revenue Integrated System (IRIS). This information can be used to help the Bureau of Internal Revenue on how to enhance the system without affecting business registration processes and services.

## KEYWORDS

System Enhancement, Functionality, Reliability, Usability, Efficiency, Maintainability, Portability

## 1. INTRODUCTION

The Internal Revenue Integrated System (IRIS) is a web-based system that uses a modern platform to serve as the Bureau of Internal Revenue's primary tool and repository for processing taxpayer information. IRIS, also known as Internal Revenue Integrated System, is a modern platform-based web-based system that was created to act as the BIR's main tool and repository for processing taxpayer data. It is now operational in some processes and transactions inside the bureau but not totally applicable in some offices and taxpayers did not much have experience in dealing with the new system since it is on the dry-run mode inside the organization. Revenue Memorandum Order (RMO) No. 27-2020, commonly known as the BIR Digitalization Roadmap 2020-2030, requires the bureau's business registration processes to incorporate new technology and system adaptation. This system is more ideal to use compared to the old system since it is upgraded by generating more software transactions such as application for Tax Identification Number, registration update and books of accounts, application for authority to print receipts & invoices, and permit to use cash register or point of sales machine. (Internal Communications, 2021).

Issues and concerns of taxpayers such as slow transactions, offline system, extensive queuing time dealing with business registration processes and services is just one of the problems that need to be addressed by the Bureau of Internal Revenue to provide quality service. A digital representation of a physical thing or attribute is said to be "digitalized". A paper document might be scanned and saved as a digital document. To put it another way, digitization refers to the process of turning a non-digital object into a digital representation or artifact. (Rolson Infotech Solutions,

2018). Then, it can be utilized by computer systems in a variety of ways. A conversion of a measurement from a manual or mechanical reading to an electronic one is an example from the manufacturing industry.

However, the foundation is digitization. This is how the physical world and software are related. They have been doing this since the 1960s. Due to the necessity for digestible data, it is an enabler for all business-value-producing operations. Digitalization is the use of technology to enable or enhance processes. Digitalization lowers expenses while boosting efficiency and production. (Sen Gupta, 2020). A business process or processes that are already in place are enhanced by digitalization; they are not altered or transformed. It converts a process from a human-driven event or sequence of events to a software-driven event.

## 2. REVIEW OF RELATED LITERATURE

A conceptual study model was developed by integrating the frameworks of technology, organization, and environment to investigate the factors influencing the State Internal Revenue Service's adoption of e-revenue. Technological proficiency, financial cost, internal need, satisfaction with the current system, competitive pressure, taxpayer readiness, and governmental regulation are among the factors used to forecast the uptake of e-revenue. It examines the factors influencing SIRS in Nigeria's implementation of the electronic revenue system. The issue of poor e-revenue acceptance in SIRS in Nigeria is not one of regulatory policy; rather, it is a result of technological proficiency, the authorities' perception of the readiness of taxpayers, and the expense of its implementation. The perception of taxpayer readiness is one of the barriers impeding the deployment of an e-revenue system. Adopting electronic internally

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generated revenue will surely increase the transparency and public accountability of governmental operations while also improving the State Board of Internal Revenue Service's capacity to serve the public in an efficient, cost-effective, and convenient manner (Oni et al., 2020).

Since small business owners are more likely to be the ones in charge of keeping accounting records and filing tax returns, and because they stand to gain financially from tax evasion, tax compliance has been a source of concern for governments, particularly in developing nations where they are looking for ways to increase the effectiveness of tax revenue collection in order to finance their budgets. Small businesses are also thought to be more likely to engage in tax evasion despite the advent of online tax systems that make filing taxes simpler. The amount of fines and penalties paid, as well as the costs associated with tax counseling and filing, were found to correlate with tax compliance positively and significantly. It was found that the integrated tax management system has an impact on small and medium-sized enterprises' tax compliance (Dere, 2021).

The online public grievance redressal system (OPGRS) is an e-government system that is evaluated for effectiveness using an Integrated Information System success model of Indian people. Perceived value, perceived ease of use, perceived satisfaction, perceived danger, and behavioral intention are among the components that make up the developed model. It also covers concepts like perceived usefulness and simplicity of use, system quality, information quality, and service quality. E-government platforms reduce costs, increase departmental productivity, and effectively deliver public services to citizens. It examines the variables that affect people's choices to file and pay taxes electronically in Thailand. This suggests that the self-determination features have a major impact on the user acceptability of Thailand's electronic tax filing and payment system. This illustrates how users' intentions to use a system are significantly influenced by its perceived legitimacy, enabling factors, performance expectations, and social influence (Mensah et al., 2020).

Merely 33% of the total population and 8% of those aged 65 to 74 possess computer skills beyond the fundamentals (AGE Platform Europe, 2020). One of the main objectives of policy should be raising everyone's level of digital literacy. To effectively reach older people, particularly those who live in rural areas and have physical limitations like poor vision, mobility issues, dexterity issues, or chronic health conditions, more work needs to be done, according to a recent EU consultation on digital education.

On the other hand, one must consider several other crucial factors that contribute to the digital gap, such as gender, low income, education, family circumstances, and isolation. Digital literacy will affect future elder generations as well, even though we may anticipate a closing digital divide due to the cohort effect (Gender Equality Index, 2020). As a result, intergenerational connection and lifelong learning must be structurally strengthened. This study was mainly anchored on the Technology Acceptance Model. The technology acceptance model (TAM) describes how people accept information systems. According to TAM, a user's behavioral intention, which is in turn influenced by how beneficial they believe a piece of technology to be in carrying out a task and how simple they believe it to be to use, will determine whether a technology will be accepted. (Davis et al., 1989).

Additionally, the Technology Acceptance Model is very helpful in determining whether the new system is acceptable or not. The two specific factors, perceived usefulness, and perceived ease of use are anticipated to be key predictors of user approval and will be the focus of the current research. The two indicators will fall through the usability indicator under the understandability and learnability variables based on the ISO 9126 Software Engineering Standard. New scales are created and validated for these two specific variables. A study used this model involving two investigations having one hundred fifty-two users and four application programs, scale items were utilized. It has been used for the study and has developed definitions of these variables, then assessed for reliability and

construct validity after passing a pretest for content validity. (Davis et al., 1989).

## 2.1 Statement of The Problem

This study aims to assess the Internal Revenue Integrated System (IRIS) of Bureau of Internal Revenue.

Specifically, the study aims to address the following research question.

1. What is the demographical profile of the respondents in terms of:

1.1 Age, and

1.2 Years in Service?

2. What is the level of acceptability of Internal Revenue Integrated System (IRIS) in terms of:

2.1 Functionality;

2.2 Reliability;

2.3 Usability;

2.4 Efficiency;

2.5 Maintainability and

2.6 Portability?

3. Is there a significant relationship between the respondents' profiles and the level of acceptability of the Internal Revenue Integrated System (IRIS)?

4. What enhancement plan may be proposed for Internal Revenue Integrated System (IRIS)?

## 2.2 Hypothesis

Ho: There is no significant relationship between the respondents' profiles and the level of acceptability of the Internal Revenue Integrated System (IRIS).

## 3. METHODS AND MATERIALS

In this chapter, the researcher outlines the methods employed in the study, which focuses on evaluating the Internal Revenue Integrated System (IRIS). The research design begins with descriptive research to observe the organization's operations and system behavior, providing an overview of system processes and material flow. This lays the groundwork for a quantitative research design to assess system performance. The study involves 41 employees from the Bureau of Internal Revenue, classified based on age and years of service, using purposive sampling. A questionnaire based on ISO 9126 is utilized to gather data, employing Likert's scale for analysis. Ethical considerations include informing participants of the study's goals, ensuring their freedom to participate, and maintaining the confidentiality of responses. The data collected are analyzed statistically, and the findings are presented, including the use of Spearman rho to explore relationships between respondents' profiles and the acceptability of IRIS. The study adheres to ethical principles, emphasizing participant informed consent and privacy.

## 4. RESULTS AND DISCUSSIONS

The collected data, along with the survey form, data analysis, and data interpretations, are presented in this chapter. The study's findings are presented and carefully examined. The claim, interpretation, and presentation all make sense in light of the particular issues that were raised at the outset of the subject.

**Table 1: Profile of the Respondents in terms of Age**

Age (in years)	Frequency Count	Percentage
21 to 25	2	4.88%
26 to 30	13	31.71%
31 to 35	14	34.15%
36 to 40	8	19.51%
41 to 45	4	9.76%
<b>Total</b>	<b>41</b>	<b>100%</b>

In table 1, the age profile of Bureau of Internal Revenue (BIR) employees is presented. As shown in the table, the highest percentage of respondents falls under the age of 31 to 35 years, which includes the 14 in the 41 total

respondents and has a percentage of 34.15%. The lowest rate of respondents is ranging between 21 to 25 with only 2 frequency count with 4.88%.

**Table 2: Profile of the Respondents in terms of Years in Service**

Years in Service	Frequency Count	Percentage
1 to 5	14	34.15%
6 to 10	10	24.39%
11 to 15	8	19.51%
16 to 20	9	21.95%
<b>Total</b>	<b>41</b>	<b>100%</b>

In table 2, the profile of the respondents in terms of years in service to Bureau of Internal Revenue (BIR) is presented. As shown in the table, the highest percentage of respondents falls under 1 to 5 years in service,

which includes the 14 in the 41 total respondents and has a percentage of 34.15%. While the lowest frequency count of respondents is under 11 to 15 years with a frequency count of 8 and with 19.51 percentage.

**Table 3: Level of Acceptability of Internal Revenue Integrated System (IRIS) in terms of Functionality**

Indicators	$\bar{x}$	Verbal Interpretation
Suitability	3.71	Very Acceptable
Accurateness	3.41	Very Acceptable
Interoperability	3.17	Moderately Acceptable
Compliance	3.54	Very Acceptable
Security	3.27	Moderately Acceptable
<b>Composite Mean</b>	<b>3.42</b>	<b>Very Acceptable</b>

Table 3 shows the level of acceptability of Internal Revenue Integrated System (IRIS) amongst the BIR employees in condition to how functional the system. The indicators included in terms of how functional the system involves how sustainable, accurate, interoperable, complying, and secure the system is. As shown in the table, the highest mean is the sustainable indicator of 3.71 and is interpreted as Very Acceptable. The lowest mean is the interoperable indicator with 3.17 and has verbal interpretation of moderately acceptable. The overall mean of IRIS in terms of the functional variable is 3.42 and is interpreted as Very Acceptable.

Data shows that the respondents accepted on how functional the Internal Revenue Integrated System (IRIS). Internal Revenue Integrated System (IRIS) includes precision and accuracy of the system itself. A group researchers states that the primary indicators of information quality in government e-services were determined to be information preciseness, timeliness, and sufficiency (Bassey et al., 2022).

Table 4 shows the level of acceptability of Internal Revenue Integrated System (IRIS) amongst the BIR employees in terms to how reliable the system. The indicators included in terms of the reliable variable of the system involves maturity, fault tolerance, and recoverable. As shown in the table, the indicator with the highest mean is the recover indicator which has a mean of 3.24 and is interpreted as moderately acceptable. The lowest mean is the fault tolerance indicator with 2.95 and verbal interpretation of moderately acceptable. The total mean of all the indicators is 3.07 with a verbal interpretation of moderately acceptable.

In terms of how reliable the system is, data shows that the respondents accepted the Internal Revenue Integrated System (IRIS). Internal Revenue Integrated System (IRIS) includes the procedure that allows an operating system to react to a hardware or software failure. A group researchers states that the least number of faults possible during program execution is the key requirement for reliable software (Pandey et al., 2021).

**Table 4: Level of Acceptability of Internal Revenue Integrated System (IRIS) in terms of Reliability**

Indicators	$\bar{x}$	Verbal Interpretation
Maturity	3.02	Moderately Acceptable
Fault Tolerance	2.95	Moderately Acceptable
Recoverability	3.24	Moderately Acceptable
<b>Composite Mean</b>	<b>3.07</b>	<b>Moderately Acceptable</b>

**Table 5: Level of Acceptability of Internal Revenue Integrated System (IRIS) in terms of Usability**

Indicators	$\bar{x}$	Verbal Interpretation
Understandability	3.56	Very Acceptable
Learnability	3.34	Moderately Acceptable
Operability	3.39	Moderately Acceptable
<b>Composite Mean</b>	<b>3.43</b>	<b>Very Acceptable</b>

Table 5 shows how usable the Internal Revenue Integrated System (IRIS) amongst the BIR employees. The indicators included on how usable the system involves understandable, learnable, and operable the system is. As shown in the table, the indicator with the highest mean is the understandable indicator that has a value of 3.56 and is interpreted very acceptable. The lowest mean is the learnable indicator with 3.34 mean and interpreted as moderately acceptable. The total mean for the usable variable is 3.43 and is interpreted very acceptable.

Data shows that the respondents accepted the Internal Revenue Integrated System (IRIS) in its usable factor. Internal Revenue Integrated System (IRIS) includes the capacity to maintain in accordance with established operational standards of the system itself. The study of (Chen et al., 2021) states that the safety, reliability, and performance of systems may be improved and ensured by a better integration of complex software systems through the development and maintenance of best practices, and the use of formal software systems engineering concepts.

**Table 6: Level of Acceptability of Internal Revenue Integrated System (IRIS) in terms of Efficiency**

Indicators	$\bar{x}$	Verbal Interpretation
Time Behavior	3.05	Moderately Acceptable
Resource Behavior	3.17	Moderately Acceptable
<b>Composite Mean</b>	<b>3.11</b>	<b>Moderately Acceptable</b>

Table 6 shows the level of acceptability of the Internal Revenue Integrated System (IRIS) amongst the BIR employees in how efficient the system is. The highest mean is coming from the resource behavior indicator with 3.17 that interprets moderately acceptable. The lowest is the time

behavior indicator with 3.05 mean and interprets moderately acceptable. The total mean on hoe efficient the system is 3.11 that interprets moderately acceptable. This supported the statement of wherein modernizing administrative processes and public administrations can

benefit greatly from Robotic Process Automation (RPA) (Houy et al., 2019). Consequently, data shows that the respondents accepted the Internal Revenue Integrated System (IRIS) in terms of efficiency.

Table 7 shows the level of acceptability of Internal Revenue Integrated System (IRIS) amongst the BIR employees in terms of how maintainable the system is. The highest mean is the testing indicator with 3.20 and interpreted moderately acceptable. The lowest mean is from the changeable indicator with a mean of 2.95, interpreted moderately acceptable. The total average mean on how maintainable the system is 3.08 with a verbal interpretation of moderately acceptable. This supported the study of wherein software needs to be well-developed and maintained in order to respond to the everchanging requirements of the market (Alsolai and Roper, 2020). The differentiation of various software maintainable prediction models and approaches can aid in the prediction of software maintainability and assist to decrease the work needed to remedy software vulnerabilities.

Table 8 shows the level of acceptability of Internal Revenue Integrated System (IRIS) amongst the BIR employees in terms of how portable the system. The highest mean is from the adaptable indicator with 3.32 and interpreted moderately acceptable. The lowest mean is conformance with a mean of 2.90, interpreted moderately acceptable. The total average mean in how portable the system is 3.11 with a verbal interpretation of moderately acceptable.

Data shows that the respondents accepted on how portable the Internal Revenue Integrated System (IRIS) is. Internal Revenue Integrated System (IRIS) includes being adaptable of the system itself within the working environment and surrounding. Saputri and Lee states that the issue of the complexity of information systems is addressed by self-adaptive systems (SASs) (Saputri and Lee, 2020). Miniaturization of IT causes mobile devices with the rising demand for context adaptation due to new computing trends like cloud computing.

Table 7: Level of Acceptability of Internal Revenue Integrated System (IRIS) in terms of Maintainability		
Indicators	$\bar{x}$	Verbal Interpretation
Analyzability	3.02	Moderately Acceptable
Changeability	2.95	Moderately Acceptable
Stability	3.15	Moderately Acceptable
Testability	3.20	Moderately Acceptable
<b>Composite Mean</b>	<b>3.08</b>	<b>Moderately Acceptable</b>

Table 8: Level of Acceptability of Internal Revenue Integrated System (IRIS) in terms of Portability		
Indicators	$\bar{x}$	Verbal Interpretation
Adaptability	3.32	Moderately Acceptable
Installability	2.98	Moderately Acceptable
Conformance	2.90	Moderately Acceptable
Replaceability	3.22	Moderately Acceptable
<b>Composite Mean</b>	<b>3.11</b>	<b>Moderately Acceptable</b>

Table 9: Test of Relationship between Age of the Respondents and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Functionality				
Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Suitability	-0.028	weak	0.465	not significant
Accurateness	-0.055	weak	0.862	not significant
Interoperability	0.014	weak	0.730	not significant
Compliance	-0.043	weak	0.933	not significant
Security	0.183	weak	0.791	not significant

Table 9 reveals the relationship between the age of the respondents and the level of acceptability on how functional the Internal Revenue Integrated System (IRIS) is. It shows the analysis of generated probability values, in which the values of the paired variables such as being sustainable, accurate, interoperable, complying, and secure are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis.

This result supports the study of that among users of computerized management information systems, there were no statistically significant relationships in respondents' perceptions of performance or functional development and its correlation to demographic variables that could be attributed to the age variable (Alsolai and Roper, 2020).

Table 10 reveals the relationship between the age of the respondents and the level of acceptability on how reliable the Internal Revenue Integrated System (IRIS) is. It shows the values, in which the values of the paired variables such as maturity, fault tolerance and recoverable are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant relationship between the age of the respondents and the level of acceptability on how reliable the Internal Revenue Integrated System (IRIS) is.

This result supports the study of that there were no significant variations found in the results regarding the acceptability of eGovernment services in terms of reliability based on gender, age, education level, or marital status (Iong and Phillips, 2022).

Table 10: Test of Relationship between Age of the Respondents and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Reliability				
Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Maturity	0.135	weak	0.401	not significant
Fault Tolerance	0.142	weak	0.376	not significant
Recoverability	0.124	weak	0.442	not significant

Table 11: Test of Relationship between Age of the Respondents and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Usability				
Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Understandability	-0.163	weak	0.309	not significant
Learnability	-0.123	weak	0.444	not significant
Operability	-0.113	weak	0.482	not significant

Table 11 reveals the relationship between the age of the respondents and the level of acceptability on how usable is the of the Internal Revenue Integrated System (IRIS). It shows the analysis of generated probability values, in which the values of the paired variables such as being understandable, learnable and operable are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant relationship between the age of the respondents and the level of acceptability on how usable the Internal Revenue Integrated System (IRIS). The study of the results of the impact of prior exposure to technology on acceptance and its significance in being usable and accessibility engineering did not show any discernible correlation with the users' age or gender (Vlachogianni and Tselios, 2021).

Table 12 reveals the relationship between the age of the respondents and the level of acceptability on how efficient is the Internal Revenue Integrated System (IRIS). It shows the analysis of generated probability values, in which the values of the paired variables such as time behavior and resource behavior are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant relationship between the age of the respondents and the level of acceptability on how efficient is the of the Internal Revenue Integrated

System (IRIS).

The result supports the study of that gender, computer training, computer ownership, and age did not turn out to be significant predictors in software systems after compensating for these variables (Abraham and Chengalur-Smith, 2019).

Table 13 reveals the relationship between the age of the respondents and the level of acceptability on how maintainable the Internal Revenue Integrated System (IRIS) is. It shows the analysis of generated probability values, in which the values of the paired variables such as analyzing, changeable, stableness and testing are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. There is a difference between the degree of correlation since the changeable variable has moderate correlation between the age and the acceptability of the system. Based on the said analysis, it can be concluded that there is no significant relationship between the age of the respondents and the level of acceptability on how maintainable the Internal Revenue Integrated System (IRIS) is.

Findings of demonstrate that maintainability and reliability importance metrics can be utilized as a management tool for overseeing a system's attempt to increase reliability and availability (Masele and Kagoma, 2021).

**Table 12:** Test of Relationship between Age of the Respondents and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Efficiency

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Time Behavior	0.027	weak	0.865	not significant
Resource Behavior	0.093	weak	0.564	not significant

**Table 13:** Test of Relationship between Age of the Respondents and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Maintainability

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Analyzability	0.150	weak	0.351	not significant
Changeability	0.252	moderate	0.113	not significant
Stability	0.093	weak	0.564	not significant
Testability	-0.148	weak	0.355	not significant

**Table 14:** Test of Relationship between Age of the Respondents and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Portability

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Adaptability	-0.014	weak	0.929	not significant
Installability	-0.026	weak	0.872	not significant
Conformance	0.183	weak	0.252	not significant
Replaceability	-0.005	weak	0.975	not significant

Table 14 reveals the relationship between the age of the respondents and the level of acceptability on how portable is the Internal Revenue Integrated System (IRIS) in terms of portability. It shows the analysis of generated probability values, in which the values of the paired variables such as being adaptable, installing capability, conformance and replaceable are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant

relationship between the age of the respondents and the level of acceptability on how portable is the Internal Revenue Integrated System (IRIS).

This is related to the study, shows a new method for offering cloud portability and considering useful to give a quick overview of these ideas in this paper and methods, then a suggestion for how to classify them (Yussupov et al., 2019).

**Table 15:** Test of Relationship between the Number of Years in Service and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Functionality

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Suitability	-0.086	weak	0.593	not significant
Accurateness	-0.077	weak	0.633	not significant
Interoperability	-0.169	weak	0.292	not significant
Compliance	-0.085	weak	0.596	not significant
Security	0.222	weak	0.163	not significant

Table 15 reveals the relationship between years in service of the respondents and the level of acceptability on how functional is the of the Internal Revenue Integrated System (IRIS) in. It shows the analysis of generated probability values, in which the values of the paired variables such as being sustainable, accurate, interoperable, complying, and secure are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant relationship

between years in service of the respondents and the level of acceptability on how functional is the Internal Revenue Integrated System (IRIS).

Alsolai and Roper, reveals that there is no statistically significant relationship between the variable of years of service in the respondents' perceptions of performance or functionality development regarding the fields of physical, software, and human resources for computerized management information systems.

**Table 16:** Test of Relationship between the Number of Years in Service and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Reliability

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Maturity	0.111	weak	0.490	not significant
Fault Tolerance	-0.010	weak	0.949	not significant
Recoverability	-0.239	weak	0.132	not significant

Table 16 reveals the relationship between years in service of the respondents and the level of acceptability on how reliable is the Internal Revenue Integrated System (IRIS). It shows the analysis of generated probability values, in which the values of the paired variables such as maturity, fault tolerance and recoverable are all greater than the level of significance 0.05, and in these cases are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant relationship between years in service of the respondents and the level of acceptability on how functional is the Internal Revenue Integrated System (IRIS).

This result supports the study of that there were no significant variations found in the results regarding the acceptability of eGovernment services in terms of being reliable based on respondents' profile (Iong and Phillips, 2022).

Table 17 reveals the relationship between years in service of the respondents and the level of acceptability on how usable is the Internal Revenue Integrated System (IRIS) in terms of usability. It shows the analysis of generated probability values, in which the values of the paired variables such as being understandable, learnable and operable are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant relationship between years

in service of the respondents and the level of acceptability on how usable is the Internal Revenue Integrated System (IRIS) in terms of usability.

A group researchers states that software engineering community must develop appropriate concepts of being usable and should include usability principles into a recognized software engineering process in both fields (Chen et al., 2021). Use cases that are acceptable place to start because they are the software's engineering creation that more resembles a practical method of software development.

Table 18 reveals the relationship between years in service of the respondents and the level of acceptability on how efficient is the Internal Revenue Integrated System (IRIS). It shows the analysis of generated probability values, in which the values of the paired variables such as time behavior and resource behavior are all greater than the level of significance 0.05. Based on the said analysis, it can be concluded that there is no significant relationship between years in service of the respondents and the level of acceptability on how efficient is the Internal Revenue Integrated System (IRIS).

Abraham and Chengalur-Smith, shows that the respondents' profile did not turn out to be significant predictors in software systems after compensating for these variables (Abraham and Chengalur-Smith, 2019).

**Table 17:** Test of Relationship between the Number of Years in Service and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Usability

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Understandability	-0.060	weak	0.710	not significant
Learnability	-0.123	weak	0.943	not significant
Operability	-0.113	weak	0.721	not significant

**Table 18:** Test of Relationship between the Number of Years in Service and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Efficiency

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Time Behavior	0.098	weak	0.542	not significant
Resource Behavior	0.128	weak	0.424	not significant

**Table 19:** Test of Relationship between the Number of Years in Service and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Maintainability

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Analyzability	0.074	weak	0.644	not significant
Changeability	0.281	moderate	0.075	not significant
Stability	-0.074	weak	0.645	not significant
Testability	0.033	weak	0.836	not significant

Table 19 reveals the relationship between years in service of the respondents and the level of acceptability on how maintainable is the Internal Revenue Integrated System (IRIS). It shows the analysis of generated probability values, in which the values of the paired variables such as analyzing, changeable, stableness and testing are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. There is no difference between the degree of correlation since the variable of changeability has moderate correlation between the years in service and the acceptability of the system. Based on the said analysis, it can be concluded that there is no significant relationship between years in service of the respondents and the level of acceptability on how maintainable is the of the Internal Revenue Integrated System (IRIS).

Masele and Kagoma, proves that the study demonstrates the importance of maintainability and reliability analysis in determining maintenance schedules and coordinating maintenance (Masele and Kagoma, 2021).

Table 20 reveals the relationship between years in service of the respondents and the level of acceptability on how maintainable is the Internal Revenue Integrated System (IRIS). It shows the analysis of generated probability values, in which the values of the paired variables

such as being adaptable, installing capability, conformance and replaceable are all greater than the level of significance 0.05, and in these cases the decisions are the same and it is to accept the hypothesis. Based on the said analysis, it can be concluded that there is no significant relationship between years in service of the respondents and the level of acceptability on how maintainable is the Internal Revenue Integrated System (IRIS).

Data shows that the respondents accepted on how portable the Internal Revenue Integrated System (IRIS) is. Internal Revenue Integrated System (IRIS) includes being adaptable of the system itself within the working environment and surrounding. Saputri and Lee states that the issue of the complexity of information systems is addressed by self-adaptive systems (SASs) (Saputri and Lee, 2020). Miniaturization of IT causes mobile devices with the rising demand for context adaptation due to new computing trends like cloud computing.

A group researchers revealed a new method for offering cloud portability and considering useful to give a quick overview of these ideas in this paper and methods, then a suggestion for how to classify them (Yussupov et al., 2019).

**Table 20:** Test of Relationship between the Number of Years in Service and the Level of Acceptability of the Internal Revenue Integrated System (IRIS) in terms of Portability

Variables	Spearman rho	Degree of Correlation	p-value	Verbal Interpretation
Adaptability	0.075	weak	0.641	not significant
Installability	0.074	weak	0.647	not significant
Conformance	0.130	weak	0.418	not significant
Replaceability	0.021	weak	0.896	not significant

#### 4.1 Bureau of Internal Revenue (IRIS) Application System Enhancement Plan

The fast-growing application of today's technology poses distinct and essential business difficulties for every size firm or government body. IT infrastructure management, not to be confused with IT management's broader duties, is the administration and management of critical operational aspects required to successfully, efficiently, and proactively employ technology, information, and data. The intent of an IT infrastructure plan is to offer structure and control over the roles in charge of various technological processes, with the primary goal of reducing downtime and preserving business efficiency. IT infrastructure has numerous goals, including enhancing staff productivity, developing cross-functional and interpersonal linkages, and increasing customer happiness and overall performance. A correctly built IT infrastructure may assist a firm in meeting its objectives and providing a competitive advantage in the market, whereas a badly implemented one can cause connection, productivity, and security difficulties.

Objects of the strategic plan:

##### 4.1.1 IT Alignment with Business Objectives

An IT strategic strategy must be in sync with the entire company objectives. Any requests for IT infrastructure, digital transformation projects, and organizational change management strategies should be discussed in advance to determine investment priorities for the time frame under consideration.

##### 4.1.2 Roadmap for Technological Advancement

The long-term IT goals, requirements, and impact of technology implementation is included in the technology roadmap, which is followed by a thorough technology adoption strategy. Many organizations, for example, have migrated from legacy (and obsolete) physical data centers to cloud services such as AWS and Microsoft Azure. They needed cloud change management to ensure a smooth transition during these initiatives.

##### 4.1.3 Modify Communication Strategy

Employees frequently go through the denial, anger, and resistance phases of the change curve before they can fully adjust to change. You may onboard your team members and help them embrace change more effectively with a clear and thorough change communication plan, hence promoting the adoption of new IT solutions.

##### 4.1.4 IT support

IT executives must standardize the IT services supplied inside a business and bridge the gap between current and necessary services in order to conduct efficient IT strategic planning.

##### 4.1.5 IT management

IT governance is a subset of corporate compliance that assures the efficient and effective use of information technology inside a business. IT encompasses cyber security and data protection rules. With the advent of hybrid and remote work, and people spread throughout the world, an IT governance policy has never been more important.

##### 4.1.6 Best practices in IT

IT businesses develop these best practices over time, and adhering to them assures lower risks and lower costs. Choosing these best practices is a continual process that must be updated on a regular basis to maintain relevance and develop.

##### 4.1.7 IT Objectives and Metrics

For the IT team to deliver on schedule, IT executives must clearly identify the goals in their IT strategic plan. IT KPIs and targets that are well-

structured will assist your team members to effectively plan for ad hoc demands.

## 5. CONCLUSIONS

This chapter presents the summary of findings based on the data gathered, the conclusions drawn based from the findings of the study and the necessary recommendations in the light of conclusions drawn.

Based on the findings of the study, the researcher came up with the following conclusions:

1. The majority of respondents was between the ages of 31 and 35 and fell within the 1 to 5 years of service.
2. The acceptability of Internal Revenue Integrated System (IRIS) in terms of functionality, reliability, usability, efficiency, maintainability and portability is considered as moderately to very acceptable.
3. There is no significant relationship between the respondents' profiles and the level of acceptability of the Internal Revenue Integrated System (IRIS) since the employees' knowledge of the system will not vary based on the respondents' age and years in service.
4. The enhancement plan is concise and detailed in nature, therefore is very comprehensively planned that will address the problem of the study.

## RECOMMENDATIONS

The study's conclusion led the researcher to make the following suggestions.

1. The Bureau of Internal Revenue may set up more trainings and seminars to their employees to increase the level of acceptability of the Internal Revenue Integrated System (IRIS).
2. The BIR employees as users of Internal Revenue Integrated System (IRIS) may participate in the IRIS-related workshop/ seminar to increase their knowledge in the utilization of the system.

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