AN ANALYSIS OF THE EFFECT OF A DISINTERGRATED ACCOUNTING INFORMATION SYSTEM ON ORGANISATIONAL PERFORMANCE: CASE STUDY OF ZIMDEF.

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE BACHELOR OF ACCOUNTANCY HONORS DEGREE OF BINDURA UNIVERSITY OF SCIENCE EDUCATION

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DEDICATION

A special dedication goes to my lovely daddy, the late and my lovely mum and my family members for the unwavering support, encouragement and love since I was a child in schooling activities. I would also like to extend my gratitude to all those I could not mention their names that encouraged me in this project.
ABSTRACT

The study was carried out to investigate the effect of a disintegrated accounting information system on the performance of the organisation. The descriptive and explanatory methods were used by the researcher to solicit information from respondents and a case study approach was used. The research study was confined to ZIMDEF. Forty questionnaires were administered but only 38 were retained. The results were analyzed using spreadsheets. This was presented in the form of graphs, tables and pie charts. From the research findings, it was discovered that there is a correlation between accounting information system and organisational performance. The study’s finding also highlighted that the use of multiple accounting systems (Disintegrated AIS), negatively influences a firm’s performance. The study recommended that the implementation of Enterprise Application Integration and Business Process Management systems was arguably chosen as the most effective practice of integration through application integration and external business integration.
Firstly, my utmost gratitude goes to the almighty Lord for the gift of life as well as paving way for me to pursue my career at Bindura University of Science Education. I would like to thank my mother for her love, support, sacrifice and patience during my four year study duration at the university, I could not have made it without her.

I also thank my two sisters and brother, and all those who assisted me for their immense contribution to my entire educational life. Lastly all my dear friends who were with me in this path of education, a candle loses nothing by lighting another candle, your help to me could not have meant much to yourselves, but to me your help lifted me to where I am today. You are all special subjects in my life.
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CHAPTER I

INTRODUCTION

1.0 Introduction

This chapter is an introductory discussion of the effect of a disintegrated accounting information system on organisational performance. It looks into the background of the study, the statement of the problem, purpose of the study, research questions, significance of the study, assumptions, limitations and delimitations of the study, definition of terms and chapter summary.

1.1 Background of the study

To operate business operations efficiently and successfully, it is necessary to make use of an appropriate accounting system. Such a system should state in clear terms whether cost and financial transactions should be integrated or kept separately (Disintegrated). Bhansali (2013), stated that where cost and financial accounting records are integrated, the system so evolved is known as integrated, but where cost and financial transactions are kept separately, the system is called to be disintegrated.

Disintegrated accounting information systems usually reduces efficiency due to unnecessary reconciliations. This is supported by Hall (2008), who stated that, disintegrated accounting information systems necessitates reconciliation between financial and cost accounts. Butkevičius (2009) also stated that, verification and compilation of data within the two systems usually force employees to work overtime thereby increasing operational costs of the company.
Zimbabwe Manpower Development Fund (ZIMDEF) is a State Enterprise under the Ministry of Higher and Tertiary Education Science & Technology Development. The broad objective of ZIMDEF is to finance the development of critical and highly skilled manpower through a 1% Training Levy paid by all eligible companies in Zimbabwe as outlined in statutory Instruments 74 and 392 of 1999.

The organization uses two separate accounting packages to process and maintain apprentice payroll (SAP and Belina). ZIMDEF uses Systems Applications and Products (SAP) mainly for the preparation of financial statements and Belina to run the apprentice payroll. This has caused delays in payment of apprentice wages and industrial attachment allowances to polytechnic students due to data which had to be reconciled between the two systems.

Zimdef has been experiencing an increase in operating revenue wastage due to fines and penalties from ZIMRA due to delayed payments as data to compile the necessary tax returns had to be reconciled manually.

Table 1.1: fines paid to ZIMRA

<table>
<thead>
<tr>
<th>Year</th>
<th>Tax to be Paid</th>
<th>Fine charged</th>
<th>total</th>
</tr>
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<tr>
<td>2013</td>
<td>$12556</td>
<td>$7324</td>
<td>$19880</td>
</tr>
<tr>
<td>2014</td>
<td>$12750</td>
<td>$12750</td>
<td>$25500</td>
</tr>
<tr>
<td>2015</td>
<td>$14000</td>
<td>$14000</td>
<td>$28000</td>
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As the use of disintegrated accounting information system, within Zimdef has led to increasing in costs, client dissatisfaction and inefficiency, there is need to investigate its effect on the overall performance of the parastatal.

1.2 Statement of the problem

The parastatal has been facing integrity challenges of loss of income and degradation of parastatal image from the year 2013 to date due to the use of two separate accounting systems. The present research therefore seeks to investigate the effect of using a disintegrated accounting information system on organisational performance and perhaps come up with recommendations.
Purpose of the Study

The purpose of the study was to investigate the impact of a disintegrated accounting system on ZIMDEF’s performance.

1.3 Objectives of the Study

- To determine the association between organizational performance and accounting information system.
- To identify the challenges associated with a disintegrated AIS.
- To identify the effect of disintegrated accounting information system on the performance of the organisation.
- To explore the attributes that influence accounting information systems data quality.
- To recommend what can be done to mitigate the challenges associated with disintegrated AIS?

1.4 Main Research Question

What is the effect of using disintegrated AIS on the performance of ZIMDEF?

1.5 Sub Research Questions

- What is the association between organizational performance and accounting information system?
- What are the challenges associated with a disintegrated AIS?
- What is the effect of disintegrated accounting information system on ZIMDEF’s performance?
- What are the attributes that influence accounting information systems data quality?
- What are the alternative measures can be done to mitigate the challenges associated with disintegrated AIS?
1.6 The study made the following assumptions:

- The respondents were able to answer truthfully and are representatives of ZIMDEF.

1.7 Delimitations of the study

The scope of the study was limited to ZIMDEF HQ, which is in Harare Zimbabwe. The research was inclined to investigate the impact of using a Disintegrated accounting information system on organizational performance. Data used in this study was for the period of four years from 2013 to 2016. The research mainly focused on the Apprentice payroll department, Finance department, ICT personnel and the Revenue department at ZIMDEF because they directly work with the two systems and have a better understanding of the research question.

1.8 Limitation of the study

The study was carried during the attachment period when the researcher had some other work related tasks he had to accomplish and during the semester when the researcher was also supposed to fulfil other academic commitments and was also given deadlines for submission of that work and as a result, other relevant data might have been overlooked. This was overcome by use of weekends and public holidays to work on the research.

1.9 Importance of the study

To the researcher

It allowed the researcher to have a deeper understanding of both theoretical and practical knowledge in the area of research and encourage a practical application of theoretical concepts on the area under study.

To the parastatal

The research provides an in-depth analysis of the effect of disintegrated AIS on organisational performance and expose weaknesses and strengths that exist within
the area of study and pave way for change in order to improve on accountability, transparency and efficiency in delivering the fund’s designated mandate.

To the University
The researched is aimed to add on to the existing data base of studies, thereby acting as a reference by future researchers in similar studies.

1.10 Definition of terms

Information System – According to Hall (2008), Information system is a combination of hardware, software, infrastructure and trained personnel organized to facilitate planning, control, coordination decision making in an organization.

Accounting Information System – According to Boochholdt (1999), AIS is a software that gather data, process it into information and provides a financial report of the processed information so that management can draw conclusions about the parastatal’s performance.

Enterprise Resource Planning- Turner and Weickgenannt (2013) defined ERP as a multi-module software system designed to manage all aspects of an enterprise.

Triangulation - Johnston (2007). defined data triangulation as a technique used to cross check information from different sources so as to discover consistencies in the search data.

1.11 Summary

This chapter, as an introduction to the research study gave an overview of the whole study. It covered the following main areas which are the background of the study, the statement of the problem, the research objectives, research questions, significance of the study, problems likely to be faced by the researcher, definitions of terms and abbreviations that will be used in the study. Chapter two is the literature review, which links related theory on disintegrated accounting information systems to the findings of the study and helps in clarifying the concepts involved in the study.
CHAPTER II  

LITERATURE REVIEW

2.0 Introduction

This chapter covers the various authorities perceptions on the effect of a disintegrated accounting information system on the performance of the organisation. The researcher will mainly focus on the objectives in line with the related literature. The research will include the use of various sources of literature to create wide base of information relevant to the research.

2.1 Purpose of Literature Review

According to Boochholdt L (1999), a literature review is an evaluative report of studies found in the literature related to the researcher’s selected area, the review should describe, summarize, evaluate and clarify this literature. The objective of this chapter is to acquire, appreciation and understanding of earlier researches and developments and to establish an analytical framework of this research project.

2.2 Theoretical Frame work

2.2.1 Overview of accounting information system

According to Hall (1998), Accounting Information System can be subdivided into several sub-disciplines, including financial, managerial, auditing, tax, and the accounting information system as shown in the table below.
The sub-disciplines of accounting

Source: Baker (2007)

As depicted in Figure 2.1, the AIS has closer links with auditing and managerial accounting. The AIS tends to be based on the needs of its internal users. Hence, the AIS has closer links with those, (i.e. managers) who use the information for decision making and auditors who review the design and evaluate the operating effectiveness of the AIS.

Accounting information is a part and parcel of today’s life which is necessary to understand the accurate financial situation of the organization and used as the basis of making any decisions. Accounting is sometimes referred to as a means to an end, with the ending being the decision that is helped by the availability of accounting information Piccoli (2012) Accounting systems can aid in decision making providing information relevant to the decision and to the decision maker Gray (1996). Effective and efficient accounting information plays a central role in management decision making Tunji (2012). According to Miko (1998) accounting information is one type of information recognized as a ‘learning machine’ that can help to evaluate how objectives might be achieved by quantifying the financial impact of each alternative available to the decision. Miko (1998) also stated that within contemporary economic conditions, a successful manager needs a lot of reliable accounting information in order to be able to make quality business decisions

Accounting systems for a large organization need to be able to collect, accumulate and report various types of transactions relevant to the nature and
As Beard (2007) state, accounting information systems vary widely from one business to another.

2.2.2 The roles of accounting information system

Johnston (2007) also defined the purpose of accounting information systems as, methods and procedures for collecting, classifying, summarizing and operating information. Baker (2007); Siegel and Shim (1998); Hall (2008), states that the role of accounting information system is to combine the study and practice of accounting with the design, implementation, and monitoring of information systems. Hall (2008) further stated that the major function of AIS is to process financial transactions so as to provide the parastatal’s stakeholders with quality financial and management reports and thereby enhance management decision making. Patel (2015) stated that the main function of Accounting Information System is to assign quantitative value of the past, present and future business events. Khonadakar and Fahim (2014) agrees with Mukti (2014) and went on further to state that there is a significant relationship between accounting information and strategic decisions. Strategic decisions in all areas of the business significantly depend on accounting information hence the other role of AIS is to aid in decision making.

2.2.3 Accounting information system and Organizational performance

One method to improve the productivity of management and other employees is the integration of information systems. Contemporary information systems have more or less automated processes. The major reasons for implementing integrated information systems are the savings in employee time in executing business processes, cost savings, and increases in competitiveness, Juozapavičius, Micku, Mikaliūnas, Pelanies and Urbonas (2009). He also stated that AIS is an integrated instrument that fits into the field of information technology in a bid to aid in designing a journey to achieve a competitive advantage.

Thompson (2009), a number of scholars have stated that AIS plays a practical role in the strategy making. He further defined a strategy as a management's action plan...
for running the business and conducting operations. Data quality has become crucial for the success of AIS today, Mukti (2014).

### 2.2.4 Accounting information system and Organisations

Organisations use different Accounting information systems that are custom made to meet the management goals. Huber (1990) purports that companies design and implement Accounting information systems that suits the need of management. AIS with the help of computerized accounting system, shows the financial statements namely profit statements, cash flow statement and Balance sheet with the click of a button. Patel (2015), classified AIS in two types i.e. Integrated and disintegrated systems.

Grande etai (2010) stated that there is a significant relationship between the corporate strategy, accounting information system design and the overall performance of the organisation. Chenhall (2003), also agrees with the previous researcher and went on to further state that an AIS that was designed with the cooperate strategy in mind, guarantees organisational success..

#### 2.2.5 Disintegrated accounting system

The use of multiple AIS within one parastatal leads to some organisations failing to fully benefit from the use of the package, Jackson and Sawyer (2002). Disintegrated accounting information system is the use of an accounting package that does not integrate all modules under one suit.

#### 2.2.5.1 Merits of Disintegrated accounting information system

According to Walker (2009) the main advantage is that, the attention of the parastatal’s management can be focused on the operational activities and observe industry trends so as to achieve better performance.
2.2.5.2 Demerits using disintegrated accounting system

The disadvantages of using a disintegrated accounting packages are that more than the advantages. According to Bansal (2013) disintegrated AIS are prone to high operational costs due to information rework. They can also cause client dissatisfaction when data needed to compel necessary documents will be unavailable when desperately needed.

Bansal, (2013) stated that that keeping information on multiple computers systems leads to integrity challenges, the following are some of them;

- Challenges in delivering customer service- Customers now expect to access the organisation’s data base through many different channels and hope to get the best service out of it, Kahn (2012).
- Poor data quality- Kahn (2012) noted that incorrect information is being gathered by the entity therefore the end result is that, the parastatal’s decisions will be based on poor data thereby affecting the performance of the organisation.

2.2.6 Integrated Accounting information systems

The shortcomings of disintegrated accounting information systems can only be rectified by integration. Integration of systems in e-commerce needs to address the following;

- Integration of systems between two or more corporations carrying out e-commerce
- Inter-parastatal integration.

Among the systems that need to be integrated within an organization are apprentice bank accounts, accounting entries and financial systems, human resources including payrolls Chan (2003). This is further supported by Price (2006) who states an effective system has to be integrated and accessible throughout the whole organization so that different users can use the same system at the same time.
2.2.7 Integrating

Butkevičius (2009), defines Integration as a process of linking systems together to form one whole system. Currently, integration is increasingly needed in the business environment. This need emerges from the efficiency and synergy requirements necessary in a complex and turbulent environment. In other words, integration is needed to facilitate coordination, which is again related to the building of competitive advantage.” Piccoli (2012). Butkevičius (2009), integrated management of organizational processes is a prerequisite for the improvement of competitiveness. An accounting information system plays the role of an integrator of the information processes.

2.2.7.1 Merits of integration


2.2.7.2 Demerits of integrated accounting information system

Walker (2009) argues that the main disadvantage of an integrated accounting information system is that the system provides information both for external and internal reporting requirements. The need for information for statutory purposes may influence the quality of information which can be made available for management purposes and also “the standardization advantages mentioned above also bring about limitations of flexibility that are all the more relevant for larger firms with unique local operations. With highly integrated operations, the need for change in a business unit or function must be weighed against the needs of the other units and the costs that they will have to bear to accommodate the change, Piccoli (2012).
2.2.8 Organizational Information Systems and their impact

Organisations who use multiple systems, should adopt Application Integration (AI). Piccoli (2012) stated that application integration is when two different systems are integrated together so as to allow efficient communication between them. The integration of departmental data bases within the organisation is referred as data Integration. According to Walker (2009), custom developed applications integrate Internal and external systems through the use of enterprise resource planning (ERP), supply chain management software and business intelligence tools.

2.2.9 Enterprise Resource Planning Overview

According to Kumar and Hillegersberg (2000), an ERP system is a configurable information systems package, developed by commercial vendors to integrate information and information-based processes within and across functional areas in an organization. Turner and Weickgenannt (2013) defines an Enterprise Resource Planning as a multi-module software system designed to manage all aspects of an enterprise. According to Davenport (1996.), it is difficult to imagine how financial and management accounting of large government entities would function without the finance modules of an ERP (Enterprise Resource Planning). These tools are software integrated systems that are used to manage all the resources of the parastatal under one database. Daenpport (1996) stated that ERP helps managers run the business from front to back.
2.2.10 ERP MODULES

**Figure 2.2:** Enterprise resource planning modules

![Enterprise Resource Planning Modules Diagram](image)

**Figure 1** Enterprise resource planning modules


2.2.11 Purpose of ERP Systems in an organization

Fig 2.2 above, helps to illustrate the role of enterprise resource planning within an organisation. The parastatal has multiple departments such as sales, human resources, production and finance which perform different inter-related tasks. In the fig above, the application which administers the central data base is referred to as Enterprise Resource Planning. Bansal (2013) stated that an ERP is a Programme that combines all facets of the organisation under one suit.


2.2.12 Benefits of enterprise resource planning systems

1. Cost effective

According to Al-Mashari, Majed and Zairi, Mohamed (2006), highlights the major advantages of ERP is that, it makes sure that information conveyed does not controvert. The use of computers, helps to save on processing time and also reduce human errors.

2. ERP speeds up processes

Al-Mashari et al (2006) stated that, ERP speed up the process of preparing financial statements, since data from all departments of the parastatal that is necessary to compile the accounts can be obtained from the database easily.

3. Quality and efficiency,

Rainer and Watson (2012) stated that through the use of ERP systems, organizations can improve transaction processes thereby resulting in improvement in service delivery, distribution and production.

2.2.13 Drawbacks of enterprise resource planning systems

1. Might demoralize employees

According to Pearson (2008), the implementation ERP might cause significant changes in the welfare of employees i.e. some employees might lose their jobs because the system would be capable of performing multiple tasks at very low cost.

2. Computer reliant

Davenport (2006) stated that computers are prone to virus attacks if proper controls to safeguard data are not in place hence this may result in loss of data or data being corrupt and therefore becomes redundant.
3. Requires proper training

According to O’Brien (2004), stated that proper training of employees is essential so as to ensure a smooth running of the systems, however training requires costs time and money.

2.2.14 Enterprise application Integration

Wheeler, Dull and Gelinas (2014) defines Enterprise application integration as a method that integrates business processes, hardware and software to ensure an association between multiple exits, which enable them to act as one whole system. Wheeler et al (2014) also stated that besides EAI, there is Business Process Management Software (BPM), is a much more complex system, that EAI, it integrates external partners, automated and traditional systems together to form one data base.

2.2.15 Data Quality Strategy

According to Bhansali (2013), data quality strategy is a business process that combines parastatal information, cooperate strategy, culture of the organisation and information technology to ensure effectiveness within the organisation. Bhansali (2013), stated that the quality of data that is produced by the AIS is considered to be an important part of business and information technology strategy.

2.2.16 Data Quality

Data quality is often defined as ‘fitness for use’, i.e. an evaluation of to which extent some data serve the purposes of the user. Saeidi (2014). According to Pearson (2008), data collection, storage and use must be properly executed so as to rely on the outcome (garbage in, garbage out). According to Bhansali (2013), all personnel that are responsible for data input must be thoroughly educated about the importance of accuracy.
2.3 Empirical Evidence

Saeidi & Prasad (2014); Impact of Disintegrated Accounting Information Systems (AIS) on Organizational Performance: A case Study of TATA Consultancy Services (TCS) - India’

The objective of the research work was to know to what extent the disintegrated accounting information system is effective on organizational performance. The statistical population or universe of this research was out of the Tata Consultancy Services (TCS) companies in India. The results from the research resulted in the following hypothesis;

- There is negative relationship between disintegrated accounting information systems and the organizational performance.
- There is a significant relationship between overall financial performance of the organization and effectiveness of its accounting information system.
- Return on investment (ROI) of the organization has a significant relationship with the effectiveness accounting information system.

Majeed (2011) supports the work of Saeidi (2014) The parastatal’s performance is measured by Return on equity and Return on assets.

Onaolapo A. (2012), Effect of Disintegrated Accounting system on organisational effectiveness: A case study of selected construction companies in Ibadan, Nigeria, American Journal of business and management, vol.1,

The object of the study was to establish the effect of disintegrated accounting information system on profitability of the organisation as well as to study use of effective accounting information system in construction companies in Ibadan. The research found out that, AIS provides tools to finance department to enhance organizational effectiveness. It also showed that there is strong relationship between accounting information system and organizational effectiveness, this
means access to integrated accounting information, will lead to organizational effectiveness.


The main objective of this study was to examine the critical success factors for accounting information systems data quality. The research found out that accounting data is always poor where an organisation uses two separate accounting information systems. A model for critical success factors for AIS DQ was proposed and examined in four Nigerian organizations were carried out, where two of them were banking organizations and the other two are manufacturing organizations. The researcher discovered that, education and training of employees, nature of AIS (Integrated or Disintegrated) and management commitment are the main factors that ensures accounting information systems data quality.

Hongjiang Xu (2009): The critical success factors for data quality in disintegrated accounting information system-different industries’ perspective, USA

The study investigated the factors that influence DQ in disintegrated AIS. The researcher used questionnaire which were circulated to diverse sectors of the industry in the Michigan area of the United States of America. The researcher discovered that skilled workers and input control are essential to ensure data quality of disintegrated AIS. Incomplete or erroneous data may affect negatively on the competitiveness of firms.


The goal of the research was to investigate AIS integration models in Lithuanian small and medium enterprises, and to determine the prerequisites and obstacles for their integration with the business processes and external information systems. The
results of the research showed that the degree of integration of the accounting information systems of small and medium Lithuanian enterprises with their business partners and state institutions remains low, although prerequisites for the integration in some cases are in place. Obstacles that preclude closer integration with external the systems are the relative inflexibility of the accounting software, the lack of use of the contemporary information and communication technologies, and high investments. To encourage closer integration within the systems, the Service Oriented Architecture should be provided, and be open for Data Integration, easy customization, and extensibility.


The objective of the study was to find out the effectiveness of a disintegrated accounting information system is in relation to the changes in the business environment. The researcher used questionnaires which was sent through e-mails to respondents and the major respondents were Spearmark employees. The results indicated that, non-integration of accounting systems resulted in delays in preparation of accounts, thereby resulted in delays in processing clients’ accounts hence too many client complaints.

**Sarah Thompson (2005): An evaluation of Tetra CS3 (case study on Redfern parastatal). South Africa**

The objective of the research was to identify the weaknesses and the strengths of the accounting package. The target population was the employees from Finance, ICT and payroll administrators. The researcher used interviews to gather data from the respondents. She found out in her study that Tetra CS3 was not integrated thereby resulted in problems like delays in processing of invoices for clients thereby resulted in them losing a significant amount of revenue in the process.
2.3 Summary

This chapter conducted a literature study analyzing the effect of disintegrated AIS on organisational performance. The chapter also explains the relationship between accounting information system and organisational performance. The following chapter explains how the research was conducted.
CHAPTER III

RESEARCH METHODOLOGY

3.0 Introduction

The aim of this Chapter is to document the process that was used during the empirical survey which include the research framework, research design, the research population, sampling and sampling techniques, sampling procedures, data collection, validity of data and research limitations. According Yin (2013), research methodology section maintains at least five parts that are research design, sampling design, sampling procedures, data collection and analysis. The chapter gives an analysis of the methods used to collect primary and secondary data in an attempt to investigate the impact of non-integrated accounting information systems on organisational performance.

3.1 Research Framework

According to O’Leary (2004), research is a systematic enquiry whose objective is to provide information to solve managerial problems following a systematic research procedure. The Research framework of the present study is to investigate the impact of a non-integrated accounting information system on ZIMDEF’s performance.

3.2 Research Design

Green (2003), say that the research design is the plan and structure of the investigation so conceived to obtain answers to research questions. Baker (2007), defined it as a master plan of the methods and procedures that are used to collect and analyze data needed by the decision maker in the master plan, the following should be considered:
According to Yin (2013), there are basically four different types of research designs which are: Experiment, Case Study, Longitudinal design and Cross-sectional design. The researcher will apply two types of research techniques which are case study and descriptive research.

3.2.1 Case Study Research Design

According to Yin (2013), a case study is a research methodology based on an in-depth investigation of a single individual, group, or event to explore causation in order to find underlying principles.

Merits of Case Study Research Design

Green (2011), identified that a case study has the following advantages:-

- It was an effective method to challenge the theoretical assumptions
- It focused particular attention on a certain case hence the results can be generalised to similar situations

Demerits of Case Study Research Design

Green (2011) further asserts that some of the disadvantages of a case study include that

- It was hard to draw definite cause-effect conclusions however the researcher will use secondary data to draw definite conclusions.
- Possible bias in data collection and interpretation as data was gathered and analysed by a single person.

3.2.3 Justification of using case study

The researcher focused on a case study design and used ZIMDEF as a case study, which has a total of four branches in Harare, Bulawayo, Gweru and Mutare.
above reasons prompted the researcher to use a case study. A case study was used as it provides the practical aspect of the research study. It also enabled the researcher to enquire the how and why questions, in a bid to understand the complication of the situation at hand in ZIMDDEF. More so the study was conducted in an area where no previous studies were undertaken.

3.2.4 Descriptive research design

Best and Khan (2003), entails that descriptive research design’s main goal is to deliver an accurate and a binding depiction of (summarized) the aspects or variables that relate to the research question. It is also argued that “the key to descriptive research is to measure and record your variables accurately using a representative sample.” The descriptive research is regarded by Cohen and Manion (1989) as being concerned with conditions or relationships that exists, practices that prevail, beliefs, point of view, attitudes that are held and effects that are being felt. Descriptive research design was used because it explained the characteristics and how Disintegrated Accounting Information Systems has an effect on organizational performance.

3.3 Target Population

According to Best and Khan (2003) target population refers to any group of individuals that have one or more characteristics in common that are of interest to the researcher. The target population for ZIMDEF was 40 respondents which comprised of managers, Apprentice Payroll Officers, Revenue Officers and finance employees from the head office in Harare as shown in fig 3.1. The researcher used total population sampling, hence took 100% of the population.
Table 3.1

<table>
<thead>
<tr>
<th>Position</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance employees</td>
<td>10</td>
</tr>
<tr>
<td>Revenue Officers</td>
<td>10</td>
</tr>
<tr>
<td>ICT Offices</td>
<td>6</td>
</tr>
<tr>
<td>Managers</td>
<td>5</td>
</tr>
<tr>
<td>Apprentice payroll Officers</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

ZIMDEF Primary source 2016

3.4 Research instruments

O’Leary (2004), also further deduced that research instruments are tools which are used to collect data for the research project. According to O’Leary (2004), questionnaires are the most frequently used method of data collection in management research. For this particular research the researcher will incorporate questionnaires and also include the use of interviews.

3.4.1 Questionnaires

A questionnaire can be defined as a set of questions designed to generate data necessary for accomplishing the objectives of the research project, Chenhall (2003). Trimisiu (2012), highlighted that questionnaires are an inexpensive method of gathering data from a potentially large number of respondents. The researcher required respondents to provide information on the impact of non-integrated AIS on organisational performance thus open ended questions were used and they allowed respondents to respond without restrictions. The questionnaire were self-administered following an introduction and explanation from the researcher who personally delivered the questionnaires to the different units. The questionnaire coverage was limited to Head Office and Mutare branch. The important feature about the questionnaires was that they were anonymous hence participants could express themselves freely.
The researcher also used a likert scale in gathering simplified questionnaires. According to Miko (1998), a “likert scale is a psychometric scale that employs questionnaires by scaling responses of respondents alongside a range. Respondents were indicated their degree of agreement with given question by use of a scale

3.4.1.1 Advantages of using a questionnaire

- Questionnaires helped in avoiding bias since the researcher was not to influence responses from respondents.
- It was relatively quick to collect information using a questionnaire although it took time to design, apply and analyse.
- Questionnaires were easily distributed to a large number of people by the researcher
- Questionnaires allowed anonymity.

3.4.1.2 Disadvantages of using the questionnaire

- Questionnaires, like many evaluation methods occur after the event, so participants may forget important issues.
- Questionnaires were standardized so it is not possible to explain any points in the questions that participants might misinterpret.

3.4.2 Interviews

Haralambos and Holbomn (1990), define an interview as a face-to-face interaction whereby the respondents answer the researcher’s questions. In-depth interviews were used to collect data. Yin (2009), suggested that with interviews immediate follow ups and clarifications are possible. Interviewees were introduced first. Personal interviews were used where the researcher asked the interviewee questions face to face. Arrangements were made with ZIMDEF employees and managers in the organisation in order to get their personal views concerning the impact of a non-integrated AIS in achieving the fund’s designated mandate. This was done in order to complement the questions and obtain a reasonable basis for interpreting the results. The output of the discussions contributed significantly to the analysis and interpretation of the questions at hand.
3.4.2.1 Advantages of personal interviews

The advantages of carrying out an interview were that the researcher gained a deeper understanding of the validity of responses and also gained control of interview situation. Face to face interaction greater flexibility that is researcher was able to use his skill to encourage and reveal more about the impact of non-integrated accounting information systems on the parastatal’s performance. Answers probed from the respondents and at the same time, the behavior of the respondents were observed. The respondent were assured that the interviewer will not reveal the respondent's identity and will use the data only in aggregate form or give the results to official organizations.

3.4.2.2 Disadvantages of personal interviews

The setback is that, interviews are bias and that results are not representative and cannot be projected for the whole population. It was also time consuming to set up, interviewing, examining, response and reporting, that lead to quite a number of rescheduling of interview time.

3.5 Reliability

Saunders, Lewis and Thornhill (2003). is of the opinion that reliability is the degree to which data collection methods will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense is made out of raw data. Reliability means dependability or consistency Yin (2009). The role of reliability is to minimize the errors and biases in a study, Yin (2009) to ensure validity and relevance, the questionnaire will be:

- Pre-tested before the actual research. Pre-testing the instrument will enable the researcher to identify and clarify ambiguous questions.
- Each respondent received the identical set of questions. In other words they will be responding to the same stimuli hence increasing the validity of collected data.
3.7 Data Validity

According to Saunders (2009) validity refers to the extent to which a measure reflects the concept it intends to measure. Furthermore, basing on literature review, concepts were carefully defined and then a framework of reference was developed. Continuous checks were conducted between researcher and supervisor. In order to ensure that data answering the research questions were gathered, the questionnaires were used. It greatly assisted in identifying the effectiveness of an integrated AIS whilst interviews will probed into the issues highlighted by the questionnaires.

3.8 Data collection

When collecting data “each measure needs to be weighed up and considered in the light of your own research goal, as well as the researchers method’s inherent advantages and disadvantages” O’Leary (2004). Primary and secondary data was employed to produce reasonable conclusions and recommendations on the impact of using a non-integrated AIS on organizational performance.

3.8.1 Primary data

Primary sources according to Greener (2008), are directed explanations or descriptions of events. Primary data is the first hand data direct from the respondents through the use of questionnaires and personal interview. Firsthand information about the impact of unintegrated accounting information system at ZIMDEF was obtained.

3.8.2 Secondary data

This refers to information from sources other than the main sources, whereby some intermediate agent has compiled data or information in their own research and has now presented it as some part of a bigger study Greener (2008). The researcher made use of secondary data largely because it is data that is readily available and hence reduces time spent on the research because it is researched data which is relevant to the research question. This proved to be the most helpful method and thus account for much of the data used, especially in the literature review and the
analysis sections of this research study. The information included both quantitative and qualitative data.

**3.9 Data presentation**

According to Greener (2008), presentation of data is argued to be a soft form of data analysis, in the rationale that it is the preliminary phase headed for the official analytical tools. Data collected was presented in the form of Graphs, Pie Charts, Tables and Images.

**3.10 Data analysis**

The information that will be gathered reported in a narrative form so as to make it more meaningful information. Responses to each question by each respondent will be punched into computer spreadsheets Excel and Microsoft word as soon as the questionnaires were collected to prepare for analysis. The data collected in both pilot and the main study was analyzed using a Microsoft word and Excel packages.

**3.11 Data collection constraints**

While a lot of effort was made by the researcher to interview the relevant sample and to seek views, some challenges and constraints were experienced. These include some targeted participants refusing to be interviewed and opting to give researcher secondary internal data. Other targeted participants claimed to be busy to an extent of not sparing any time with the researcher neither could they find time to complete the questionnaire. Time constraints were mitigated by effective data collection and careful planning.

**3.12 Summary**

The chapter gave an overview of the procedure that was used by the researcher in carrying out the research. The researcher outlined the research design, which is a plan of how the research was carried. This was done in order to ensure that in built checks and balances exist. The next chapter will give a detailed presentation and analysis of the findings which were obtained from the research.
CHAPTER IV

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter focused on the presentation, interpretation and discussion of the results. The main purpose of the chapter was to review the results that were obtained from the research (primary and secondary) that was carried out by the researcher. Graphs, tables and pie, charts were used for data presentation. Explanations were made in a bid to enhance understanding of data presented on the pie charts, graphs and tables. The research was carried out by means of questionnaires and interviews.

4.1 Response rate from targeted population

Table 4.1

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Issued</th>
<th>returned</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires</td>
<td>40</td>
<td>38</td>
<td>95%</td>
</tr>
</tbody>
</table>

n= 40

Source: Primary Data 2016

A total of Twenty two (40) questionnaires were dispatched to the top management, Revenue Officers, ICT Officers, Apprentice Payroll Officers and finance department. From the questionnaires distributed 38 respondents returned the questionnaires, only two questionnaires were not returned. There was a 95% response rate.
4.1.2 Academic qualifications

Figure: 4.1 Academic qualification

![Academic Qualifications Diagram]

**Figure 2 Academic Qualifications**

**Source: Primary Data 2016**

Fig 4.2 shows that respondents holding degrees and postgraduate degrees constitute a large percentage of the sample; this indicate that the parastatal 67.5% (Masters-12.5% + Degree-50% ) of the sample are highly professional employees. The respondents in the bracket ‘other’ have employees holding ‘A’ level and O’level certificates. The degree of qualifications shown in the diagram above reflects that the populations constituted of educated personnel who are able to review relevant information to the study.
4.1.3 Length of service at ZIMDEF

The findings shown in the bar graph in, figure 4.1.3, shows that the majority of the respondents have been with the Fund for 5-10 years. The findings could give an implication that ZIMDEF retains its employees and are probably good employers. The respondents gave valid results since most of the respondents have worked in the organization for a much longer period thus having an experience with the accounting systems used by the parastatal. Due to the working experience, the respondents will also give reliable information as they know the strengths and weaknesses of using two separate Accounting Information systems.

**Figure 3 Length of service**

**Source:** Primary Data 2016

**Figure 4.2: Distribution of subjects by period of service**
4.1.4 Relationship between an accounting information system and organizational performance.

Table 4.2 The Relationship between AIS and organizational performance.

<table>
<thead>
<tr>
<th>Strength of feeling</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>30%</td>
</tr>
<tr>
<td>Agree</td>
<td>51%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>5%</td>
</tr>
<tr>
<td>Disagree</td>
<td>14%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The question sought to establish whether there is a link that exist between AIS and the performance of ZIMDEF. The results indicated that, 81% (51%+30%) of the respondents agreed that there is a significant relationship between an AIS and ZIMDEF’s performance, whilst 14% disagreed went the opposite direction. This was supported by Saeidi and Prasad, (2014), in her study when she found out that there was a significant relationship between organisational performance and the effectiveness of AIS at TATA Consultancy Services Grande (2010) also reported that there is a progressive relationship between, organizational strategy, AIS system design and the overall performance of a parastatal.
4.1.5 Effects of information produced on an AIS on management decision making.

Figure 4.3 Accounting information system and decision making.

This was done so as to find out whether the data produced by the AIS system, has an impact on management decision making. The researcher discovered that, 85% (33%+52%) of the responses believed that information produced by AIS systems is essential for management decision making. The results seem to agree with Trimisiu Tunji (2012), he stated that an effective and efficient accounting information system plays a central role in management decision making.

4.1.6 Decision making and its influence on organizational performance.

Table 4.4 Decision making and organizational performance

![Figure 5 Decision making and organizational performance](image-url)
Table 4.4 shows that, 38% and 47% of the respondents strongly agreed and agreed that the quality of decisions made using AIS significantly influence the success of the organisation respectively. However, 5% disagreed with the fact that making decisions using AIS have an influence on organisational performance. This is in line with Chang (2001) who studied the nexus between organizational strategies and performance. They discovered that organizations vary their AIS design so as to support their cooperate strategy, bearing in mind that AIS have the potential to enhance organizational performance.

4.2 Challenges associated with the use of disintegrated accounting information systems.

4.2.1 Duplication of effort

![Figure 6: Duplication of effort](Image)

Source: Primary Data 2016

Fig 4.5 Duplication of effort

The results indicates that 100% of the respondents agreed that the use of disintegrated AIS system results in duplication of data and therefore work becomes repetitive and boring which intern decreases the employee morale. The results agree with Walker (2006) who found out that capturing of the same information into two separate systems ultimately reduces efficiency and slows down progress with the parastatal.
4.2.2 Challenges in sharing information and reporting.

Figure 4.6 Difficulty in reporting and sharing information

![Graph showing difficulty in reporting and sharing information](image)

Figure 7 Difficulty in reporting and sharing information

**Source:** Primary Data 2016

The results show that, 86% (24% + 62%) of the respondents agreed. The findings show that the use of disintegrated AIS system results in integrity challenges when preparing financial and management reports and sharing of information. The majority of the respondents agrees with Bhansal (2013) who stated that the use of disintegrated AIS, have so many drawbacks, which include time consuming when preparing reports and difficult in sharing information.
4.2.3 Disorganized and Redundant database structure

Figure 4.7: Redundancy and Disorganized database structure

![Pie chart showing responses: Strongly Agree 28%, Agree 10%, Disagree 42%, Not sure 6%, Strongly Disagree 14%]

Source: Primary Data 2016

The results from this question disagree with Bansel (2013) who found out that the use of a nonintegrated accounting systems results in redundancy and disorganized database structure. The results show that, 56% of the respondents disagrees that a non-integrated AIS can lead to disorganized and redundant data.

4.3 The effect of a disintegrated AIS on organizational performance.

4.3.1 Financial loss as a result of using a Disintegrated AIS

The results indicate that 17% agreed and 83% respondents strongly agreed that there was loss in revenue due to penalties paid to ZIMRA for late remittances as a result of data which had to be reconciled within the two systems. The use of two separate accounting information systems have a significant effect on organisational performance. The information represented on table 4.9 shows that all the
respondents agreed that there was loss of revenue thus 100%. This is supported by Couture (2012) who said that the implications of using two separate AIS systems are poor quality data which then effects business users through increased running costs, inefficient decision-making processes, lower performance and incorrect financial reports.

4.3.2 Bad publicity due to Disintegrated AIS systems

Table 4.3 Bad publicity

<table>
<thead>
<tr>
<th>Strength of feeling</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>36%</td>
</tr>
<tr>
<td>Agree</td>
<td>64%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>10%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Primary Data 2016

From table 4.8 above indicates that 100% of the respondents’ believed that the use of disintegrated AIS have a negative effect on organizational performance through a bad publicity to the clients and 10% were not sure whether the use of disintegrated accounting information system can negatively affect the parastatal’s cooperate image. According Jackson and Sawyer (2002) the using disintegrated AIS systems can damage the cooperate image of the organisation, i.e. the quality of products produced, quality of services provide may disrupt customer satisfaction.
4.4 Factors Affecting data quality in accounting information systems

Figure 4.8

![Graph showing factors affecting data quality in AIS]

Figure 9 Factors affecting quality in accounting information systems

Source: Primary Data 2016

(a) The Attributes that affect data quality in AIS

The findings reflect that, the majority of the respondents believed that the nature of AIS system used by an organisation has a significant impact on the quality of data produced that is 71%. The results were in line with Hongjiang Xu (2010) who discovered that the quality of accounting information produced is imperative for the success of the systems.

(b) The impact of skilled employees and input controls on data quality.

The results show that, 96% of the respondents agreed that a combination of skilled personnel and data input controls have a significant bearing on the quality of information produced. Hongjiang Xu (2008) reported that organizations should
consider the most important components to maintain and improve the quality of data in AIS systems.

(c) **Data quality management as a measure to improve and maintain data quality.**

The findings reflect that 70% respondents agreed that employing someone who is specifically responsible for management of data quality can aid to improve the employing a data quality manager can help the organization to improve the quality of data produced by the organisation, however the 27% respondents who disagreed with the idea of employing a data quality manager are in line with Hongjiang Xu (2008) who stated that, it is expensive and imperatively difficult to employ a data quality manager in small and medium organisations, however to serve on employment cost, management should be responsible for data quality supervision. Basing on Hongjiang Xu (2008), his findings may be may not apply to this study because it was carried out to SMEs, yet the case study organisation cannot be classified under SMEs.

4.4.1 **Data quality strategy as a measure to improve and maintain DQ.**

**Figure: 4.9 Data quality strategy**

![Data quality strategy chart](image)

*Figure 10 Data quality strategy*
The results indicated that 76% of the respondents agreed that implementing a data quality strategy can have fruitful results in maintaining and improving organisational data quality. While 19% disagree and 5% were not sure, Bhansali (2013) discovered that launching an exercise to clean, capture data will help organisations achieve their long standing objective of enhanced Data Quality.

4.5 Enterprise application integration (EAI)

Fig 4.10: Employing a data quality manager and Adopting a data quality strategy

![Enterprise application integration](image)

*Figure 11 Enterprise application integration*

*Source: Primary Data 2016*

Fig 4.9 Enterprise application integration (EAI)

The findings indicated that 76% of the respondents were not sure whether the introduction of (EAI) can put to an end the challenges associated with the use of two separate AIS systems. This therefore contradict with the findings of Rainer and Watson (2012) who discovered that EAI can be used to merge different parastatal software’s into one. The results seem to suggest that, the respondents did not have
an understanding of EAI except for the ICT personnel and managers that’s why the majority were in the category of not sure.

4.6 Business process management software (BPM).

The question was designed to inquire whether the introduction of BPM software can be a solution to the challenges at hand. The results indicated that the majority of the respondents agree that BPM are essential and can help the organisation to operate effectively. Rainer and Watson (2012) stated that BPM software are more advanced than EAI systems and are designed to tackle a much more complicated job of integrating manual systems, automated systems and external services.
4.7 Interviews

4.7.1 Interview Responses rate

Table 4.4 Interviews responses

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of interviews</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews Scheduled</td>
<td>25</td>
<td>100%</td>
</tr>
<tr>
<td>Interviews conducted</td>
<td>15</td>
<td>60%</td>
</tr>
<tr>
<td>Interviews not conducted</td>
<td>10</td>
<td>40%</td>
</tr>
</tbody>
</table>

In the interviews that were conducted, the researcher managed to interview 60% of the population taken whilst 40% was not available for the time scheduled and some mentioned lack of time to in light of their busy schedules to make time for an interview. These interviews were done in order to acquire more comprehensive data and to check the validity and reliability of data given in the questionnaires.

4.7.2 The relationship between an accounting information system and the performance of an organization.

From the twenty five interviews conducted 73.33% of the interviewees agreed that there is a connection between an accounting information system and organization performance on the other hand, 26.67% disagreed. This position was also supported by the data acquired from the questionnaires.

4.7.3 Adoption of data quality strategy to improve and maintain data quality

The results showed that 100% of the interviewed population agreed with Jackson and Sawyer (2002) who stated that, the use of two or more separate systems within an organisation is expensive especially in small organisations. The responses indicate that the entity has been experiencing some drawbacks such as loss of revenue penalties paid to authorities.
4.7.4 Challenges faced due to the use two separate accounting systems

The findings from the interviews indicated that the parastatal has been failing to close their monthly accounts on time in order to produce reports since one system (SAP) was used for reporting purposes and the other system (Belina) for maintaining the apprentice payroll.

4.8 Data Triangulation

This is done to ensure data validity and reliability, therefore since the results from the questionnaire tally with the result obtained through interviews, hence the researcher can actively rely on the information provided.

4.9 Secondary data

Table 4.5

<table>
<thead>
<tr>
<th>Year</th>
<th>Tax to be Paid</th>
<th>Fine charged</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>12556</td>
<td>7324</td>
<td>$19880</td>
</tr>
<tr>
<td>2014</td>
<td>12750</td>
<td>12750</td>
<td>$25500</td>
</tr>
<tr>
<td>2015</td>
<td>14000</td>
<td>14000</td>
<td>$28000</td>
</tr>
</tbody>
</table>


Information presented on Fig 4.15 show the penalties paid by ZIMDEF to ZIMRA due to late remittances of apprentice wages, from 2013 to 2015. The information in the table show an increasing trend of penalties year after year. This has been supported by the data collected from the questionnaires.

4.10 Summary

The chapter interpreted and analysed data that has been collected mainly from the questionnaires. The information was presented using graphs and pie charts and it was sufficient enough to be able to allow the researcher to answer the research questions and objectives and to draw conclusions on them.
CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter touches on summary and conclusion of the findings of the research project, recommendations are also made to try elaborate the impact of using a nonintegrated accounting information system at ZIMDEF.

5.1 Summary Findings

- From the responses given, it was concluded that, there is an association between an accounting information system and organizational performance.
- The study’s finding also highlighted that the use of multiple accounting systems, negatively influences a firm’s performance.
- The study discovered that the use of non-integrated AIS negatively affects organizational performance.
- The study also found out that the type of AIS system used by ZIMDEF affects the quality of data produced.
- The study found out that, in an attempt to solve problems associated with the use of multiple accounting information systems, an organization can use enterprise application integration (EAI) system or business process management software (BPM).
5.4 Conclusion

- There is a positive relationship between organisational performance and accounting information system.
- The study points out, poor performance, increased operating costs and client dissatisfaction as the challenges associated with a disintegrated accounting information system.
- This study points out that the use of non-integrated accounting information system has a negative effect on the performance of Zimdef.
- The use Enterprise application integration (EAI), will help improve on duplication of effort.

5.5 Recommendations.

- To integrate separate accounting information systems (SAP and Belina), the study recommends the parastatal to use Enterprise application integration (EAI), this will help improve on duplication of effort. It will also improve on difficulty in reporting and sharing information within the organization and lack of capacity for process improvement.
- The study also advises on the use of Enterprise application integration system to integrate the organization’s AIS with that of external business partners such as banks and clients in order to attain real-time information and improve efficiency on service delivery.
- Another recommendation to the parastatal involves the adoption of data quality strategy to ensure maintenance and improvement of data quality. This will help in minimizing the risk of misstatement by eradicating errors.
- The parastatal needs to consider recruitment of competent personnel as there is an argument that this is an important attribute towards attaining high quality information within the organization
- To improve data quality, there is need for a parastatal to place emphasis on input controls.
5.6 Suggested areas of study

The research also recommend for further research on the factors that affect data quality in accounting information system and their impact management decision making since from the research carried out, the quality of information produced by the AIS system heavily affect management decision and organisational performance.
REFERENCES


Bhansali, N. 2013. Data governance: Creating value from information asset. USA; Taylor and Fransis group (CRC Press)


Yin Z.(1994). Case Study as a Research Method; Univesiti Teknologi, Malaysia


ZIMDEF ANNUAL REPORT 2013

ZIMDEF ANNUAL REPORT 2015

ZIMDEF ANNUAL REPORT 2016
APPENDIX I: LETTER OF INTRODUCTION

Bindura University of Science Education
P Bag, 1020
Bindura
Zimbabwe

November 16, 2016

Dear Sir

RE: Request to carry out an academic research in your department

My name is Collen Takudzwa Muguyo, Registration Number B1336158, a part 4 student with the above university doing Bachelor of Accountancy Honours.

During the 3rd and 4th year we are required to carry out a research project so with regards to this, I have chosen a research with the topic: An investigation of the impact of non-integrated accounting information system on organisational performance, case of ZIMDEF. I am asking to collect data in your department that can assist me on my project by delivering questionnaires and if possible hold an interview with you or any other person of your choice.

I do hope that you would grant me this opportunity and your acceptance will be greatly appreciated. You are guaranteed that the information obtained will be used for academic purposes only.

Yours faithfully

C Muguyo
APPENDIX II: Disintegrated AIS Questionnaire ZIMDEF

Please be assured that your responses will be held in strict confidence. (Please do not write your name on any questionnaire).

Please tick where appropriate

SECTION A: PERSONAL BACKGROUND

1(a) What is your gender? □ Male □ Female

(b) Indicate your age range from below (years)

□ (a) 20-25 □ (b) 26-35 □ (c) 36-44 □ (d) above 45 □

2. Indicate your academic qualifications?

(a) Diploma □ (b) Professional Courses □ (c) Degree □ (d) Masters □
(c) Other (specify)……………………………

3. Please indicate the department where you belong.

(a) Management □ (b) ICT department □ (c) Apprentice Payroll □
(d) Revenue Officer □ (e) Finance □

4) How long have served your organization?

(a) Up to 1 year □ (b) 1 to 5 years □ (c) Above 5 years □
**SECTION B**

You are expected to give your opinion on each of the models by ticking the appropriate box. The key is given as follows:

(SA–Strongly agree, A –Agree, NS –Not sure, D –Disagree, and SD –Strongly Disagree)

**Main Research Question.**
What is the effect of using a disintegrated Accounting Information System on ZIMDEF’s performance?.

<table>
<thead>
<tr>
<th>Q5</th>
<th>What is the relationship between AIS and Organisational performance?</th>
<th>SA</th>
<th>A</th>
<th>NS</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>There is a significant relationship between AIS and organisational performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>The output of AIS has an effect on management decision making.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Decision making within an organisation have a significant influence on organisational performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6</th>
<th>What are the challenges associated with disintegrated AIS?</th>
<th>SA</th>
<th>A</th>
<th>NS</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Using disintegrated AIS results in duplication of effort because data is captured into two separate systems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>The use of a disintegrated AIS system may result in difficulty in sharing information and reporting and because it is time consuming to convey data from two separate AIS.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C Disintegrated AIS are a product of redundant data and disorganized database structure because there is repetition of the same information in different systems.

Q7 What is the impact of using a non-integrated AIS on organisational performance?  

A The disintegrated AIS costed ZIMDEF thousands of dollars due to late payment of statutory remittances.

B The organisation experienced bad publicity about its accounting processes when it failed to pay apprentice wages on time due to the effects of a non-integrated accounting information system.

Q8 What are the factors that affect data quality in an AIS?

A The nature of AIS system used by ZIMDEF has a significant impact on the quality of data produced.

B AIS data quality is influenced by skilled personnel and input control.

C The Employment on a fulltime data quality manager yield positive results in maintaining the quality of data within the organization.
### Q9: What are the alternatives that can be done to mitigate the challenges associated with disintegrated AIS?

**A** The introduction of a Data quality strategy can be used to measure the quality of data produced within the organisation.

**B** Enterprise application integration (EAI) is the only measure that can be employed in order to mitigate the challenges associated with disintegrated AIS.

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10) Any other suggestions to improve the about how to mitigate the problem of using two separate AISs

……….
APPENDIX III: INTERVIEW GUIDE

Interview questions with management and staff

1. Do you think there is a relationship between accounting information system and ZIMDEF’s performance?
2. Did ZIMDEF ever suffer financial losses as a result of using a disintegrated accounting software packages?
3. What other problems do you think are created as a result of using two separate accounting systems?
4. Do you think the hiring of a data quality manager or introduction of data quality strategy is essential for improving the quality produced at ZINDEF?
5. Apart from EAI and BPM, which other process do you think might help to solve your current problem?
6. Do you have any other suggestions to improve or mitigate the problem of using two separate AISs