Project Parivartan
for
Indian Patents Office

Vayam assisted Indian Patent Office to transform itself into a customer focused and responsive organization. Our solution enabled the office to transform its culture and processes into the best of international practices. While focusing on strategic priorities for future, we provided a solution for secure and business-friendly electronic services for its customers; greater cost effective internal information; and to address interoperability with WIPO, PCT and other patent offices like Trilateral Office that may choose to collaborate with.

CLIENT: Indian Patent Office

LOCATION: New Delhi and Kolkata, India

CLIENT DESCRIPTION

The basic functionality of the Patent office is to Grant Patents and Register Designs after thoroughly scrutinizing them for novelty. There are 4 main locations of these offices in India; namely, Kolkata (Headquarters), New Delhi, Mumbai and Chennai. A Patent Information Center also exists in Nagpur but Patents and Designs processing is not done there. For Patents, the main objective is to administer the provisions of the Patents Act, 1970 and grant Patents, maintain records of granted patents and provide public information through publication in Gazette at appropriate stages.

For Designs, the main objective is to administer the provisions of the Designs Act, 2000 and register Industrial Designs, maintain records of registered designs and provide information to public at appropriate stages. Accepted Patent Specifications and registered designs are required to be published under the respective Acts.

CHALLENGES

- Lack of standardization in various processes
- Manual processing and hence takes a longer time for the processes to be completed
- Difficult document tracking
- Difficult status checking
- Difficult to check for duplication, which may lead to litigation.
- Non availability of effective search index
- No reminder system available
- MIS reports are not available
- Problems in cash receipt generation in case of multiplicity of receivable heads
- PCT related tracking of Patent Application is difficult.

SOLUTION OFFERED

Information Strategy Planning (ISP)

Vayam assisted IPO by providing a framework for mapping the processes of an organization and results in creation of three architectures: Information, Business Systems and Technical. These architectures are the foundation for the development of flexible systems, sharing data and establishing user priorities. ISP will be the input for the development of the different Business system solution.

Information Architecture: The structure of the enterprise in terms of what it may keep information about and the activities which may use the information.

Business System Architecture: A business system is an integrated collection of procedures, which supports or is planned to support particular functions of the enterprise. This support can be manual or computerized. The systems and the databases needed to support the activities of the enterprise.

Technical Architecture: It is a structure that summarizes the mix of hardware, software and communications facilities, which support or will support the business systems and other parts of information environment within the enterprise.

Digitization of Existing Records

To meet the requirements of the client, Vayam Technologies Ltd. undertook the tasks of digitization and application development for IPO. The application software has capability to capture the Published application/patents granted details. Application has option to associate OCR/Scanned documents to a particular patent application. The software has option to search a particular application and view the details and also a link to view the associated OCR's/Scanned documents. The software has option to modify any existing published application/Granted patents details. User can view any existing/entered published application/Patents granted details through a "view" option. Modify or view option will have a search feature by which user will identify and select an application to modify or view.

Digitization consisted of the following activities:
- Coordination
- Administration
- Synchronization
- Indexing
- Scanning, OCR and data entry
- Data Digitization System (DaDS) will be integrated with the Document
- Management System and digitized data would be accessible to the various users
- Data entry Application software development

IPO Website Development

Website is a window for the world to the organisation and therefore, features for the Indian Patent Office web-site plays an important and critical role in project *'Parivartan'* as we at Vayam believe that in current era, the website of any organisation is very important and critical part for the its successful operation and function. Therefore, to give a complete and comprehensive web site for the Indian Patent Office following characteristics were infused into the website:

- A virtual Indian Patent Office
- Aesthetic and modern looks
- Dynamic by nature
- Transactional
- Linkable (to counterpart patent Office sites and their databases)
- Comprehensive Searchable
- Highly Informative
- Online availability

The above-mentioned characteristics will make the IPO website highly robust and at par with International standards. It makes website flexible and scalable enough to incorporate any additional features at any point of time with minimum level of efforts.

Hardware Solution

The web Application part of the proposed solution was implemented based on n - tier architecture with clustered database and application server including:
- Web server
- Application Server
- Cluster of Data base servers
- Java Message Service
- Backup server for Failure Mechanism
- Mail Server
- Firewall
- Intrusion Detection System (IDS)

The Intranet Application for each branch office has the following Hardware features:
- Web Sever
- Application Server
- Database server
- Mail server
- Firewall server
- IDS

BENEFITS TO THE CLIENT

- Creating a readily available information network
- Providing comprehensive reports
- The critical documents in paper form shall be preserved in digitized form thus ensuring their longevity
- Categorize the digitized documents based on the relevant subjects

- Maintenance of all the information in a Central Repository and hence help to reduce the difficulty in management of information
- Graphical User Interface for retrieving the relevant information at minimum time
- Increasing business understanding and control
- Providing cost control