A TECHNICAL REPORT ON

STUDENT INDUSTRIAL WORK EXPERIENCE

SCHEME [S.I.W.E.S]

HELD AT

OFI OUTSPAN NIG LIMITED

BY

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ND/23/COM/PT/0061

DEPARTMENT OF COMPUTER SCIENCE

**INSTITUTE OF INFORMATION AND COMMUNICATION
TECHNOLOGY**

KWARA STATE POLYTECHNIC, ILORIN

FROM

SEPTEMBER TO DECEMBER, 2024

**IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE
AWARD OF ORDINARY NATIONAL DIPLOMA (OND) IN COMPUTER
SCIENCE, KWARA STATE POLYTECHNIC**

CERTIFICATION

This is to certify that **ABDUL-GAFAR MUKTHAR** with matriculation number **ND/23/COM/PT/0061** undergoes his industrial training at **OFI OUTSPAN NIG LIMITED,** In partial fulfillment of the award of National Diploma (**ND**) in computer science, Kwara State Polytechnic, Ilorin, undersigned by the following people:

…………………………………….   …..………………………

MR. ABDULKAREEM Q.B   **Date**

Department SIWES Supervisor

…………………………………….   …..………………………

MR OYEDEPO F.S   **Date**

Head of Department

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DEDICATION

This SIWES report is dedicated to GOD Almighty, Mr. & Mrs. **ABDUL-GAFAR** for their spiritual and financial support during my SIWES program.

ACKNOWLEDGEMENT

With overwhelming joy in my heart, I wish to thank the almighty God the fountain of all knowledge, my strength and my source, the great provider for his unconditional love and favor towards my life and throughout this academic pilgrimage. My immeasurable appreciation goes to my parents **Mr.** and **Mrs ABDUL-GAFAR** for their parental care and the support they have given me since the day I have been given birth to and for the effort they have put in ensuring that I become someone great in life.

My sincere appreciation also goes to the entire staff and management of **OFI OUTSPAN NIG LIMITED**

My acknowledgement is incomplete without acknowledging my H.O.D; **MR. OYEDEPO F.S** for his firmness and tireless effort in making Computer Science Department the best. To all my lecturers, thank you for the grooming and shaping. God bless you all.

Finally, only God is above all sort of mistakes. All errors in this work are strictly and exclusively mine.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

SIWES was established by ITF in 1973 to solve the problem of lack of adequate practical skills preparatory for employment in industries by Nigerian graduates of tertiary institutions.

The Scheme exposes students to industry based skills necessary for a smooth transition from the classroom to the world of work. It affords students of tertiary institutions the opportunity of being familiarized and exposed to the needed experience in handling machinery and equipment which are usually not available in the educational institutions.

Participation in Industrial Training is a well-known educational strategy. Classroom studies are integrated with learning through hands-on work experiences in a field related to the student's academic major and career goals. Successful internships foster an experiential learning process that not only promotes career preparation but provides opportunities for learners to develop skills necessary to become leaders in their chosen professions.

One of the primary goals of the SIWES is to help students integrate leadership development into the experiential learning process. Students are expected to learn and develop basic non-profit leadership skills through a mentoring relationship with innovative non-profit leaders.

By integrating leadership development activities into the Industrial Training experience, we hope to encourage students to actively engage in non-profit management as a professional career objective. However, the effectiveness of the SIWES experience will have varying outcomes based upon the individual student, the work assignment, and the supervisor/mentor requirements. It is vital that each internship position description includes specific, written learning objectives to ensure leadership skill development is incorporated.

Participation in SIWES has become a necessary pre-condition for the award of Diploma and Degree certificates in specific disciplines in most institutions of higher learning in the country, in accordance with the education policy of government.

It is vital that each internship position description includes specific, written learning objectives to ensure leadership skill development is incorporated.

Participation in SIWES has become a necessary pre-condition for the award of Diploma and Degree certificates in specific disciplines in most institutions of higher learning in the country, in accordance with the education policy of government.

Operators - The ITF, the coordinating agencies (NUC, NCCE, NBTE), employers of labor and the institutions.

Funding - The Federal Government of Nigeria

Beneficiaries - Undergraduate students of the following: Agriculture, Engineering, Technology, Environmental, Science, Education, Medical Science and Pure and Applied Sciences.

Duration - Four months for Polytechnics and Colleges of Education, and Six months for the Universities.

1.2 OBJECTIVES

The following are some of the objectives of SIWES:

i. SIWES will provide students the opportunity to test their interest in a particular career before permanent commitments are made.

ii. SIWES students will develop skills in the application of theory to practical work situations.

iii. SIWES will provide students the opportunity to test their aptitude for a particular career before permanent commitments are made.

iv. SIWES students will develop skills and techniques directly applicable to their careers.

v. SIWES will aid students in adjusting from college to full-time employment.

vi. SIWES will provide students the opportunity to develop attitudes conducive to effective interpersonal relationships.

vii. SIWES will increase a student's sense of responsibility.

viii. SIWES students will be prepared to enter into full-time employment in their area of specialization upon graduation.

ix. SIWES students will acquire good work habits.

x. SIWES students will develop employment records/references that will enhance employment opportunities.

xi. SIWES will provide students the opportunity to understand informal organizational interrelationships.

xii. SIWES will reduce student dropouts.

Foster commitment and collaboration with both internal and external constituents.

The 4 months Students Industrial Work Experience Scheme (SIWES) which is a requirement for the completion of my course of study, Computer Science, was undertaken at Ofi Outspan Nig Limited. The Organizations function is to provide training services for computer programmers and enable them to learn on the field practitioner.

CHAPTER TWO

DESCRIPTION OF THE ESTABLISHMENT OF ATTACHMENT

2.1 LOCATION AND BRIEF HISTORY OF ESTABLISHMENT

The name of the organization is Ofi Outspan Nig Limited, Km3 Afon Road Ogbondoroko Ilorin Kwara State. It was founded by group of computer scientists whose aim is to develop, train and recreate the world of technology with the motto, together, we recreate the world.

The company started its operation in November, 2019.

Presently the organization has grown wide to the extent that it has several departments.

In fact this institution has grown to the extent of having a staff of 15 or more and people that are been paid by this institution.

2.2 OBJECTIVES OF THE ESTABLISHMENT

i. To provide world class training services for computer students and IT enthusiast

ii. To provide a co-working space for experts to work and network

iii. To provide a community of like-minded technological experts

v. To create a platform where students of tertiary institutions can put classroom knowledge into real life practice
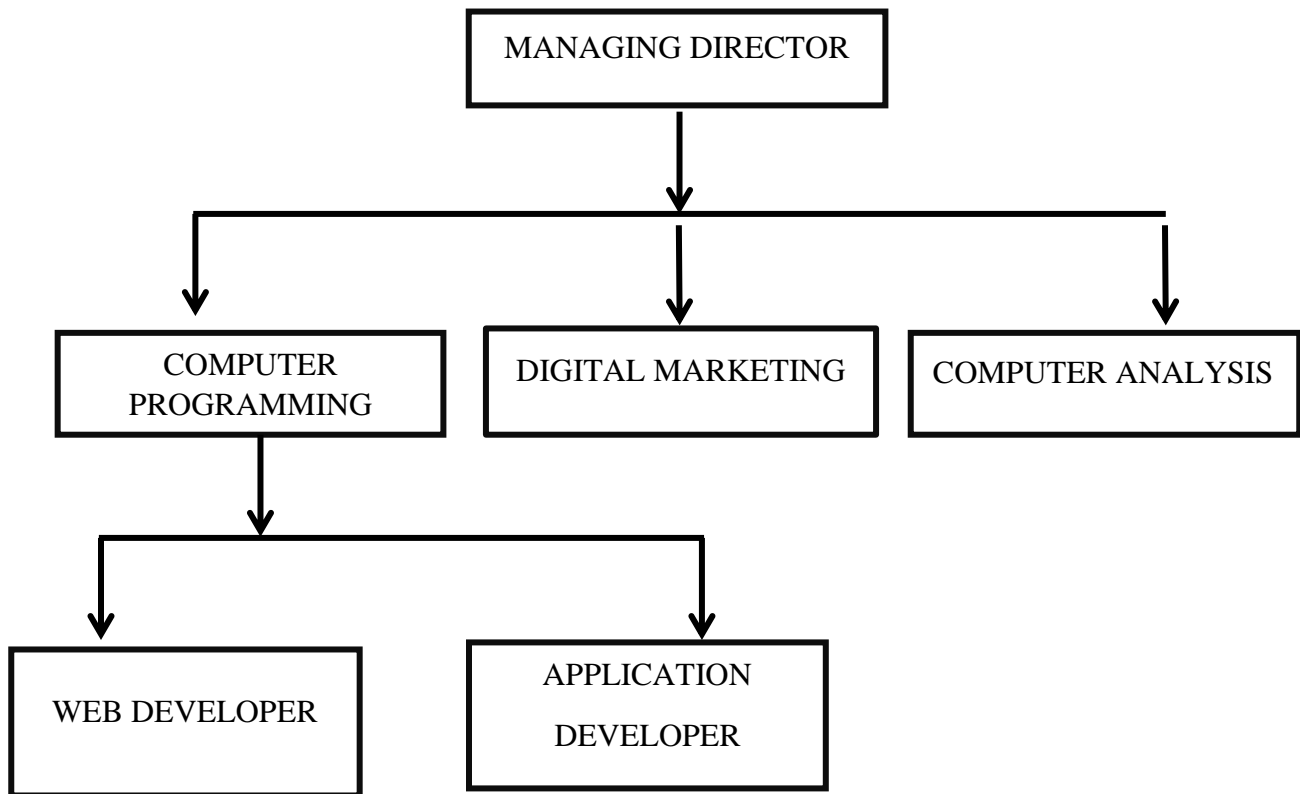
2.3 ORGANIZATIONAL STRUCTURE

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                    ┌──────────────────────┐
                    │  MANAGING DIRECTOR   │
                    └──────────┬───────────┘
          ┌────────────────────┼────────────────────┐
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│    COMPUTER      │ │ DIGITAL MARKETING│ │ COMPUTER ANALYSIS│
│  PROGRAMMING     │ │                  │ │                  │
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│              │  │   APPLICATION    │
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│              │  │   DEVELOPER      │
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Figure 1. Organizational structure of the company

2.4 THE DEPARTMENTS IN THE ESTABLISHMENT AND THEIR FUNCTIONS

There are three major departments in ofi outspan nig limited

Administrative Department

Human Resources Department

IT Department

• Administrative department: the main role of the administrator is to ensure the efficient performance of all departments in the organization. They provide motivation to the work force and make them realize the goals of the organization.

• Human resources department: this department is responsible for handling different functions within the organization. The department is responsible for hiring and firing employees, training workers, maintaining interoffice relationships and interpreting employments laws. The department works diligently behind the scenes to ensure that the organization runs efficiently.

- Information Technology Department: this is the department responsible for the architecture, hardware, software and networking of the computers in the company. Some of the activities of this department are programming, web development, technical support and administration.

CHAPTER THREE

INDUSTRIAL EXPERIENCE

3.1 INTRODUCTION TO COMPUTER

I was trained and exposed on how type on computer, the definition of computer, how is been able to accept data and categories of it.

3.1.1 CATEGORIES OF COMPUTER

Computers can be broadly categorized into two main types:

- **Analog Computers** – These computers process continuous data and are used for measuring physical quantities like temperature, speed, and voltage. Examples include flight simulators and old scientific instruments.

- **Digital Computers** – These computers process discrete data using binary (0s and 1s). They are commonly used in everyday applications, including personal computers, smartphones, and supercomputers.

Types Of Computer

- **Supercomputers** – Extremely powerful computers used for complex calculations, simulations, and research, such as weather forecasting and scientific modeling.

- **Mainframe Computers** – Large computers used by organizations for bulk data processing, such as banking transactions and airline reservations.

- **Minicomputers** (Mid-range Computers) – Smaller than mainframes, used by businesses for tasks like database management and networking.

- **Microcomputers** (Personal Computers) – Includes desktops, laptops, and tablets used for personal and business applications.

- **Workstations** – High-performance computers designed for technical or scientific applications like graphic design, engineering, and animation.

- **Embedded Computers** – Specialized computers built into devices like smartphones, appliances, and cars to perform specific functions.

3.1.2   COMPONENTS OF COMPUTER SYSTEM

- Hardware
- Software
- User
- Networking Components

PERIPHERAL DEVICES

- Input Device
- Output Device
- Backing Storage

PROCESSOR

- The control unit
- The memory unit
- Arithmetic and logic unit (ALU)

Input Device

- Mouse
- Keyboard
- Touch screen
- Web cam
- Microphone

Output Device

- **Printer**
- **Monitor**
- **Speakers**
- **Projector**

INTRODUCTION TO APPLICATION PACKAGES/SOFTWARE

1. **Word Processing Software** – Used for creating, editing, and formatting text documents (e.g., Microsoft Word, Google Docs).
2. **Spreadsheet Software** – Designed for organizing and analyzing data using tables and formulas (e.g., Microsoft Excel, Google Sheets).
3. **Database Management Software** – Helps store, manage, and retrieve structured data (e.g., Microsoft Access, MySQL).
4. **Presentation Software** – Used to create visual presentations with slides (e.g., Microsoft PowerPoint, Google Slides).
5. **Graphics and Design Software** – Enables users to create and edit images, videos, and animations (e.g., Adobe Photoshop, CorelDRAW).
6. **Accounting Software** – Helps businesses manage financial transactions and reports (e.g., QuickBooks, Sage Accounting).
7. **Web Browsers** – Used to access and navigate the internet (e.g., Google Chrome, Mozilla Firefox).
8. **Communication Software** – Facilitates online communication through messaging, emails, or video calls (e.g., Microsoft Outlook, Zoom).
9. **Enterprise Resource Planning (ERP) Software** – Integrates business processes like finance, HR, and supply chain management (e.g., SAP, Oracle ERP).
10. **Antivirus and Security Software** – Protects computers from malware and cyber threats (e.g., Norton Antivirus, McAfee).

USES OF APPLICATION PACKAGES

Application packages are essential tools that serve various purposes in personal, business, and industrial environments. They enhance productivity, streamline processes, and facilitate communication. One of the primary uses of application packages is document creation and editing. Word processing software allows users to write, edit, and format text documents efficiently, making it useful for students, professionals, and businesses. Similarly, spreadsheet software is widely used for data organization, financial calculations, and statistical analysis.

INTRODUCTION TO MICROSOFTWORD

Microsoft Word is a word processing software developed by Microsoft that allows users to create, edit, format, and print documents. It is widely used for various purposes, including writing reports, letters, resumes, and academic papers. Microsoft Word provides a user-friendly interface with numerous features such as text formatting, spell check, grammar correction, tables, templates, and image insertion. It also supports advanced functions like mail merge, collaboration tools, and cloud storage integration. As part of the Microsoft Office suite, Word is compatible with other applications like Excel and PowerPoint, making it an essential tool for personal, educational, and professional use.

USES OF MICROSFTWORD

- Document Creation and Editing
- Resume and Cover Letter Writing
- Official and Business Communication
- Mail Merge for Bulk Communication
- Tables and Data Organization
- Legal and Administrative Document

HOW TO CREATE A NEW DOCUMENT OPEN AND EXISTING DOCUMENT

Creating a New Document

1. **Open Microsoft Word** – Click on the Microsoft Word application icon to launch it.
2. **Select "Blank Document"** – On the start screen, choose "Blank Document" to create a new file.
3. **Use a Template (Optional)** – Instead of a blank document, you can choose a pre-designed template by clicking "New" and selecting a template that fits your needs.
4. **Start Typing** – Begin entering text, formatting, and editing your document as needed.
5. **Save the Document** – Click on "File" > "Save As," choose a location, and enter a file name to save your work.

Opening an Existing Document

1. **Launch Microsoft Word** – Open the application as usual.
2. **Click on "File"** – In the top menu, select "File" to access document options.
3. **Select "Open"** – Choose "Open" from the list to browse for a saved document.
4. **Choose a Location** – Select where the file is saved (e.g., "This PC," "OneDrive," or a specific folder).
5. **Select the File** – Click on the document you want to open and press "Open."
6. **Edit and Save** – Make any necessary changes and save the document using "File" > "Save" or "Save As" if you want to rename it.

TEXT FORMATING

Text formatting in Microsoft Word refers to modifying the appearance of text to enhance readability and presentation. It includes changes to font style, size, color, alignment, and other text effects. Below are some key text formatting features:

- Changing Font Style and Size
- Bold, Italic, and Underline
- Changing Text Color
- Highlighting Text
- Text Alignment
- Changing Line Spacing
- Applying Bullets and Numbering
- Using Text Effects and Styles
- Indenting and Tab Settings

Text formatting helps improve document presentation and readability, making it easier to highlight important information and maintain a professional appearance.

NETWORKING

Networking refers to the process of connecting multiple computers, devices, or systems to share resources, communicate, and exchange data. It enables devices to connect locally (within a home or office) or globally (over the internet). Networking plays a crucial role in modern communication, business operations, and technology infrastructure.

INTERNET

The Internet is a global network that connects millions of computers and devices worldwide, enabling communication, data sharing, and access to various online services. It is the backbone of modern digital communication, allowing users to browse websites, send emails, stream videos, and conduct business transactions.

COMPUTER NETWORK

A computer network is a system that connects two or more computers and devices to share resources, exchange data, and communicate. Networking enables seamless interaction between computers, allowing for internet access, file sharing, and collaborative work.

3.1.3   LAN

A Local Area Network (LAN) is a network that connects computers and devices within a small geographic area, such as a home, office, school, or campus. LANs allow users to share files, printers, internet connections, and other resources efficiently.
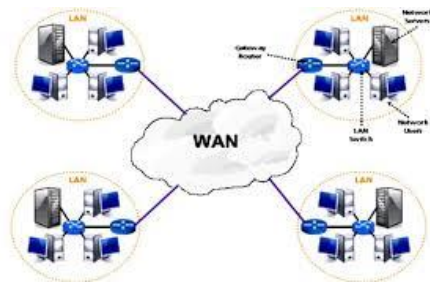
3.2   SOME PROJECT DONE AT THE FIRM

A Table Format
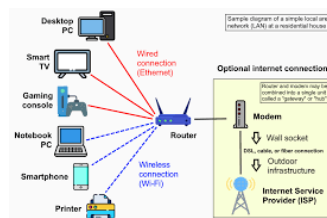
LOCAL AREA NETWORK

WAN

A Wide Area Network (WAN) is a type of network that covers a large geographical area, connecting multiple Local Area Networks (LANs) across cities, countries, or even globally. The internet is the largest example of a WAN, enabling worldwide communication and data exchange.

WIDE AREA NETWORK

PAN

A Personal Area Network (PAN) is a small network designed for personal use, connecting devices within a short range, typically within a few meters. It is used for communication between personal devices such as smartphones, laptops, tablets, and wearable gadgets.
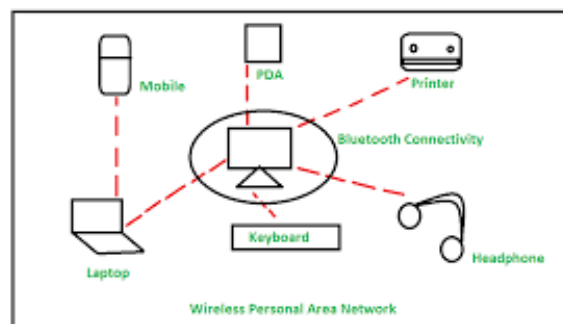
Personal Area Network

CHAPTER FOUR

CHALLENGES AND PROBLEM ENCOUNTERED

It is not uncommon to hear students on their Student Industrial Work Experience Scheme (SIWES) or internship lament over their unpleasant experiences, especially the challenges encountered in the process of finding a firm to accommodate and support them.

While it is expected of students to go out and acquire practical knowledge of their chosen fields, it seems also right for firms to make provisions to support their efforts.

Though internship is peculiar to polytechnics, but most universities have followed suit depending on the course of study of the students. The major objective of internship is to help students apply theoretical knowledge and school-based skills to practice before they enter the world of work.

The program came into existence following decree No. 47 of October 08, 1971 as amended in 1990. This decree gave birth to the founding of the Industrial Training Fund (ITF) in 1973/1974, which in turn established the Students Industrial Work Experience Scheme (SIWES) to bridge the gap between school-based knowledge and work-place skills. Though industrial training provides students with work experience that prepares them for the work place, but the major advantage is that it helps students discover their areas of career interests which they are most likely to acquire.

But despite this advantage, internship isn't without its hiccups, as students face the challenges of getting firms that would not just absorb them in their core areas of competence, but pay them monthly allowances. Vanguard Learning investigation reveals that organizations such as banks request for IT students because of cheap labour, others do not wish to accommodate students who beg for placements, while some organizations will ask the students to pay for the knowledge that will be acquired. Some of the challenges faced are listed below:

- Trekking each day to Ofi Outspan Nig Limited
- Lack of free access to internet for SIWES students at training place.
- Some of the projects I executed took me few days to debug at early stage of working.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0   CONCLUSION

In conclusion, this report has dealt with all I was taught both practical and theory during the SIWES program. The SIWES program is of great advantage which every student that participated will forever remember.

5.1   PERSONAL IMPRESSION ABOUT THE ORGANISATION

The Web Development Department of Ofi Outspan Nig Limited is a place to be and thank God that I went there for the industrial training. They have God fearing staffs and student have unlimited and unrestricted access to all their resources this makes it easier for students to learn fast.

5.2   SUGGESTIONS AND RECOMMENDATIONS

I will suggest that the ITF should keep the SIWES program going so that students in the higher institution can gain more practical experience which will prepare them ahead of the labour market demands.

I recommend the Computer Training of Ofi Outspan Nig Limited, Kwara state for any computer science student interested in Computer Learning, it is a place where one can never be the same after being trained and also for any IT department the student might fall into.