The impact of Management Information System in improving customer service delivery and decision making: Experience from Tanzania Medicines and Medical Devices Authority

Ambele Mwafula
Manager, ICT and Statistics
TMDA
BACKGROUND

• The management information system (MIS) is one of the powerful tool for tracking, storing, manipulating and distributing information to internal and external customers.

• It helps Regulatory Authorities in decision-making process.

• MIS solutions improve customer service delivery

• We are reporting the importance of the current MIS which has been in use for past five years and the new enhancement that allow customers to submit dossier application online.
WHERE ARE WE FROM

• TMDA started to use MIS in 2009
• The old MIS was not web based system
• The system was only accessible at TMDA HQ
WHERE WE ARE

• TMDA in partnership with Trademark East Africa (TMEA) re-engineered the MIS

*Main object:* To develop web based Management Information Systems (MIS) and LIMS that interfaced with other systems within and outside TMDA e.g. payment service providers (banks), Tanzania Electronic Single Window
## WHERE WE ARE

<table>
<thead>
<tr>
<th>Systems</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epicor 10</td>
<td>Financial Management System</td>
</tr>
<tr>
<td>LIMS</td>
<td>Laboratory Information System</td>
</tr>
<tr>
<td>HR-MIS</td>
<td>Human and administration system</td>
</tr>
<tr>
<td>MIS</td>
<td>Work Flow System (Core business process system)</td>
</tr>
</tbody>
</table>
WIDE AREA NETWORK (WAN) IN ZONE OFFICES

WAN ensures security of information by not allowing some of report to be accessible in website
MIS METHODOLOGY

• Conducting a system analysis to identify and document requirements
• Review of various hosting options including the hardware and software capabilities
MIS METHODOLOGY

• Review various open source software that could be used as components to develop the system

• Review the various on-going initiatives in the region, in particular the EAC harmonization project(s)
MIS METHODOLOGY

• The system was developed using Agile methodology

• The source codes of the MIS are maintained by TMDA
Process automated by TMDA MIS

- Product registration
- Premises registration
- Import and export of products
- Clinical trials
- Inspection at port of entry
- Laboratory services
- Billing of Customers
- Permit/certificates verification using QR Codes
A decade of regulatory harmonization

Tasks assigned to staff

in tray and out tray
Stages in the MIS
A decade of regulatory harmonization

System capture the following information:

- **Applicant**: Hetero Labs Limited
- **Country**: INDIA
- **Box**: 500 018 Hyderabad
- **Tel**: 23704923/24/25
- **Reference No.**: TFDA12/HM/0089
- **Received Date**: 2012-03-12 13:29:41
- **Product**: Glimed - 1

**Product**
- **Trade/Proprietary Name**: Glimed - 1
- **Generic Name**: Glimpiride
- **ATC Code**: A10B
- **Classification**: Human Medicinal Products
- **Type**: Imported Product

**Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Specification</th>
<th>Strength</th>
<th>SI Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glimpiride</td>
<td>USP</td>
<td></td>
<td>ng</td>
</tr>
<tr>
<td>Lactose</td>
<td>USP</td>
<td></td>
<td>ng</td>
</tr>
<tr>
<td>Povidone (K-30)</td>
<td>USP</td>
<td></td>
<td>ng</td>
</tr>
<tr>
<td>Purified Water</td>
<td></td>
<td></td>
<td>ng</td>
</tr>
<tr>
<td>Lactose Monohydrate</td>
<td>USP</td>
<td></td>
<td>ng</td>
</tr>
<tr>
<td>Sodium Starch Glycolate</td>
<td>USP</td>
<td></td>
<td>ng</td>
</tr>
</tbody>
</table>
A decade of regulatory harmonization.
Welcome to Customer Online Self Service Portal

Services Provided

- Online Submission of Import & Export Applications
- Product Retention charges Statement
- List of Registered Products

Events & News Updates

Login

Trader Account No

Email Address

Password

Sign In

Need Help (Forgot Password)
Identifying products authorized in Tanzania

Open [www.tfda.go.tz](http://www.tfda.go.tz) then go to registered products
Advantages of MIS

• It improves the administration of the business by bringing a discipline in day to day operations as everybody is required to follow and use systems and procedures.
  • This process brings a high degree of professionalism in the business operations.

• With the system TFDA can keep track of all registered products.
Advantages of MIS

• The availability of customers and products data has helped TFDA to align its business processes according to the needs of its customers.
WHERE DO WE GO
# Product Application Details

<table>
<thead>
<tr>
<th>Assessment Procedure</th>
<th>Brand Name/Device Name</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Assessment Procedure</td>
<td>Enter Brand Name</td>
<td>Select Classification</td>
</tr>
<tr>
<td>Generic Name(Optional)</td>
<td>Distribution Category</td>
<td>Storage Conditions</td>
</tr>
<tr>
<td>Select Common name</td>
<td>Strength Distribution Category</td>
<td>Strength Storage Conditions</td>
</tr>
<tr>
<td>Product Forms</td>
<td>Intended Use</td>
<td>Proposed Shelf Life After Opening</td>
</tr>
<tr>
<td>Product Form</td>
<td>Enter Intended Use</td>
<td>shelf_life_after_opening</td>
</tr>
<tr>
<td>Risk category (if applicable)</td>
<td>Proposed Shelf Life</td>
<td>Payment Currency(The payment will</td>
</tr>
<tr>
<td>Risk category (if applicable)</td>
<td>shelf_life</td>
<td>be handled in the local currency of the</td>
</tr>
<tr>
<td>Product Type</td>
<td>Duration Description</td>
<td>local market.</td>
</tr>
<tr>
<td>Product Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Physical Description(Description of Finished Product Specification)</td>
<td>Local Agent</td>
<td>Certificate Issue Place</td>
</tr>
<tr>
<td>Physical description</td>
<td>TEST ACCOUNT</td>
<td>TFDA HQ</td>
</tr>
</tbody>
</table>
Customer specify assessment procedure

Assessment Procedure

Select Assessment Procedure

- SADC Joint Assessment
- WHO Collaborative Procedure
- Orphan Medicines
- EAC Joint Assessment Procedure
- National Assessment
Customer Data entry

Product Information Details (Fill all the information on the Tabs)

- Product Ingredients (expand to fill in the product ingredients)
- Packaging Information (expand to fill in the product packaging)
- Finished Product Manufacturers (expand to fill in the finished manufacturers)
- API Manufacturers (expand to fill in the API manufacturers)
- GMP Inspection Details (expand to fill in the GMP Inspection)

Link Product application to the GMP Inspection Application on the Manufacturing Site

GMP Inspection Details

- Gmp certificate no
- Manufacturer name
- Country
- Region
- Physical address
- Postal address
- Email address
- Product line

No data
Uploading Dossier
CONCLUSION

MIS is a vital tool for helping Regulatory Authorities in processing and managing data. It is also useful in decision making process and improving service delivery to customers.