

INTERNAL AUDIT INFORMATION SYSTEM (IAIS) FOR INTERNAL AUDIT
DEPARTMENT OF GOLDEN HOPE PLANTATION BERHAD

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Dedicated to my beloved wife and son,
father, my late mother, my in-laws and to all my brothers and sisters

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ABSTRACT

Internal Audit Department (IAD) of Golden Hope Plantations Berhad (GHPB) current manual performance monitoring is unable to systematically control and monitor each executive audit visits, audit report issuance, department's monthly performance and categorize the audit findings according to non-compliance and process improvement. Internal Audit Information System (IAIS) is the proposed solution developed to computerize the current manual system. This will speed up the time and reduce the use of resources (manpower and cost). Object-Oriented Software Engineering (OOSE) is the technique used for this IAIS software development project. IAIS is an in-house developed system that is developed with a minimum cost. Any maintenance or trouble-shooting will be carried out by internal personnel. Implementing IAIS involves building a database thus helping the department to handle large amount of data, satisfy multiple users in using the same system concurrently, making the information retrieval and data input faster, and provide greater accuracy. Redundant record keeping is reduced or eliminated. IAIS will also assist the process of submitting the KPI monthly performance report to the KPI's Committee every month end. IAIS will also indirectly assist management in evaluating each executive's performance in IAD throughout the financial year and provide an indicator for bonus and increment. The monetary losses for each audit visit will also be identified and calculated. In line with the GHPB ICT Strategic Directions, IAIS will be an IAD's effort to support the GHICT master plan in enhancing business productivity and efficiency using ICT tools through computerizing IAD's process of keeping track the entire audit visits and duration reports issued to the auditee, monitor executive/department monthly performance and categorize the audit findings.

ABSTRAK

Proses pemantauan aktiviti secara manual Jabatan Audit Dalaman (IAD), Golden Hope Plantations Berhad (GHPB) sekarang tidak membolehkan pemantauan dan kawalan secara sistematik dilakukan untuk lawatan eksekutif IAD, pengeluaran laporan IAD, prestasi jabatan dan mengategorikan isu-isu laporan audit kepada ketidak patuhan dan pembaikan proses. “Internal Audit Information System” atau IAIS adalah sistem yang dibina bagi mengambil alih sistem manual untuk mempercepatkan masa dan menjimatkan sumber (tenaga kerja dan kos). “Object-Oriented Software Engineering” (OOSE) adalah teknik yang digunakan dalam membangunkan projek IAIS. IAIS dibina oleh staf IAD dengan kos yang minima. Sebarang pentyelenggaran dan pembaikan juga akan dilakukan oleh staf dalaman. Perlaksanaan IAIS melibatkan pembinaan pangkalan data yang akan membantu dalam mengendalikan data yang banyak, menyelesaikan penggunaan IAIS secara beramai serentak, membantu proses capaian maklumat dan penginputan data yang lebih cepat dan menyediakan data yang lebih tepat. Penyimpanan data yang bertindih juga akan dapat dikurangkan atau dihapuskan. IAIS akan juga membantu dalam proses penyerahan laporan prestasi KPI bulanan. IAIS juga secara tidak langsung membantu pihak pengurusan untuk menilai prestasi setiap eksekutif di IAD sepanjang tahun dan menyediakan penunjuk bagi pemberian bonus dan peningkatan gaji. Kerugian wang untuk setiap audit juga akan di kenalpasti dan dikira. Selari dengan Dasar Strategik GHPB ICT, IAIS adalah usaha IAD untuk menyokong pelan dasar GHICT dalam meningkatkan produktiviti perniagaan dan tahap kecekapan menggunakan peralatan ICT melalui proses pengkomputeran proses pemantauan keseluruhan jadual lawatan audit, pengeluaran laporan IAD, prestasi jabatan dan mengategorikan isu-isu laporan audit.

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LIST OF ACRONYMS

IAIS	Internal Audit Information System
IAD	Internal Audit Department
GHPB	Golden Hope Plantations Berhad
KPI	Key Performance Indicator
IS	Information System
IT	Information Technology
ICT	Information and Communication Technology
GHICT	GHPB's ICT Department
MIS	Management Information System
BMPs	Best Management Practices
PDA	Personal Digital Assistance
KLSE	Kuala Lumpur Stock Exchange
H&C	Harrison and Crossfield
PNB	Permodalan Nasional Berhad
ECS	Estate Computer System
GHOMIS	Golden Hope Oil Mills Integrated System
PAIMS	Precision Agriculture Integrated Management System.
GAAS	Generally Accepted Auditing Standards

LIST OF ACRONYMS

IIA	Institute of Internal Auditors
BOD	Board of Directors
UKAIS	United Kingdom Academy of Information System
EDP	Electronic Data Processing System
DP	Data Processing System
DSS	Decision Support System
ES	Expert System
EIS	Executive Information System
AIS	Accounting Information System
WWF	World Wildlife Federation
CPO	Crude Palm Oil
CRM	Customer Relationship Management
AICPA	American Institute of Certified Public Accountant
BA	British Airways
HP	Hewlett-Packard
BSC	Balance Score Card
ERP	Enterprise Resource Planning
UML	Unified Modeling Language
OO	Object-Oriented
OOSE	Object-Oriented Software Engineering
OOA	Object-Oriented Analysis

LIST OF ACRONYMS

OOD	Object-Oriented Design
OOP	Object-Oriented Programming
SWOT	Strength Weaknesses Opportunity & Threat
PIAR	Preliminary Internal Audit Report
LAN	Local Area Network
BCP	Business Continuity Plan
DRP	Disaster Recovery Plan

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CHAPTER 1

PROJECT OVERVIEW

1.1 Introduction

Internal Audit Information System (IAIS) is an effort by Internal Audit Department (IAD) to adopt ICT tools in its operations in line with GHPB's ICT master plan. ICT master plan is drafted to support GHPB in meeting the evolving business requirements, consistent change and competitive marketplace in line with the evolvement of the plantations industry. The paradigm shift has brought forth tremendous changes in the management of plantations industry.

IAIS will assist IAD to keep track internal auditors' audit visits and duration reports issued to the auditees, monitor each executive and department's monthly performance and categorize the findings according to non-compliance and process improvement.

Hence, in this project, the study aims is to bring about the changes, development and better improvement of the current manual process to a computerized system of IAD in monitoring its activities through the effective use of computer technology in terms of information management to provide both value and services to IAD of GHPB.

1.2 Background Of The Problem

IAD of GHPB is required to visit various operating units or auditee in Malaysia and overseas. Internal Audit Executives will perform financial, compliance, system improvement, operational and management audits of the above operating units. Audit portfolio includes companies in diverse industries and countries throughout the world, including plantations and manufacturing. After completing the audit visits, the executives will then be required to produce audit reports within the specified time throughout the financial year.

For every audit visit, IAD's management will monitor the duration in which reports are prepared and issued to the auditee to enable management to limit and control the process to ensure the budgeted reports to be produced in each financial year as prescribed in the department's Key Performance Indicator (KPI) are achieved.

KPI is a tool to evaluate every department performance in GHPB throughout the financial year. Every department is required to submit each month performance to the KPI's Committee. Every department's performance is dependant towards each executive in the department's performance as every visit completed will carry certain points depending on its objective, whether it's a normal routine visit, special visit or an investigation etc. This evaluation will enable management to evaluate each executive's performance in the Group throughout the financial year and provide an indicator for bonus and increment.

The findings from the above visits will then be categorized as non-compliance and process improvement findings. The monetary losses for each audit visit will also be identified and calculated.

Currently, all the above monitoring and controlling process is executed manually every end of the month by several senior executives and a manager. This process will consume time and resources in order to meet the tight dateline. This creates problems every end of the month for the management to keep track of the

audit visits and issuance of reports, monitor each executive and department's monthly performance and categorizing the findings according to non-compliance and process improvement.

A proper system application is needed to keep track the entire audit visits and duration in which reports are prepared/issued to the auditee, monitor each executive and department monthly performance and categorizing the findings according to non-compliance and process improvement. This will ensure a faster time and a reduce use of resources in preparing the monthly performance report to the KPI's Committee.

1.3 Statement of the Problem

IAD is unable to systematically keep track each executive in IAD audit visits and audit report issuance, monitor each executive and department's monthly performance and categorize audit findings to non compliance and process improvement findings.

1.4 Project Objectives

As a guideline to conduct this project, the following objectives are outlined:

- i. To study and analyze the internal audit visits, report issuance and executive/department's monthly performance monitoring process.
- ii. To design and build a prototype of a computerize system for tracking audit visits and duration reports prepared/issued to the auditees, monitor each executive and department's monthly performance and categorize the findings according to non-compliance and process improvement throughout the financial year.

1.5 Project Scope

The scope of the project includes the following:

- i. The study involves conducting research and analysis of the current internal audit visits, report issuance monitoring and executive/department's monthly performance monitoring process in order to identify and suggest improvement to computerize the current manual system.
- ii. IAIS keep track internal auditors entire audit visits and duration reports prepared/issued to the auditees, monitor each executive and department's monthly performance and categorize the findings according to non-compliance and process improvement.
- iii. The IAIS is developed to cater the requirement of IAD of GHPB in submitting their monthly performance report to the KPI's Committee, keeping track entire IAD's audit visits and analyze the audit findings.
- iv. The project only focus on data related to IAD's audit visits, audit findings and audit report issuance.
- v. The intended users of the system are the IAD's Executives, Senior Executives and the management of IAD which comprises of the Manager, Senior Manager, and Director of IAD. These people are the stakeholders for the proposed system.
- vi. The hardware used in developing the information system is a computer powered by Intel Pentium® M Processor with 30GB Hard Drive and 0.99GB Shared DDR SDRAM. The Programming Language that will be used is Microsoft Visual Basic version 6.0 with Microsoft Windows XP Professional Version 2002 Operating System environment as the platform and Microsoft Access as the database platform. Crystal Reports Professional is used to design and generate various reports needed by IAD. Microsoft Project 2000 is the project management software that will be used to assist in managing IAIS project which provides Gantt Chart for project planning, controlling and monitoring.
- vii. Type of testing to be used in testing IAIS is unit, integration and user satisfaction testing.

By determining the scope of the study, the following processes in developing the proposed system as the solution of the project problem would be easier and has clearer defined boundaries, which in turn act as a guideline in developing the system.

1.6 Importance of Project

This project is important to enable IAD to computerize the process of keeping track of the entire audit visits and duration reports been prepared/issued to the auditee, monitor executive/department's monthly performance and categorizing the findings according to non-compliance and process improvement. This will shorten the time and reduce the use of resources in preparing the monthly performance report to the KPI's Committee.

1.7 Chapter Summary

This chapter has discussed the background of the problems and how this project will overcome the above problems. This chapter also discusses the objectives, scope and the importance of implementing IAIS in IAD of GHPB.

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