

**DIPLOMA IN INFORMATION TECHNOLOGY**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY**

**Industrial Attachment Report**

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# DECLARATION

**DECLARATION BY THE STUDENT**

I solemnly declare that the work done is composed solely by myself and authentic to the best of my knowledge and belief. I further declare that the work reported has not been previously submitted in whole or in part by another person.

**NAME: LORENE WAMBUI KARANJA**

**SIGNATURE: …………………….**

**DATE: …………………**

**DECLARATION BY THE SUPERVISOR**

I solemnly declare that the work done by this student was solely supervised by me.

**NAME: ………………………………**

**SIGNATURE: ……………………………………**

**DATE: ……………………………………………**

**TNT APPROVAL STAMP**

# ABSTRACT

The purpose of this report is to provide the details of the institution of attachment, a description of all the activities undertaken during the same, the lessons learnt and the challenges during the attachment period. The essence of attachment is to pull all the theoretical work done in class by a student into practical exercise.

I was therefore attached at The National Treasury for a period of three months.

# DEDICATION

I dedicate this report to my parents for the huge impact they have made in my life for raising me and making me believe in my strengths.

Thanks to everyone else who has influenced me to become the person who I am today.

# ACKNOWLEDGEMENT

I would like to thank The National Treasury at Harambee Avenue for allowing me to work as an attaché where I gained different skills.

I would like to acknowledge my parents for the financial support throughout the attachment period.

I would also like to thank my supervisors Mr. Timothy Kimaru for the unwavering support they accorded me in making this attachment a success.

Finally, I would like to thank my colleagues that I met during the attachment period and wish them the best in their future endeavours.

# DEFINITION OF TERMS

TNT: The National Treasury

ICT: Information Communication Technology

IFMIS: Integrated Financial Management Information System

PDF: Portable Document Format

WPS: Wi-Fi Protected Setup

HTTPS: Hypertext Transfer Protocol Secure

# EXECUTIVE SUMMARY

Industrial attachment was introduced as a requirement to gain practical skills to enable one to put into practice skills learnt in class, therefore I joined TNT for a period of three months. This report is therefore a summary of the activities I carried out, challenges I faced, solutions to the challenges and my recommendation.

# CHAPTER ONE: INTRODUCTION

## 1.1 BACKGROUND

Industrial attachment was introduced to inspire students with practical and technical skills, as partial fulfilment for the award of a Certificate, Diploma or Degree. During the training, students are able to link theoretical principles learnt in higher learning institutions and real-life technical applications. It gives students practical skills and the work environment philosophy to use their skills and principles learnt in class to serve the institutions and society in general. Due to the above reasons, Jomo Kenyatta University of Agriculture and Technology has organized 12 weeks of training in any institution of the student’s choice to allow every student to apply their skills and knowledge achieved during the course of study and to acquire new skills in managing relationships and carrying out different jobs assigned. That’s why I undertook my attachment at the TNT at Harambee Avenue.

## 1.2 OBJECTIVES

The main objectives of the attachment exercise were as follows;

* To be acquainted with the expectations of working in a highly competitive environment.
* To be exposed on areas out of classwork and to get access to company facilities and equipment.
* To assess the interests in the occupation I am undertaking.
* To enhance industry’s satisfaction with the graduate.
* To make the transition from school to the world of work smooth and to enhance relations with other people.
* To get an opportunity to apply class knowledge to real work situation closing the gap between university work and the actual practice.
* To enhance students’ awareness of public service obligations.

# CHAPTER TWO: DESCRIPTION OF THE ESTABLISHMENT OF ATTACHMENT

## 2.1 LOCATION AND BRIEF HISTORY OF ESTABLISHMENT

The National Treasury is located at the Harambee Avenue, Nairobi. It is the government initiative for finance in Kenya. This State Department is responsible for enhancing financial inclusion for economic development, providing basic financial security that benefits Kenyans upon retirement and new currencies that deal with counterfeits and illicit financial flows.

The mandate of this state department is to exercise overall coordination over all matters relating to finance risk management and to establish mechanisms, either on its own or with stakeholders that will end finance emergencies in Kenya.

## 2.2 OBJECTIVES OF THE ESTABLISHMENT

### 2.2.1 VISION STATEMENT

The vision statement of the TNT of Kenya is;

An institution of excellence in economic and public financial management.

### 2.2.2 MISSION STATEMENT

To promote economic transformation for shared growth through formulation, implementation and monitoring of prudent economic and financial policies at national and county levels of government.

### 2.2.3 CORE VALUES OF THE TNT

* Equity
* Teamwork
* Fairness
* Honesty
* Accountability
* Integrity and Transparency
* Inclusion
* Customer focus
* Stakeholders Participation
* Results oriented

## 2.3 ORGANIZATIONAL STRUCTURE

### 2.3.1. ICT DEPARTMENTAL DESIGN

The management and administration of day-to-day activities of the ICT department reside in the office of the Director, the overall responsibility for policy and general guidance is vested in the board of directors and the Director General of the supreme court of Kenya. The institute has an international advisory board to advise on various aspects of research projects. The institute has different departments which facilitate its day-to-day activities as shown in the structure.

**DIRECTORSHIP**

**MANAGERIAL**

**DEPARTMENTAL**

**MEMBERS**

**SYSTEM ADMINISTRATOR**

**ICT PROCUREMENT**

**ICT SUPPORT AND HARDWARE MAINTENANCE**

**ICT TECHNICAL & HARDWARE SUPPORT MANAGER**

**ICT SOFTWARE AND SYSTEMS SUPPORT MANAGER**

**ICT DIRECTOR**

## 2.4 DEPARTMENTS OF TNT

1. SUPPORT SERVICES

This department has five (5) divisions namely:

* Finance and Accounts
* Human Resource and Administration
* Supply Chain
* Information and Communication Technology
* Media and Public Relations

**2. POLICY, PLANNING AND RESEARCH**

* Coordinates research in the field of finance management.
* Providing a framework for coordinating and financing of the public sector’s role in the national response.
* Initiates and participates in organizational performance reviews and business process improvement programs.
* Convene joint planning and prioritization by stakeholders though joint forum.
* Develops and reviews the national strategy for finance management.

**3. INTERNAL AUDIT**

**FUNCTIONS OF THE DEPARTMENT OF ICT AND INNOVATION**

* Provides ICT-related support to all departments.
* Maintenance of company servers and databases.
* Stores and retrieves data and information when needed.
* Provision of ICT technical training.
* Maintenance of computer hardware and software components.
* Maintenance of company networks among others.
* Advises the different departments on technological advancement in the different fields of scope.

#### 4. TECHNICAL SERVICES

The Technical Services Department is composed of 4 divisions namely:

**ACCOUNTING SERVICES**

* Develops and maintains financial issues.
* Coordinates national and county finances assessments.

##### **PUBLIC DEBT MANAGEMENTS**

* Ensures the sharing of the benefits and costs of the public debt between the current and future generations.
* Promotes the development of the market institutions for the government debt securities.

#### DIRECTORATE OF BUDGET AND ECONOMIC AFFAIRS

* Formulates, implements and monitor macro-economic, fiscal and financial policies and regulations
* Builds and sustains effective partnerships both within and without the government and identifies development partners with an interest to support authority.
* Mobilizes resources for the authority through the engagement of collaborating development partners and organized groups.

###### **DIRECTORATE OF ADMINISTRATIVE AND SUPPORT SERVICES**

* Consolidation of county plans into financial contingency plans.
* Establishment and maintenance of finance response capacity database.
* Develops strategies and oversee coordination and implementation of finances response programs based on finance management

# CHAPTER THREE: EVALUATION OF THE ATTACHMENT REPORT PERIOD

## 3.1 BENEFITS OF THE ATTACHMENT EXERCISE

Concerning my objective during the attachment training, the whole process has been a success and all my objectives were well achieved.

I learnt a lot of things that added to my experience in the computing field. Apart from the practical skills acquired in my career, I was able to acquire new theoretical skills in my field of study which is of high importance to my knowledge of Information Technology.

Furthermore, this training taught me social skills and I learnt how to interact with people from different classes hence growing my confidence and enhancing interpersonal skills.

### 3.1.1. ASSIGNED ROUTINE DUTIES DURING ATTACHMENT

The following were the duties I was assigned at the ICT department of the institution.

* Assembling computer components
* Setting up projectors for a PowerPoint presentation.
* Taking part in the inspection of goods delivered such as new computers.
* Upgrading computers for example replacing CMOS.
* Crimping of Ethernet cables.
* Troubleshooting of desktops
* Conducting backup operations
* Installation of anti-virus to the computers that is Kaspersky internet security.
* Troubleshooting and configuring network problems.

### 3.1.2. PRACTICAL ACHIEVEMENTS OBTAINED

From my assigned duties and responsibilities, I was able to achieve the following benefits:

* I learnt how to use projectors
* I learnt how to run and use printers
* I learnt how to install office and windows operating system
* I learnt how to install a desktop and personal hardware
* I learnt how to install various printer drivers.
* I learnt how to do troubleshooting on a computer that hung up.

# CHAPTER FOUR: ACHIEVEMENTS AND GAINED EXPERIENCES

## 4.1 THEORITICAL ACHIEVEMENTS ACQUIRED

Apart from gaining experience practically, I gained some experience from theory work. The following were learnt;

* The evaluation processes.
* The Judiciary act and regulations.
* Inspection of new desktops and personal computers.
* Tendering procedures for local purchases.
* The complete process of using informatics and communication skills.
* The functions of various departments with their different committees.

## 4.2. KNOWLEDGE AND SKILLS/LEARNING EXPERIENCE ACQUIRED

My training exercise has helped me in analysing my options and my situation. During the attachment, I gained skills in 3 different axes.

Socially, I have gained confidence through my interactions with different classes of people and top officials. I have gained good interpersonal skills.

Professionally, I had the opportunity to put in practice whatever I’ve been learning in class like the computer assembling process, installing cables and designing the cabling system, installing and upgrading an operating system, learning how to crimp cables which were used for internet connection. I acquired good management, self-motivation and time management skills.

My knowledge about Information Communication Technology was expanded as I went through fieldwork and worked in different departments. I have learnt and acquired teamwork and problem management skills.

## 4.3. DISCUSSION ON GAINED EXPERIENCE AND SKILLS

One of the most important and obvious goals of an attachment exercise is the acquisition of real-world experience. Attachment allows learning first-hand experience that can’t be taught in class and helps us to get a practical translation of the theory taught.

The training has brightened the employment chances of the students in the universities. Through this attachment, I have gained good interpersonal skills through my interactions with my supervisor and the rest of the staff.

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 SUMMARY OF ATTACHMENT ACTIVITIES

During the attachment period I took part in different activities in the ICT department such as:

* Conducting backup operations
* Installation of anti-virus to the computers that is Kaspersky internet security.
* Troubleshooting and configuring network problems.
* Configuring D-link switches
* Cable management
* Office activation.

## 5.2 PROBLEMS ENCOUNTERED DURING ATTACHMENT

My training experience has been quite good though I faced some challenges before and as I progressed with my training. Some of the challenges faced include:

Finance – During the period of searching for an attachment place, it requires money as sometimes you have to travel to deliver your attachment requests and to purchase the required dressing attires. This leads to too much spending.

The problem of securing an attachment place – Getting a place to be attached was a problem as many organizations would fail to answer the request sent to them.

Lack of enough people in work hence the burden of work lies onto your back.

Limited time period – The time for searching for an attachment place was very limited as there was a delay in getting our attachment requirements from the institution.

Lastly, during the training, there is neither provision to pay attachments nor any drafted allowances and thus catering for the daily expenses becomes a burden.

## 5.3 HOW I OVERCAME THE CHALLENGES

Through the challenges that I faced, they gave me experience and taught me more. The following are some ways I used in solving the challenges:

* Being proactive – There being no much work, I engaged myself in productive projects which enabled me to gain much experience.
* I was able to cope with the limited period I had and work tirelessly to see success in the training.
* My parents aided in assisting me financially to the success of my training.

## 5.4 SUGGESTIONS FOR IMPROVEMENT OF THE SCHEME

During my training experience, I was able to cope up with different people and also the work allocated by different officials in the organization.

My suggestions for improvement of the scheme are as follows:

* Purchase new computer components such as desktops and printers so as to be used to learn different computer skills
* Employing or allocating different ICT officers who would assist in support and maintenance of computer components
* Organizing occasions and meetings where we can get to network with different people and learn new things.

# CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS.

## 6.1 CONCLUSION

The supervised industrial attachment allows students to apply and put into practice what has been learnt in class. This exposes them to work methods not taught in class.

It also acquaints them with the expectations of working in a highly competitive environment and provides an opportunity for the students to assess their interests in their career undertaken.

In review, the training has been a success and I was able to gain practical skills and make connections with different types of people. This attachment with the TNT has made me gain much practical knowledge and experiences in my field of study.

The training has instilled in some integrity skills such as being punctual, being submissive to and taking views of supervisors, communication skills, and being efficient in problem management.

This training program should therefore be maintained for students to learn more practically as this has been an excellent experience and I hope other attachés achieved as much as I did.

I grew my interest in my career and made a good transition from what I have been learning from school to the outside world of work.

## 6.2. RECOMMENDATIONS

Attachment is very beneficial to students as it assists them to blend academic work with that of the industry therefore much emphasis should be given to attachment exercises by the students.

The following should be put in place to better future benefits for students and the institution at large.

The institution should liaise with the student financing institution (HELB) and look forward to pushing for grants to support their students on attachment.

The students should be facilitated for during their industrial attachment as it can be seen how well and of importance it is as the students lack enough funds to facilitate their upkeep during the training period.

# References

Gumbe, S. M., Svotwa, T. D., Mupambireyi, F. P. (2012). Students’ perspectives of Industrial attachment programme.