

Electronic QMS Ends relentless pursuit of inefficiency Ends Quality Manager's nightmare

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Introduction to Dubai Ports Authority:

Dubai Ports Authority (DPA) is the largest man made port in the world. It achieved a ranking of 10th largest Container Ports in the world. More than 125 Shipping Lines call DPA & it has been awarded Best port in Middle East. In 1998 11,316 vessels called & it handled a total of 36.4 million tonnes of cargo.

DPA manages Port Rashid Terminal (PRT) & Jebel Ali Terminal (JA), which are 40 kms apart & connected by a high-speed fiber optical communication cable. Put together both the ports have 103 berths & equipped with one of the best equipments & technology.

DPA also manages Jebel Ali Free Zone Authority (JAFZA), situated adjacent to JA port. JAFZA provides ready built facilities, such as warehouses, factories and offices, manages staff accommodation, recreation, etc. Till 1998 it has leased out facilities to about 1400 companies from about 80 countries including about 60 Fortune 500 companies.

DPA's Quality Journey

Developing & implementing Quality Management System (ISO : 9002) :

DPA (PRT & JA) was the first Organisation under Dubai Government to develop & implement quality systems in conformance to ISO : 9000 family of standards. Both the port terminals got certified in 1996 & JAFZA got certified in 1998.

JAFZA is possibly the first business of its kind in the world (certainly in GCC) to have been certified to ISO 9002. JAFZA quality systems were recognised as " Best Systems " and awarded a certificate by HH Sheikh Mohammed, Crown Prince of Dubai in 1998.

Maintaining & Improving the Quality Management System (ISO : 9002) :

Quality Management System (QMS) comprises of 2 Quality Manuals, 58 procedures, 40 Work Instructions, & 189 Forms including guidelines & attachments. These were made available at 138 locations in hard copies in White Folders titled Quality Systems Procedures. At all the 138 locations a suitable place was created which was visible & provided easy access to users.

3 people team from Quality department (Quality Manager, Quality Officer & Secretary) with active assistance from 34 Process Owners, 34 Lead Auditors & 21 Auditors maintain the Quality system, in addition to other quality initiatives.

Difficulties in maintaining the Quality System in Hard Copy:

- Monitoring & keeping track of document amendments, audit reports etc. had become a near impossible task.
- Document amendment, approval, issue & distribution was complicated & time taking process. As a result Process Owners became apathetic & indifferent to even initiate the change process.
- At times, improved practice did not get implemented in time.
- It supported the generally held belief that ISO 9000 is nothing but Documentation, Documentation & only Documentation
- Documentation was becoming the key mind set instead of improving the system. (Fear of ISO becoming a Paper Tiger)
- Quality Department used to be totally immersed in tracking & monitoring documentation instead of focussing its effort on improvement.
- It generated phenomenal paper (20,000 pages of documents considering all locations plus 5000 pages generated from audits).
- Looming fear that latest revision may not be available at all the desired locations.

Converting QMS from Paper to Electronic system:

In view of the scale of operation, diversity of businesses, volume of work involved, it was envisaged to convert the paper based system to electronic media early on in 1997 itself. Considering DPA had already invested heavily in information technology, the required IT infrastructure was already in place.

To take care of the above mentioned issues, using ISO Achiever application, running in Lotus Notes environment, a major initiative of converting paper based system to electronic media was launched in 1997. After overcoming all kinds of hurdles, a dedicated, sustained & successful effort of one & a half years, by a small team from IT & Quality department, entire QMS was converted to electronic media.

Main steps taken were:

- Selecting the right application,
- Evaluating & upgrading desktops
- Procurement of server & software
- Training of Process Owners & Auditors,
- Mail migration
- Pilot testing
- Going live

Technical, Operational & People issues were identified & resolved, success story created & developed the comfort level among users & made the system live.

Benefits:

- **Effective Management:** All users i.e. Process Owners, Quality department & Auditors are in total control of the QMS. It has led to effective management of QMS & released lot of time to focus effort on other burning issues needing quality intervention.
- **Decontrol:** Due to ease of monitoring, Process Owners have been given the necessary authority for document amendments, distribution, archiving etc.
- **Process Owners own the system:** With radical improvement in the ease of use i.e. ease of creating, revising, approving, distributing & archiving of documents, it developed a greater sense of ownership.
- **Distance is dead:** Process Owners, Auditors & Quality department could access QMS from any location having Lotus Notes desktop.
- **Reduced Cycle time:** Amendments to documents get done quickly.
- **Eco friendly system:** Phenomenal saving of paper. 50 megabytes has replaced 10,000 sheets of paper.
- **Foundation for future applications:** It provided basic framework for future applications under Lotus Notes environment. This has reduced the need for repeated training of employees for other notes based applications like customer complaints, Policies on achiever etc.
- **QMS No longer an Excess Baggage:** Popular myth that QMS work is an additional burden has been changed to a certain extent.

- Total Business Perspective: Employees are better informed about the way total business operates by ready access to entire QMS, instead of a narrow compartmentalised view.

Way Ahead:

To enlarge the scope of QMS by adding other business processes like Strategic planning & making it available to all the 600 desktops in the company network. Use of Internet browser will make it possible without any major investment.

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