Advancing the Quest for Local Assembly of ICT Devices with TAIFA: Technology Inspiring Africa

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TAIFA Laptop Project

TAIFA LAPTOP PROJECT (TLP)

TRANSFORMING KENYAN EDUCATION FOR 21ST CENTURY LEARNING: CREATING DIGITAL LEARNING

A Project Concept Developed by

Jomo Kenyatta University of Agriculture and Technology
ICT Integration Solution Concept

- JKUAT, working with public/private industry partners in 2013, conceptualized six pillars towards an end-to-end solution for ICT integration in education:
  - policy and strategy;
  - hardware, software and applications;
  - curriculum, e-content and e-books;
  - training and capacity building;
  - technical support and connectivity and
  - e-waste management
Hardware Solution...

- JKUAT began assembling desktop computers in 2006, the E-MADO brand, in partnership with Ministry of Industrialization and other public/private partners.
- This is a Kenya Vision 2030 flagship project under JKUAT.
- JKUAT assembled 1200 desktop computers under a taxation regime that favored imported computers than locally assembled – and stopped assembling in 2010.
- The University recalibrated and began pursuing the one laptop per child (OLPC) model of MIT in the USA.
- The model received a major boost from the pursuit of laptops for schools project in 2013.
...Hardware Solution...

- JKUAT has designed a medium and scalable assembly line and set aside land under its Industrial Park for its construction.
- The assembly plant is designed with a capacity of 4500 units per day.
- JKUAT developed a blueprint for the project and bid twice in 2013.
- JKUAT aims at producing for her students/staff needs, needs in higher education and supporting the ICT integration in education project.
- JKUAT launched her laptops for students project in October 2013.
...Hardware Solution

- JKUAT has remained steadfast in the pursuit of the local assembly of electronics.
- The University has pursued the dream and now has began assembling laptops – the TAIFA Brand Laptop.
- The University has done 4000 units for the JKUAT Students Laptop Project.
- The TAIFA Laptops are available for university students, staff and other higher education stakeholders.
The TAIFA Laptop Brand
Solution for Schools

- Solution = Device + Software + Content
- With overall ecosystem

- **Devices**
  - JKUAT
  - Inspur

- **Software**
  - Microsoft
  - Intel
  - Vendors

- **Curriculum & Content**
  - KICD
Upcoming TAIFA Laptop Brand

- TAIFA Junior – to serve Government of Kenya’s Laptops for Schools Project
- TAIFA HPC
- TAIFA Access Port
Impact – Local Assembly & Production

- 4000 TAIFA Laptops are already available for university students, staff, other universities and distributorships in partnership with Inspur & GDL.
- JKUAT has already procured an assembly line expected to be installed in March 2015.
- The assembly line will have the capacity to produce a total of 4,500 per day - that is 94,500 laptops per month - translating to a delivery of 2,010 laptops per county per month.
- At an average of 100 pupils in class one this means we can supply up to 21 schools per county per month.
Impact – Jobs & Wealth Creation

The overall job potential from the local assembling is as follows:

<table>
<thead>
<tr>
<th>Source</th>
<th>Direct Jobs</th>
<th>Indirect Jobs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer assembly factory</td>
<td>1,000</td>
<td>3,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Curriculum and e-content development</td>
<td>450</td>
<td>1,350</td>
<td>1,800</td>
</tr>
<tr>
<td>Computer distribution system</td>
<td>100</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Capacity building</td>
<td>300</td>
<td>800</td>
<td>1,100</td>
</tr>
<tr>
<td>Computer maintenance and service</td>
<td>900</td>
<td>3,000</td>
<td>3,900</td>
</tr>
<tr>
<td>E-waste management</td>
<td>300</td>
<td>900</td>
<td>1,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,050</strong></td>
<td><strong>9,550</strong></td>
<td><strong>12,600</strong></td>
</tr>
</tbody>
</table>
Impact of the Solution – Manufacturing & National Pride

- Commencement of local assembling is part of a wider vision under the Kenya Vision 2030 – that’s building capacity for full-scale local production and manufacturing of electronics in Kenya by the year 2030.


- TAIFA Brand Laptop carries an element of identity:
  - For all local and global market TAIFA is the primary brand;
  - For all Kenya we have TAIFA, the national flag and the client’s brand;
  - For other nations and institutions TAIFA, the nation’s flag and client’s brand.
Recommendations

- The ICT integration in education is a transformative project which will:
  - Prepare our children with 21st Century skills – stimulate their creative and innovative minds,
  - Facilitate creation of jobs and wealth through device assembly, software development, training and capacity building, support and maintenance, e-waste management among other related activities.
- Achieving this requires, among others:
  - Supporting local assembly (device assembly, support and maintenance),
  - Supportive tax regime and incentives (for device assembly and parts for repairs and maintenance).
Local assembling of ICT Devices is Vital for Economic Growth – hence the passion for TAIFA: Technology Inspiring Africa

Thank you