

## **JKUAT-ITP PUBLIC SECTOR INTERNSHIP REPORT**

### **Introduction**

The internship report covers production process scope, progress made, current status and future opportunities to explore. Also lessons learnt, skills acquired, challenges faced, systems used, experience gained and recommendation.

### **Acknowledgement**

I acknowledge JKUAT-ITP fraternity for this great opportunity to gain experience in computer assembling. A lot of trainings and learning has happened for both interns and staff. The experience gained is vital for the future growth of the project. Am happy to be part of this team.

### **Objectives**

To improve the computer assembly plant process efficiency co-ordination and quality control.

To avail and supply the government of Kenya with laptops and Learner Digital Device for Digital Literacy Program in conformity to the client's specifications.

### **Overall structures and visions**

Nairobi Industrial and Technology Park is the key vehicle providing infrastructure that supports growth into SME's for today's global economy. In the context of institutions of higher education JKUAT has the mandate of training, research and innovation.

### **Projects**

| <b>Name</b>                                 | <b>Start date</b> | <b>status</b>         |
|---|-------------------|-----------------------|
| Taifa laptops                               | June 2016         | Production in process |
| Learners digital device (LDD)               | November 2016     | Assembling in process |
| Teacher digital device (TDD)                | November 2016     | First phase completed |
| Computer assembly line software development | Feb 2017          | In progress           |

### **Systems used**

1. Computer assembly line
2. Production Server ( Oracle virtual box )
3. LAN and WAN computer networks
4. PLC logic controllers
5. OEM Technology management tool

### **Opportunities**

NITP opens up the opportunity for electronics manufacturing in Kenya. These devices will boost ICT efficiency by increasing information sharing capacity among Kenyans and Africa at large.

**Skills acquired**

1. Computer networking
2. Electronics assembling
3. Data security
4. Electronics quality inspection
5. Assembly process design management
6. People management
7. Management reports
8. Quality Management System

**Challenges observed**

1. Technology issues
  - a) Organization' data security is a major challenge as there are not yet clear organizational structure to control information access.
  - b) Initial systems planning was not efficient. Equipment were underestimated such as internet access capacity was below consumption.
  - c) Technology transfer is inefficient as the owner protects their business idea as well
2. People issues
  - a) People management was a challenge since the new employees with unclear roles were not assigned any deliverables.
  - b) Hiring and training takes a lot of time since procedures and protocols has to be followed.
3. Process issues
  - a) The organization has a slow paced speed to taking actions resulting into processes that are run inefficiently for a longer time before they can be improved
  - b) The process use a borrowed technology that can be made better by us

**Supervision experience**

Being the Engineer in charge of assembly processes, it was a great opportunity to train and oversee implementation of various processes involved. It was realized that without proper supervision, nearly all processes will be more inefficient and very expensive.

**Recommendations**

1. Technology is refined by working on one process several times as we improve it for better. Kenya need to start working on its own electronics manufacturing industry to open up the course of development.
2. Our people should stop hiding their skills but practice them without fear of failure as through this will have innovations to initiate ICT systems manufacturing industry in Kenya

3. To come up with our own ICT systems, we need to establish research and development centers to incubate ideas.



