



**UNIVERSITI TEKNOLOGI MALAYSIA**

**FACULTY OF COMPUTING**

**INDUSTRIAL TRAINING REPORT**

**DATA ANALYSIS IN AUDITING USING  
AUDIT COMMAND LANGUAGE (ACL)**

By

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**BACHELOR OF COMPUTER SCIENCE (BIOINFORMATICS) WITH HONOURS**

<b>TRAINING PLACE</b>	<b>: MALAYSIAN INDUSTRIAL DEVELOPMENT FINANCE</b>
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## **ABSTRACT**

This report focuses on the 20-week industrial training journey within a real-world working environment, emphasizing the student's curriculum. The training takes place at Malaysian Industrial Development Finance (MIDF) Berhad, a financial service provider that helps promote industrial growth as a catalyst for economic development in Malaysia. MIDF achieves this by offering services that support businesses in their growth, such as SME financing, investment banking, and asset management. This report explores the industrial training journey, detailing the tasks and responsibilities, side tasks, additional engagements, and skills gained throughout the internship. The main task, focusing on data analysis using Audit Command Language (ACL), a specialized tool for auditing and analysis, will be explained. The project aims to utilize ACL to enhance the efficiency and accuracy of auditing processes, automate repetitive tasks, and improve the reliability of audit outcomes. The work involved a combination of designing scripts, performing data analysis, validating audit results, and generating comprehensive reports. This report will articulate the entire process, beginning with the project's objectives, followed by the execution phase, a list of hardware and software used, the issues and challenges faced, and the knowledge gained. In conclusion, the report will summarize the findings of the industrial training, including achievements, insights, and suggestions regarding the overall training performance and experience.

## **ABSTRAK**

Laporan ini memberi tumpuan kepada perjalanan latihan industri selama 20 minggu dalam persekitaran kerja sebenar, dengan memberi penekanan kepada kurikulum pelajar. Latihan ini dijalankan di Malaysian Industrial Development Finance (MIDF) Berhad, sebuah penyedia perkhidmatan kewangan yang membantu mempromosikan pertumbuhan industri sebagai pemangkin kepada pertumbuhan ekonomi di Malaysia. MIDF mencapai ini dengan menawarkan perkhidmatan yang menyokong perniagaan dalam pertumbuhannya, seperti pembiayaan PKS, perbankan pelaburan, dan pengurusan aset. Laporan ini meneroka perjalanan latihan industri, merangkumi tugas dan tanggungjawab, tugas sampingan, penglibatan tambahan, dan kemahiran yang diperoleh sepanjang latihan. Tugas utama, yang memfokuskan pada analisis data menggunakan Audit Command Language (ACL), sebuah alat khusus untuk pengauditan dan analisis, akan diterangkan. Projek ini bertujuan untuk menggunakan ACL bagi meningkatkan kecekapan dan ketepatan proses pengauditan, mengautomatikkan tugas berulang, dan meningkatkan kebolehpercayaan hasil pengauditan. Kerja yang terlibat merangkumi reka bentuk skrip, analisis data, pengesahan hasil pengauditan, dan penjaan laporan yang menyeluruh. Laporan ini akan menghuraikan keseluruhan proses, bermula dengan objektif projek, diikuti dengan fasa pelaksanaan, senarai perkakasan dan perisian yang digunakan, isu dan cabaran yang dihadapi, serta pengetahuan yang diperoleh. Sebagai kesimpulan, laporan ini akan merumuskan penemuan latihan industri, termasuk pencapaian, pandangan, dan cadangan mengenai prestasi dan pengalaman latihan keseluruhan.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

As part of the University Teknologi Malaysia requirements, students must complete 20 weeks of industrial training in a relevant field, which is equivalent to 12 credit hours. This chapter provides an overview of the company where the industrial training was undertaken. It includes the organization's vision and mission, core business activities, organizational structure, and the Gantt chart outlining the timeline for the industrial training program.

#### **1.2 Organization Structure**

MIDF stands for Malaysian Industrial Development Finance Berhad, and its purpose is to help promote industrial growth as a catalyst for economic growth in Malaysia. MIDF was incorporated in 1960 mainly for the purpose of ensuring access to financing for manufacturing-based small and medium enterprises (SMEs), and as part of Malaysia's post-independence strategy to accelerate development of the industrial sector. As a wholly owned subsidiary of Malaysia Building Society Berhad (MBSB), MIDF specializes in three core business areas: investment banking, development finance, and asset management. MIDF has evolved from being Malaysia's first development finance institution into a diversified financial services provider. With a steadfast commitment to fostering growth, MIDF continues to support businesses at every stage of their lifecycle, delivering tailored financial solutions to meet diverse needs.

### 1.2.1 MBSB-MIDF Merger

Malaysia Building Society Berhad (MBSB) has merged its operations with Malaysian Industrial Development Finance Berhad (MIDF), following the acquisition of the entire equity interest of MIDF from Permodalan Nasional Berhad (PNB). This merger is viewed as a strategic move to strengthen MBSB's financial resilience, positioning the company as a significant player in Islamic banking.

The merger also builds on MIDF's long-standing role in supporting Malaysia's industrialization since its incorporation in 1960. As a financial services provider, MIDF focuses on investment banking, development finance, and asset management, including Shariah-compliant financing and wealth products. While the operational activities of MIDF were absorbed by MBSB, MIDF continued to operate under its own brand as a separate entity focusing on industrial financing and investment banking. This structural arrangement allowed the combined group to leverage the strengths of both institutions while maintaining specialization in key areas.

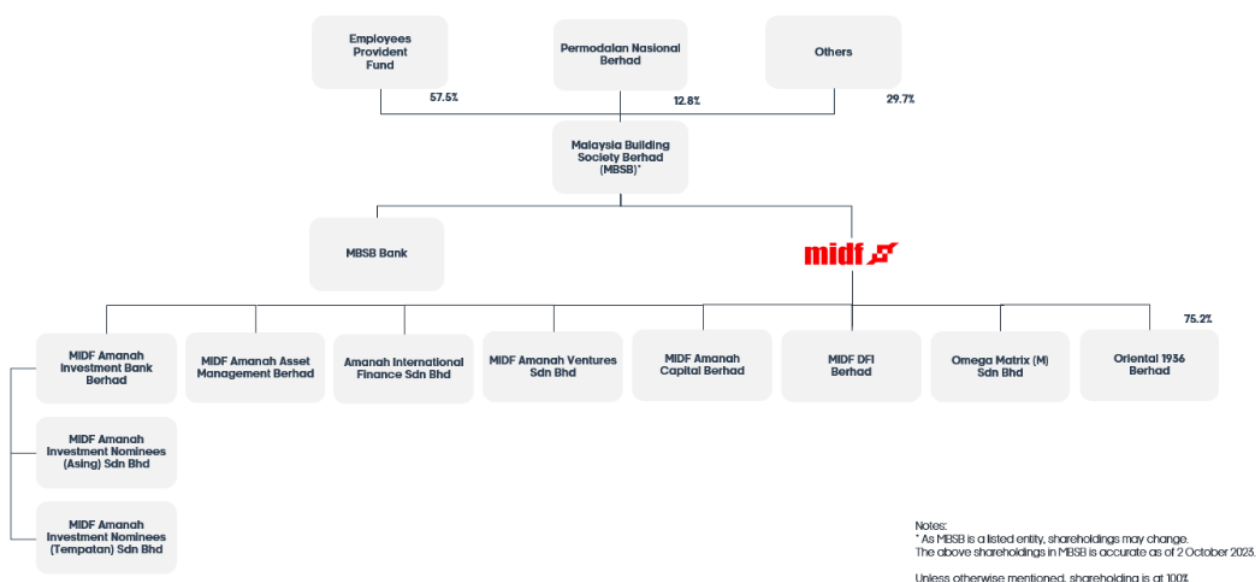


Figure 1.1 MBSB-MIDF Corporate Structure

### **1.3 Organization Vision and Mission**

MIDF aims to be a reputable and preferred integrated financial services provider, dedicated to creating superior value for stakeholders. The organization is committed to continuous progress and innovation, leveraging its expertise in the capital markets to seize opportunities that enhance its competitive edge. The mission of MIDF is to empower clients to thrive while contributing to the nation's economic growth. This is achieved by offering high-quality products and services in investment banking, development finance, and asset management.

### **1.4 Organization Core Business Area**

MIDF operates through three primary business areas, each tailored to meet the diverse financial needs of clients while contributing to the growth of the Malaysian economy.

#### **1.4.1 Investment Banking**

MIDF Amanah Investment Bank Bhd is dedicated to offering a comprehensive suite of investment banking services. This includes expertise in debt capital markets, corporate finance, equity underwriting, treasury operations, and equity broking. Additionally, the bank provides in-depth economic and equity research, ensuring clients receive well-rounded support tailored to their financial needs.

#### **1.4.2 Development Finance**

MIDF's Development Finance Business supports the growth of the services and industrial sectors in Malaysia by providing financing solutions to Malaysian enterprises. This initiative not only supports individual businesses but also contributes to the overall economic

development of the nation, promoting sustainable growth and job creation across various industries.

### **1.4.3 Asset Management**

MIDF Amanah Asset Management Bhd offers comprehensive fund management services to a diverse clientele, including statutory bodies, private pension funds, insurance companies, state government-related funds, charities, foundations, and corporations. The firm is dedicated to helping these entities achieve their financial goals through tailored investment strategies and expert management.

## **1.5 Internal Audit Division**

The Internal Audit Division (IAD) of MIDF plays a crucial role in maintaining the integrity and effectiveness of the organization's operations. IAD evaluates and contributes to the improvement of risk management, controls and governance functions within the MIDF. The internal audit division consists of three teams: Investment Banking & Asset Management, Development Finance Business & Shared Service, and Technology, each with distinct functions.

The training takes place in Technology Audit, where the team evaluates information technology (IT) systems, applications, and networks. This includes performing comprehensive risk assessments of the IT environment and analyzing data related to IT controls to identify trends and anomalies. Additionally, the team conducts cybersecurity assessments to protect sensitive data, analyzes system performance for efficiency and reliability, and ensures compliance with data protection and privacy regulations.

## Internal Audit Department

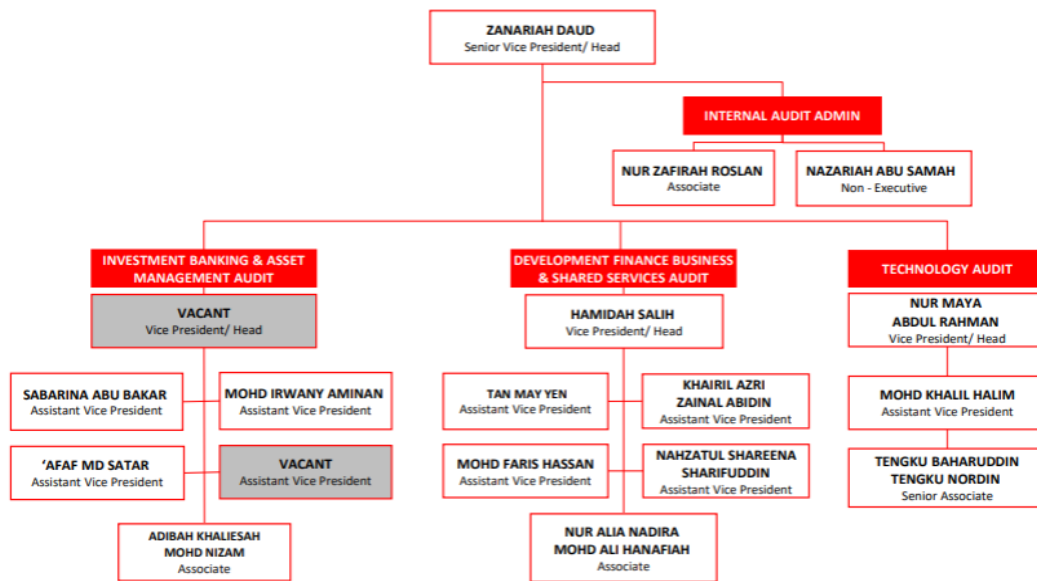


Figure 1.2 Internal Audit Department Board Charter

## 1.6 Internship Training Plan Gantt Chart

This Gantt chart outlines the timeline for the internship activities, illustrating the key tasks and milestones throughout the program. Each task is broken down into specific activities and durations, allowing for clear visualization of progress and deadlines.

Task	Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
Initial Training	Learn basic auditing concept																				
	Learn ACL software																				
Ongoing Audit	Data Analysis																				
	Working Paper																				
Project / Task	Preliminary Assessment																				
	Fieldwork																				
	Reporting																				
Final Reporting and Presentation																					

Figure 1.3 Internship Training Timeline

## **CHAPTER 2**

### **DETAILS ON TRAINING**

#### **2.1 Introduction**

In this chapter, an in-depth overview of the 20-weeks internship program will be provided, exploring both primary tasks and additional engagements that were part of the experience. It outlines the key activities undertaken throughout the internship, focusing on the core responsibilities as well as supplementary initiatives that contributed to personal and professional development. In addition, the chapter highlights the various hardware and software tools that played crucial roles in executing the tasks within the scope of the internship program. Furthermore, the chapter offers insight into the roles that contributed to shaping and enhancing the overall experience.

#### **2.2 Objectives**

The primary objectives of the project were:

- (a) To automate the evaluation of IT controls, improving audit efficiency by quickly identifying weaknesses and ensuring comprehensive coverage using ACL.
- (b) To use ACL to identify anomalies and potential risks within the IT environment, such as fraud or non-compliance.
- (c) To verify data accuracy and ensure that the data being audited complies with legal, regulatory, and organizational standards.



## 2.3 Data Analytic in Auditing

Data analytics is an essential part of the audit fieldwork. For each audit step, it is outlined and defined in the Audit Work Program (AWP), which serves as a guide for the overall audit process. The audit work program details the audit procedures, objectives, and timelines, ensuring that each phase of the audit is aligned with the audit objectives. Data analytics will be performed based on the test objectives defined in the AWP. This ensures that the analysis is targeted and focused on specific areas of interest.

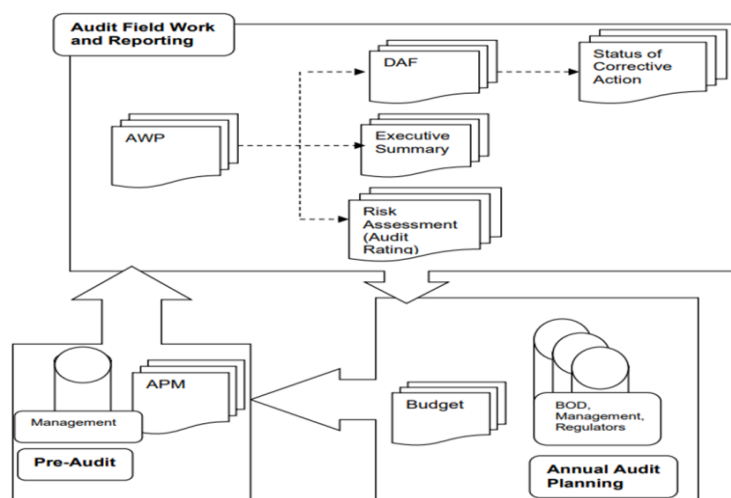


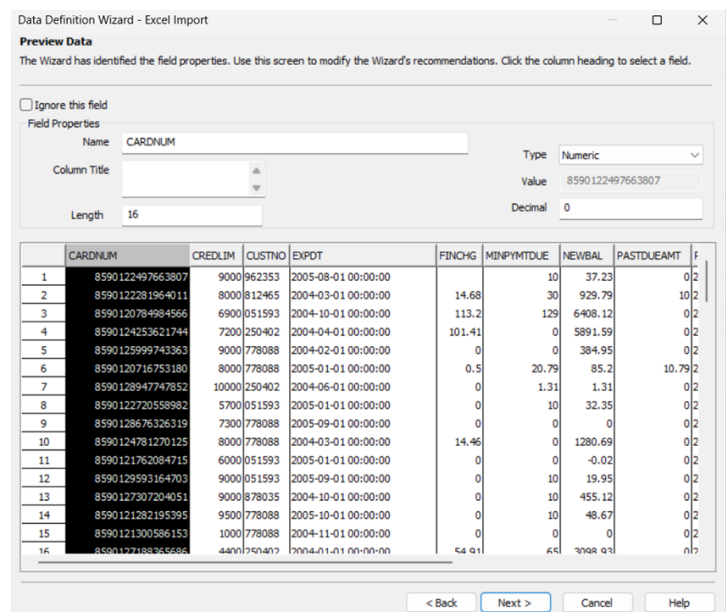
Figure 2.1 End-end Audit Process

## 2.4 Main Internship Task – Data Analysis

The project focuses on exploring and applying data analysis methodologies within the context of auditing, using Audit Command Language (ACL) software. ACL is a widely used tool in the auditing profession for data analysis, enabling auditors to analyze large datasets, automate complex calculations, and uncover anomalies that may indicate fraud, errors, or inefficiencies. The work involved a combination of design, analysis, preparation, validation, and reporting tasks, all aimed at enhancing the efficiency and accuracy of auditing processes using ACL.

## 2.4.1 Data Importing and Preparation

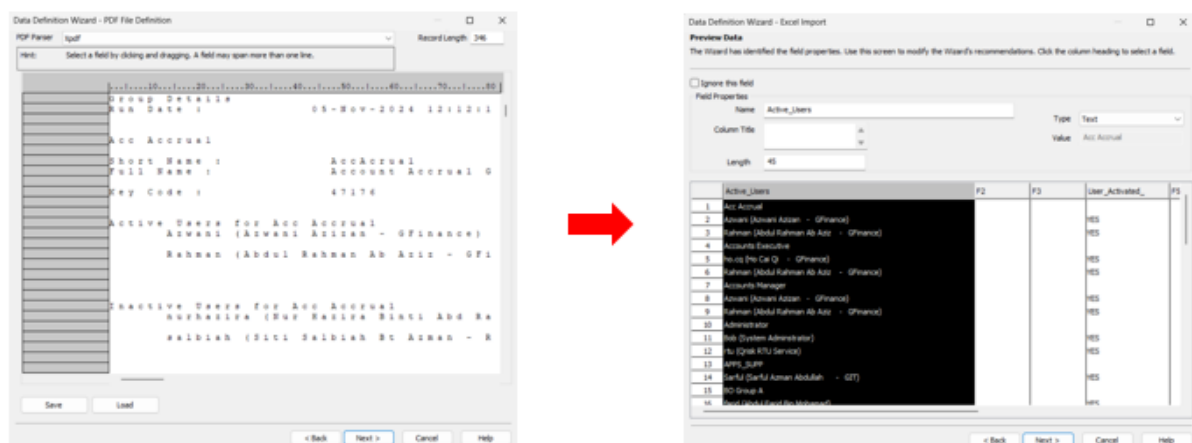
The data analysis process began with data extraction, where relevant information was gathered and consolidated into a structured format using ACL. The data could be either structured or unstructured before being extracted into ACL. If it is already in a structured format, data cleaning can be performed. If the data is unstructured, it needs to be converted into a structured format first before cleaning.



The screenshot shows the 'Data Definition Wizard - Excel Import' window. The 'Preview Data' section displays a table with 16 columns: CARDNUM, CREDLIM, CUSTNO, EXPOT, FINCHG, MINPYMTDUE, NEWBAL, PASTDUEAMT, and F. The table contains 16 rows of data. The 'Field Properties' section on the left shows the 'Name' as 'CARDNUM', 'Type' as 'Numeric', 'Value' as '8590122497663807', and 'Length' as '16'.

	CARDNUM	CREDLIM	CUSTNO	EXPOT	FINCHG	MINPYMTDUE	NEWBAL	PASTDUEAMT	F
1	8590122497663807	9000	962353	2005-08-01 00:00:00		10	37.23		02
2	8590122281964011	8000	812465	2004-03-01 00:00:00	14.68	30	929.79		102
3	8590120784984566	6900	051593	2004-10-01 00:00:00	113.2	129	6408.12		02
4	8590124253621744	7200	250402	2004-04-01 00:00:00	101.41	0	5891.59		02
5	8590125999743363	9000	778088	2004-02-01 00:00:00	0	0	384.95		02
6	8590120716753180	8000	778088	2005-01-01 00:00:00	0.5	20.79	85.2	10.79	02
7	8590128947747852	10000	250402	2004-06-01 00:00:00	0	1.31	1.31		02
8	8590122720558982	5700	051593	2005-01-01 00:00:00	0	10	32.35		02
9	8590128676326319	7300	778088	2005-09-01 00:00:00	0	0	0		02
10	8590124781270125	8000	778088	2004-03-01 00:00:00	14.46	0	1280.69		02
11	8590121762084715	6000	051593	2005-01-01 00:00:00	0	0	-0.02		02
12	8590129593164703	9000	051593	2005-09-01 00:00:00	0	10	19.95		02
13	8590127307204051	9000	878035	2004-10-01 00:00:00	0	10	455.12		02
14	8590121282195395	9500	778088	2005-10-01 00:00:00	0	10	48.67		02
15	8590121300586153	1000	778088	2004-11-01 00:00:00	0	0	0		02
16	8590127188366568	4400	778088	2004-11-01 00:00:00	0	0	0		02

Figure 2.2 Example of structured data



The screenshot shows the 'Data Definition Wizard - PDF File Definition' window. The 'Field Properties' section on the left shows the 'Name' as 'Active Users', 'Type' as 'Text', and 'Length' as '40'. The table on the right shows the 'Active Users' column with 16 rows of data. A red arrow points from the unstructured data on the left to the structured data on the right.

	Active Users	P2	P3	User_Activated	P5
1	Active Users				
2	Active Users				
3	Active Users				
4	Active Users				
5	Active Users				
6	Active Users				
7	Active Users				
8	Active Users				
9	Active Users				
10	Active Users				
11	Active Users				
12	Active Users				
13	Active Users				
14	Active Users				
15	Active Users				
16	Active Users				

Figure 2.3 Unstructured data converted to structured data

## 2.4.2 Data Validation and Verification

Data validation was conducted to ensure that the extracted and cleaned data complied with organizational policies and regulatory standards. To perform this, ACL provides built-in features for validating the data against predefined rules. The Validation Wizard can be used to define validation rules for specific fields.

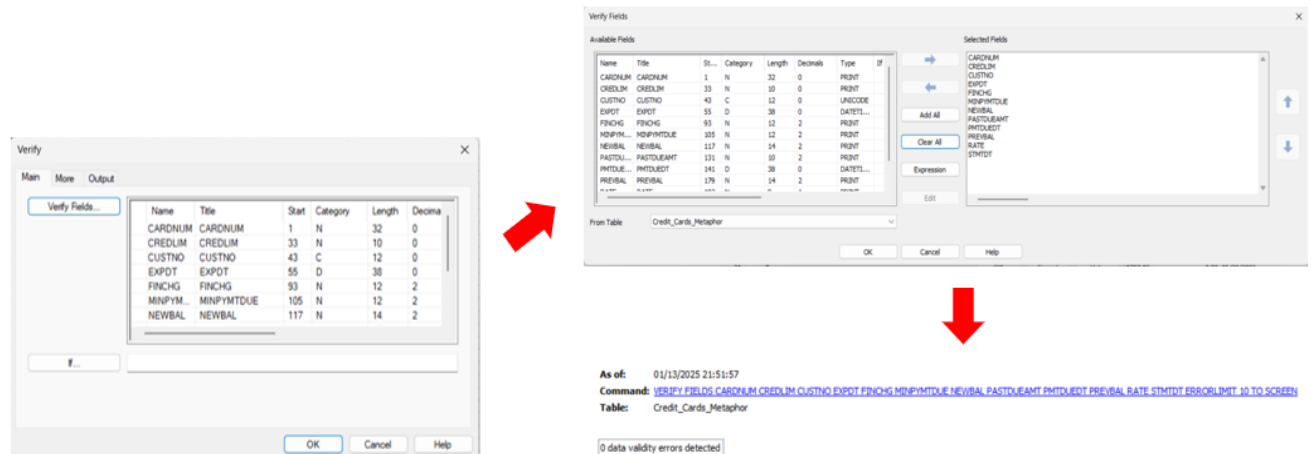


Figure 2.4 Data validation

## 2.4.3 Audit Processes

Audit processes are critical to ensure data integrity, identify anomalies, and maintain compliance within the dataset. In ACL, audit processes can be facilitated using several pre-built functions to test for data quality and compliance. Below are three example audit test cases that have been done and the step to perform them using ACL's pre-built features:

Table 2.1 Audit Test Cases

Test Case	Objective	Step / Command Used
Vendor Payment Anomalies	Detect irregularities in vendor payments, such as duplicate or overpayment issues.	1. Use the JOIN function to combine payment records with vendor information.

Test Case	Objective	Step / Command Used
		2. Apply DUPLICATE function to detect duplicate payments. 3. Use IF function to flag any overpayments based on preset limits.
Purchase Order and Invoice Discrepancies	Ensure that purchases are properly recorded and invoices match purchase orders.	1. Use JOIN to merge purchase order and invoice data. 2. Apply MATCH functions to check for discrepancies in amounts, quantities, and terms between purchase orders and invoices.
Gaps in Transaction Dates	Identify any gaps in the sequence of transaction dates.	1. Use the DATE function to extract transaction dates. 2. Apply DIFFERENCE to calculate the time between successive dates and identify any unexpected gaps.

#### 2.4.4 Reporting

Once the data has been validated and audited, it is ready for reporting. ACL provides a reporting interface, which includes pre-built functions such as the Summary and Table reports, allowing users to easily generate summaries, totals, and cross-tabulations based on the cleaned data. However, since the reporting features provided in ACL are not suitable for inclusion in official audit reports due to limitations in customization and formatting, they are not used in the final report. Instead, the final report is the Detailed Audit Finding (DAF), which presents the audit results in a more customized and detailed way.

Command: DO REPORT Default\_View

---

Page ... 1  
Produced with ACL by: Beta Testers Only, No Commercial Use

Unacceptable Transactions at Metaphor

First_N	Last_Name	Dept_Name	AMOUNT	DESCRIPTION	TRANS_DATE	CARDNUM	CODES	CUSTNO
[REDACTED]								

Figure 2.5 Example of Reporting in ACL

<p><b>CONFIDENTIAL</b> MIDF BERHAD</p>		<p>[Drawing]</p> <p>2024 GENERAL &amp; IS AUDIT ON PROJECT MANAGEMENT</p>
<p>2.0 DETAILED AUDIT FINDINGS ("DAF")</p>		
<p>2.1 Non-Compliance with The Supplier's Due Diligence Process During Procurement Stage</p>		
<p>Criteria:</p>		
<p>1. <u>Operational Procedures for Procurement (ADM-OP-PP) dated 17.08.2022</u></p>		
<p>Clause 6.14 - Selection of Supplier and Due Diligence</p>		
<p>6.14.1 <u>Supplier</u> evaluation or assessment is the process of evaluating, assessing and investigating potential suppliers' background <u>prior to issuance LOA</u></p>		
<p>6.14.2 The evaluation or assessment process should be <u>thoroughly conducted</u> by Administration Department and / or the relevant Department/Division of the respective transaction.</p>		
<p>6.14.3 Relevant information to be gathered on the supplier during the due diligence/assessment exercise shall be as listed below:</p>		

Figure 2.6 Example of DAF

## 2.5 Side Task

As part of the overall project, additional side tasks were also undertaken to support various organizational objectives.

### 2.5.1 Design Poster

One of these tasks involved designing a poster for mandatory training to raise awareness about the importance of completing the required training programs and ensuring compliance with organizational policies and regulatory requirements. Another poster was created to encourage staff members to log requests with the Helpdesk, ensuring that issues were addressed in a timely and organized manner.



Figure 2.7 Poster on Mandatory Training

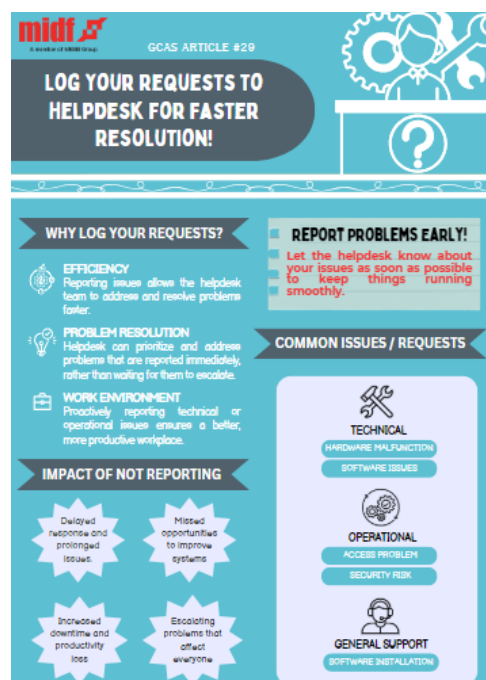


Figure 2.8 Poster on Log Request to Helpdesk

## 2.5.2 Manage SharePoint

The main page of the SharePoint site for the internal audit team was redesigned to improve organization and accessibility. Key resources such as audit reports, procedures, and important documents were categorized in a way that made them easy to find and use. The page layout was kept simple and intuitive to support the team's daily workflow. In addition to the design, the site was regularly updated to ensure all documents remained current and properly organized. This helped improve communication and made it easier for the team to access the necessary resources quickly, supporting more efficient audit processes.

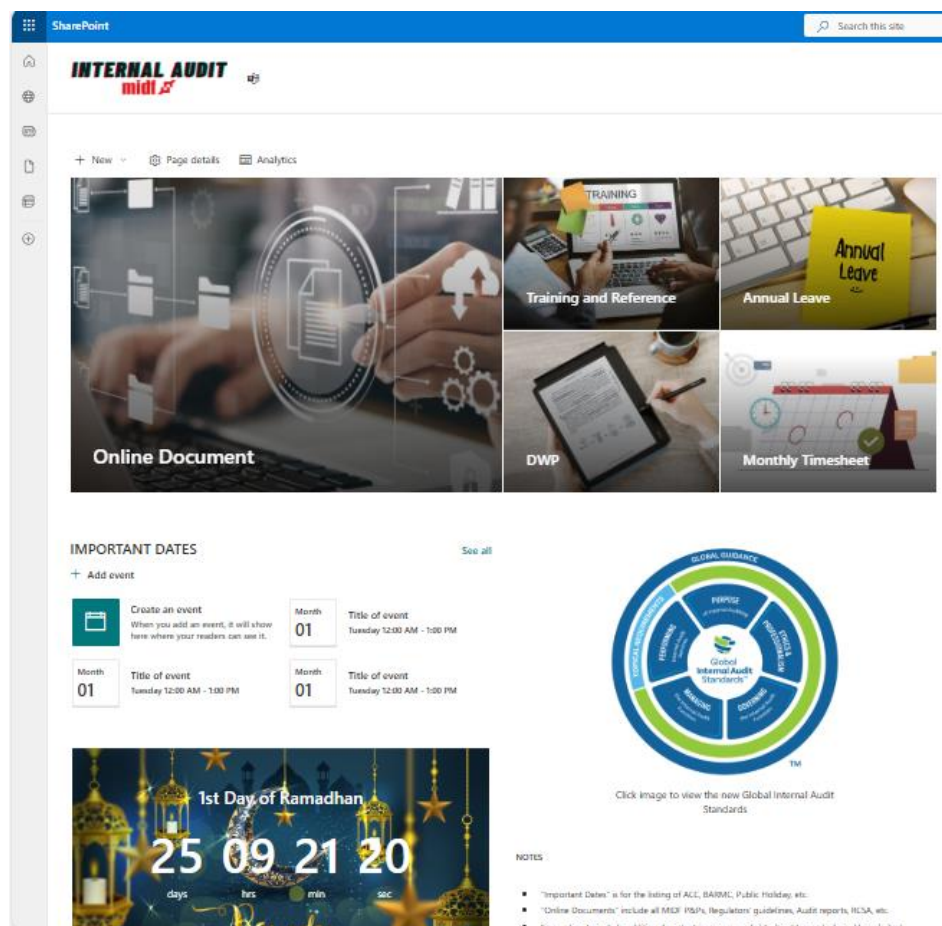





Figure 2.9 Main Page Layout of SharePoint for Internal Audit Team

## 2.6 Hardware and Software

Throughout the internship program, a combination of hardware and software tools were used to efficiently complete tasks and support various activities. These tools played a crucial role in the execution of daily responsibilities, helping to streamline processes, enhance productivity, and ensure the successful completion of projects.

Table 2.2 List of hardware and software

	Name	Specification / Description
Hardware	Laptop HP Probook	Processor: Intel Core i5 Operating System: Windows 11 Pro 64-bit Memory RAM: 16 GB
Software	Audit Command Language 	A data analysis and audit software used for automating data extraction, cleaning, and analysis to detect anomalies and ensure compliance.
	Excel 	A spreadsheet application used for organizing, analyzing, and a supplementary tool for basic data manipulation, reporting, and visualization of smaller datasets.
	Canva 	An online graphic design tool that enables users to create professional visuals with templates and a drag-and-drop interface.

## 2.7 Completion of Tasks

The following Gantt chart outlines the timeline for the completion of key tasks throughout the internship. It details the progression of activities in three main phases: Preliminary Assessment, Fieldwork, and Reporting. Each phase includes specific tasks designed to ensure the successful execution of the audit process. The chart provides a clear



overview of the timeframes allocated to each task, helping to track progress and ensure timely completion of all objectives within the internship period.

Task name	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16	WEEK 17	WEEK 18	WEEK 19
<b>PRELIMINARY ASSESSMENT (28/10/2024 - 15/11/2024)</b>												
Define Audit Objective												
Data Source Review and Preliminary Understanding												
Audit Plan and Methodology												
<b>FIELDWORK (18/11/2024 - 10/01/2025)</b>												
Data Preparation and Importing												
Identifying Anomalies and Patterns												
Audit Processes												
<b>REPORTING (12/01/2025 - 07/02/2025)</b>												
Prepare Audit Report												

Figure 2.10 Project Timeline Gantt Chart

## 2.8 Additional Engagements

In addition to the main tasks and responsibilities during the internship, several additional engagements were undertaken to further enhance the overall learning experience. These activities were not directly related to the primary tasks but provided valuable opportunities for professional development, networking, and contribution to organizational initiatives.

### 2.8.1 In Service Programme (InSPro)

The In-Service Programme (InSPro) is designed specifically for new employees to familiarize themselves with the organization. This program serves as a platform to welcome new team members and provide them with an overview of the company. The session aims to enhance employee engagement by offering an overview of the organization's subsidiaries, increasing awareness of the company's vision, culture, values, and processes, and encouraging networking opportunities to foster a sense of belonging. By participating in InSPro, new employees gain a comprehensive understanding of the organization, its operations, and are able to build connections with colleagues.

### 2.8.2 Compliance Games

The Compliance Games were organized as part of Compliance and Ethics Week, aiming to engage employees in a fun and interactive way while highlighting the importance of compliance and teamwork. A total of 10 teams, each consisting of 4 members from various departments, competing in friendly challenges. Throughout the games, teams worked together to complete tasks that required both strategic thinking and general knowledge of compliance. The Internal Audit team came in second place and won a RM300 cash prize. Overall, the event helped to strengthen teamwork, foster a sense of unity among employees, and remind everyone of the core values of compliance and ethics within the workplace.



Figure 2.11 Award Ceremony

### 2.8.3 Christmas Exchange Gifts

As part of the organization's end-of-year festivities, a Christmas Exchange Gift event was organized to promote camaraderie and holiday cheer among employees. Everyone was encouraged to engage in a fun gift exchange, where each person anonymously selected a colleague to exchange thoughtful gifts with. In addition to the gift exchange, fun games were

organized to enhance the festive atmosphere and encourage light-hearted interactions among employees. These activities not only helped to celebrate the season but also promoted stronger connections and a sense of belonging within the workplace.



Figure 2.12 Internal Audit Department Gathering

## 2.9 Conclusion

In conclusion, this chapter has provided a comprehensive overview of the project, detailing its objectives, scope, methodology, and key activities. The project aimed to enhance auditing processes through the application of Audit Command Language (ACL), focusing on data extraction, analysis, and reporting. The project successfully utilized ACL to automate auditing tasks and analyze large datasets more efficiently, which significantly improved the auditing process. Time management and resource allocation were also critical to ensuring timely completion, despite the constraints of limited staff. The experience gained through these challenges has provided valuable insights into the practical application of IT and data analysis techniques in the field of auditing.

## **CHAPTER 3**

### **OVERALL INFORMATION OF INDUSTRIAL TRAINING**

#### **3.1 Skills Improvement**

During my internship, I gained both theoretical and practical knowledge that are crucial for a career in Computer Science and Information Technology. The hands-on experience provided an opportunity to enhance a variety of technical and soft skills, which have prepared me for future roles in the IT industry.

##### **3.1.1 Problem-Solving**

One of the most important skills I learned was problem-solving. In the world of IT, being able to break down complex problems and approach them logically is the key. I was trained to think critically about how to tackle issues from different angles, which not only helped me with technical tasks but also developed my ability to make decisions under pressure.

##### **3.1.2 Teamwork**

Another valuable soft skill was teamwork. Most projects in IT require collaboration, and I learned how to communicate effectively with others, actively listen, and share progress regularly. This taught me the importance of maintaining good working relationships within a team, as well as the role of communication in keeping everyone aligned and on track.

### **3.1.3 Data Management and Analysis**

I gained a strong understanding of data management and analysis. I learned how to handle large datasets, clean data, and use tools like Excel and Audit Command Language (ACL) to analyze data. This skill is vital in any data-related role, whether it's in data analysis, business intelligence, or even software development.

## **3.2 Problems and Challenges**

During the execution of the tasks in this project, several challenges were encountered, ranging from data-related issues to technical difficulties.

One of the most significant challenges encountered during the project was dealing with poor data quality. The data extracted from various sources often contained inconsistencies, missing values, and errors, making it difficult to proceed with the analysis. Missing values in key fields, duplicated records, and inconsistent data formats (such as varying date formats or numerical precision) were particularly problematic.

Another challenge was the difficulty in handling unstructured data within ACL. While ACL excels at working with structured data in spreadsheets or databases, it struggled when dealing with unstructured data like text documents, logs, or other non-tabular formats. The project involved some datasets where the information was stored in less organized formats, such as email logs, free-form text, or scanned documents, which could not be directly imported into ACL for analysis. This required additional preprocessing and conversion steps to structure the data appropriately before it could be analyzed in ACL.

Time management and resource allocation were also significant challenges. Given the complexity and scope of the project, it was difficult to balance the time required for data extraction, analysis, and reporting within the set deadlines. Team members were sometimes had too many tasks to handle, which caused delays in some areas. One of the main problems was that there were not enough staff to manage all the work, which slowed things down.

### **3.3 Knowledge Gained**

During the industrial training, various valuable insights were gained from the supervisor, staff, and reference materials, which contributed significantly to the learning process.

My supervisor played a key role in guiding me throughout the project. She shared her extensive knowledge of the auditing process and helped me understand how to approach each task with accuracy and attention to detail. She also provided me with opportunities to take part in various audit tasks, giving me hands-on experience and helping me apply what I had learned. One of the most valuable lessons I learned was how to properly write working papers. My supervisor emphasized the importance of clear and organized documentation to ensure that audit findings could be reviewed easily. This was a skill I would carry forward into future auditing work.

The staff played an important role in the training experience. They were always open to questions and offered practical advice on how to handle specific challenges. One of the key lessons I learned from the staff was the importance of communication within a team, especially when different teams are involved. Regular updates and discussions were critical in keeping everyone on track and ensuring tasks were completed on time.

The reference materials, including books and online resources, were extremely valuable in helping build a deeper understanding of the audit process using Audit Command Language (ACL). These resources provided essential theoretical knowledge and practical examples that supported the effective application of ACL in data analysis and auditing tasks. The online platform provided a wide range of training modules on auditing techniques, data analysis, and professional best practices. These resources were a great way to reinforce what I was learning on the job and helped clarify complex concepts.

### **3.4 Comments**

During my industrial training, I believe I made good progress and learned a lot. I was able to get involved in the tasks and tried my best to improve my understanding of the auditing process.

One of the things I did well was quickly learning how to use new tools, especially Audit Command Language (ACL). I used what I learned from the reference materials and my supervisor to help with data analysis and to write clear and accurate audit reports. I always made sure to follow procedures carefully, which I know is important in auditing. However, at the beginning of the training, I had some trouble understanding how to use the auditing software and some of the more complex data analysis techniques. Although I improved over time, there were moments when I needed extra help to understand the more advanced parts of ACL. I think I could have asked more specific questions earlier to avoid confusion and learn faster.

When it came to working with the team, I made sure to keep in touch with everyone, but I know I could have been more active in sharing updates and asking for help when I faced challenges. Sometimes, I waited too long to report issues, which may have caused delays. In the future, I will try to be more open about problems and ask for help sooner to make sure things run more smoothly.

## **CHAPTER 4**

### **CONCLUSION**

#### **4.1 Achievements**

The overall achievement of the industrial training was the successful completion of the project, which involved analyzing large datasets using Audit Command Language (ACL). The training provided an opportunity to gain hands-on experience in data extraction, analysis, and the preparation of audit reports. Through the project, valuable skills were developed in data analysis, auditing practices, and the use of specialized software tools. Additionally, the opportunity to work closely with a professional team and receive guidance from the supervisor helped build a deeper understanding of auditing processes, preparing for future roles in the field.

#### **4.2 Issues and Challenges**

Several challenges were encountered during the internship. I also found it difficult to adapt to the company's internal systems. Every company has its own tools and platforms for communication, file sharing, and task management, and it took time for me to get used to them. It was sometimes confusing to know which tools to use and how to navigate them efficiently, especially when working on collaborative projects. The learning curve was steep, and I had to spend extra time figuring out how to use the company's systems.

Another challenge I faced was with the task assignments themselves. At times, the tasks I was given were either too advanced for my current skill level or repetitive and did not provide much opportunity for learning. Some assignments required expertise that I had not yet developed, which made it hard to contribute meaningfully to the project. The biggest challenge I faced was dealing with delayed or missing data. Sometimes the data I needed to analyze was



not available on time, or it was incomplete. This caused delays because I could not start my work without the full data and hard to finish my tasks on time and produce accurate results.

### **4.3 Opinion and Suggestions**

It would be helpful if there was a more detailed and structured training session for interns to teach them how to use the company's tools and internal systems. This training should explain how to use the tools for communication, task management, and file sharing. If interns are trained on the systems in the beginning, they will be able to use them more confidently and quickly, which will help them start their tasks without delays.

Supervisors should ensure that the tasks given to interns are appropriate for their skill level and experience. Assigning tasks that are too difficult can be overwhelming, while tasks that are too simple may not offer enough opportunity for learning. A better approach would be to give interns a mix of tasks that gradually increase in complexity.

To ensure that interns can complete their tasks efficiently, it's critical that the necessary data is available on time and in a complete format. Companies should establish clear timelines for when data will be provided to the team and communicate these timelines effectively. If delays are unavoidable, supervisors should notify interns in advance and provide guidance on how to proceed in the meantime.

## APPENDICES

### Appendix A Industrial Training Checklists (Placement)

#### INDUSTRIAL TRAINING CHECKLISTS (PLACEMENT)

No.	Activities/Tasks	Tick (√)	Endorse by and date
1.	Report Duty to The Organization Approved by faculty	√	
2.	Perform Report Duty Verification on ITS, verified by organization supervisor.	√	
3.	Contact faculty supervisor to inform the job scope and organization information	√	
4.	<i>Update of Industrial Training site (address). Inform faculty supervisor and JKLI, if any changes.</i>		
5.	Updating Industrial Training Logbook online – daily basis	√	
6.	Ensure that the organization supervisor is able to login to ITS successfully (Organization supervisor gets ITS userid and password).	√	
7.	Faculty Supervisor Visit. Date (physical): 14 <sup>th</sup> January 2025	√	
8.	Industrial Training Presentation.	√	
9.	Performance evaluation by organisation supervisor in ITS	√	
10.	Submission of Industrial Training Logbook.	√	
11.	Submission of Industrial Training Report with checklist and achievement form as Appendix.	√	
12.	Fill in Industrial Training Performance Evaluation by student in ITS.	√	
13.	End Industrial Training	√	
14.			
15.			

## Appendix B Industrial Training Achievements

**Sekretariat Latihan Industri**  
**Fakulti Komputeran,**  
**Universiti Teknologi Malaysia, 81310 SKUDAI, JOHOR**  
**Fax: 07-5565044 Tel: 07-5532008**

### INDUSTRIAL TRAINING ACHIEVEMENTS

■

(This form must be filled by student and must be attached in the Industrial Training report)

Student's Name : AIN BATRISYIA BINTI NORAZLAN

Organisation : MALAYSIA INDUSTRIAL DEVELOPMENT FINANCE (MIDF) BERHAD

No.	Task (List all tasks have been completed)	Month of Task Achieved				
		Month 1	Month 2	Month 3	Month 4	Month 5
1	Learned and applied ACL (Audit Command Language).	√				
2	Worked on gathering and validating data for audit processes.	√	√	√		
3	Assisted with testing data accuracy and completeness.	√	√	√		
4	Performed data analysis using ACL.		√	√	√	
5	Conducted risk assessments and documented findings.			√	√	
6	Assisted in preparing audit reports.			√	√	√
7	Participated in final audit reviews and report presentations.				√	√

<b>Deliverable/Training reflection</b> (Outcomes that have been achieved)
<ul style="list-style-type: none"><li>• Gained proficiency in using Audit Command Language (ACL) to analyze and validate large datasets, which improved the accuracy and efficiency of audit processes.</li><li>• Contributed to risk assessments and helped document audit findings.</li><li>• Assisted in preparing and reviewing audit reports, helping ensure the clarity and accuracy of audit findings and recommendations.</li></ul>

Student Signature: *ain*

Date: 30/1/2025

Approval	
Organisation's Supervisor:	Faculty Supervisor:
<i>Maya</i>	
Name: Nur Maya Abdul Rahman	Name:
Date: 31/1/2025	Date: