

Automation of Resource Planning, Asset and Logistics Management

Business Context

Information superiority assumes great importance in today's digitised battlefields. It is therefore important for the armed forces to use Information and Communication Technology (ICT) to utilise computerisation to re-define the efficiencies for various defence applications. This would make the armed forces better equipped, agile and robust enough to effectively handle any contingencies, as well as benefit from better cost management and increased efficiencies.

The Indian Air Force therefore wished to develop an online material management system, which would lead to timely supply of materials, reduction of stock outs and minimise the cost. It was hoped that an automated system would also reduce paper work for inventory management and provide easy availability of the material information flow across various departments. This would bring about an improvement in the serviceability of weapon systems operated by the IAF in the defence of the nation.

Challenges

The IAF had a materials management system that was plagued by the usual problems that beset a large

organisation's manual materials system - cumbersome paper based processes, stock outs, delays, dependencies on individuals and inaccurate communications. The vast size and geographical spread of the IAF made it difficult to keep and maintain records for inventory management in real time. Tracking inventory and communicating transparently with an individual/unit running short of inventory were other problems for the organisation. In the actual event of an operation, it would have been a nightmare to not know, in real time, how many and what type, of spares or ammunition were available, where they were needed the most, and how quickly they could be forwarded.

Solution

TCS developed the IMMOLS, a nationwide enterprise system integration project that addressed the need for computerising the IAF's inventory control and logistics management. The IMMOLS application could be broadly divided into two components—a custom-designed application that catered to all facets of materials management at various levels of hierarchy in the IAF, and an IT infrastructure covering a nationwide installation of computing platforms and campus LANs. In addition, IMMOLS also implemented some of the

Tata Consultancy Services have developed an Enterprise Material Management application for automation in IAF. The Integrated Materials Management Online System software has been developed with state-of-the-art technology. Its user-friendly features and high standard of training has ensured smooth implementation at selected pilot sites of IAF.

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Air Vice-Marshal
VSM

activities of maintenance management and finance management of the IAF, such as Aircraft On Ground (AOG) management, routable management, job card, FLCR (Floor Level Consumption Records) at Base Repair Depots (BRDs) and various budgeting and accounting activities.

The IMMOLS solution developed by TCS is a good example of the streamlining of Indian defence logistics activities and auditing thereof. It is complemented by the Equipment Accounting On-Line System

IMMOLS (Integrated Materials Management Online System), is the first enterprise wide resource planning solution implementation in the history of India's defence forces. This project is considered to be a significant development in India's road to e-Governance in a defence organisation and a good example of public-private partnership.

Benefits

The engagement with TCS provided the IAF with the following benefits:

- Efficient materials management
- Asset visibility for better utilisation of available resources
- Forward planning and procurement of materials
- Information triggers for mid-course corrections in various materials management processes
- Reduction in inventory levels, leading to significant cost savings
- Improved aircraft fleet serviceability
- Real time availability of materials information flow
- Reduction in paper work
- Speedier processes for demand collection, procurement and repair cycles
- Efficient spares accounting

(EQUOLS) and the Audit Online System (AUDOLS) which are embedded in the solution. The e-auditability and e-vouchers features of the solution make it a powerful and comprehensive logistics solution.

About Tata Consultancy

Tata Consultancy Services is an IT services, consulting and business solutions organisation that delivers real results to global business, ensuring a level of certainty that no other firm can match. TCS offers a consulting led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model TM, which is recognised as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India

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