

## Electronic Verification System for Drug Authorities

Electronic Verification System enables NDA to improve their process and enhance performance

# Electronic Verification System for Drug Authorities

## Customer Profile

National Drug Authority (NDA) was established by Section 3(1) of the National Drug Policy and Authority Act Cap 206 as a body corporate with perpetual succession and a common seal, and may sue or be sued in its corporate name. NDA's primary responsibility is to ensure quality, safety and efficacy of human and veterinary medicines and other health care products through the regulation and control of their production, importation, distribution and use.

NDA is comprised of 4 key departments tasked with different responsibilities within its overall mandate. One of the departments is the Inspectorate department whose responsibility is to verify applications for importation of drugs. This is necessary to ensure that imported drugs:

- Comply with import requirements (i.e. are registered drugs from approved sources)
- Are of the identity, quantity and quality described on the related Pro-Forma Invoice
- Are of good quality

## Business Situation

NDA was facing several challenges in serving their clients. The main issue was related to delay in processing import applications to issue Import Verification Certificates. The second key issue was the need to have a one-stop-shop for all import/export data and to ease finding of information as and when needed. They were making manual entry of the drugs to be imported in the register. This in turn was creating difficulties and errors in determining if drugs to be imported are on the Register. NDA was also facing challenges with respect to the following issues:

- Determining if the drugs to be imported have valid Retention and or GMP
- Determining the correct value of drug imports in the country
- Delays and mistakes in drawing samples, processing laboratory tests and delivering test results which often used to take weeks/months
- Tracking if rejected imports have actually been re-exported or destroyed
- Ensuring that Accounts department is collecting the right amount of import fees

As a result, NDA decided to computerize their verification activities to address the above mentioned challenges.

### Customer:

National Drug Authority primary responsibility is to ensure quality, safety and efficacy of human and veterinary medicines and other health care products through the regulation & control of their production, importation, distribution and use.

### Industry:

Public Sector—Judiciary

### Business Situation:

NDA decided to computerize their verification activities to address the issues faced while serving clients.

### Solution:

Techno Brain provided a fully web-based Electronic Verification System.

### Benefits:

- Enables NDA to issue verification certificates within 2 hours
- Allows NDA to determine the quantity of drugs being imported in the country
- Aids NDA to know quarter wise number of applications received for importation of Human Drugs

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## Solution

Techno Brain was selected by NDA to develop and deploy an electronic verification system [EVS] in which all the above issues has been addressed. Techno Brain provided a fully web-based solution with the following 3-tier architecture:

- Data layer in SQL Server
- A business-logic layer comprising a set of .Net web-services
- A browser-based User interface comprising MOSS site / sub-sites

The system has enabled NDA to efficiently and uniformly handle applications for verification Certificate to import/export/re-export human and veterinary pharmaceuticals, biological, vaccines, medical sundries, medical devices, appliances and diagnostic aids; pharmaceutical raw materials, manufacturing equipment; analytical equipment and apparatus, reagents and chemicals and related chemical, articles or goods. The entire application is role based with suite of web-pages arranged for role-based groups that have been built based on actual NDA on ground processes and procedures.

The system has also categorized NDA's import applications review stages as: Received, Queried, Rejected, Approved thereby easing data querying and retrieval. The import application can be grouped as Drug Register categories which help NDA to determine number of applicants for importation of Human drugs or Veterinary drugs etc. The system enables NDA to generate reports and export them to spreadsheet for further analysis and manipulation.

## Technologies:

Windows Server 2008 R2, Microsoft Office Share Point Foundation, Visual Studio 2010, Microsoft SQL Server 2008

## Benefits

**Key benefits of the new automatic fingerprint identification system:**

- Allows NDA to have a stronger and deeper view on all the applications and review their different states
- Allows NDA to know quarter wise number of applications received for importation of Human Drugs
- Allows NDA to determine the quantity of drugs being imported in the country
- Allows NDA to determine the correct amount of import fees is being levied
- Enables NDA to issue verification certificates within 2 hours