



VARUN SHIPPING COMPANY LIMITED

Maritime Shipping Software Implementation

[Challenges, Solutions and Pitfalls]



VARUN SHIPPING COMPANY LIMITED

Organizational Profile



Varun - Key Highlights

Hydrocarbon oriented shipping company

Increasing global and Indian demand for hydrocarbons

Leading player in niche LPG shipping sector

Leading player in deep water Offshore services sector

Growth through fleet expansion

Consistent dividend payouts

Rated amongst the best 5 midsize companies by Businessworld*



Hydrocarbon Oriented Shipping Company

Who We Are

We own and operate vessels in offshore services, oil & gas, petroleum products & easy chemicals



Our Aim

To be a leading hydrocarbon shipping company, by leveraging on our leadership and experience in the LPG & petroleum product sectors



Our Distinction

Our diversified fleet serves as a hedge against downturn in any single sector, thereby mitigating the “cyclicality” associated with the shipping industry



Our Value Propositions

- Declared dividends in each of the past 23 consecutive years
- Offering our customers a comprehensive shipping solution across the entire hydrocarbon chain
- Recognising the changing needs of our markets and customers and adapting by expanding and diversifying our shipping product range





Information Technology in Shipping

- **Ship Board and Communication Technology**
 - Technology has taken major inroads in ship-shore communications and in the ship building industry.
 - Communication technology will further reduce the distance between ship and shore.
- **ERP System**
 - ERP is like the glue that binds the different applications, processes and computer systems for a large organization.
 - Typically, each division would have their own system optimized for that division's particular tasks.
 - With ERP, each division still has their own system, but they can communicate and share information seamlessly with the rest of the company.
 - This presentation mainly deals with our experiences while implementing the above.



Maritime Shipping and Information Technology - Challenges

- **Managing the Implementation Process**
 - Finalization of Goals
 - Awareness of Limitations
 - Creation and Tracking of Implementation Plan
 - Communication with all Functional and Technical Heads
 - Involvement of Top Management
- **Change Management**
 - Employees can resist adapting to the changes that the technology requires.
 - It can interrupt existing operations
- **Communication and Training**
 - If training on the new software is inadequate or if insufficient time is spent on communicating the new processes and software functions to employees, the implementation and adoption of the new technology is jeopardized
- **Managing Expectation**
 - Major challenge is to manage the expectations of the users, mid-level managers and top management



Maritime Shipping and Information Technology – Solutions

We have learnt the following from our experiences of implementing and integrating various systems:

- **Managing the Implementation process**
 - Formation of Team – Team to include functional and technical personnel.
 - Assigning of responsibilities – Functional and Technical
 - Finalization of Goals – Short term and long term
 - Regular communication with all Functional and Technical Heads
- **Change Management**
 - Awareness of Limitations – Communication of the same to all concerned
 - Implementation in phased manner
 - Involvement of Top Management
- **Communication and Training**
 - Training to be undertaken in phased manner.
 - First training on basic functions to be done. Subsequently after user achieves comfort level, advanced training to be provided on features, reporting, add-ons, etc.



Maritime Shipping and Information Technology – Solutions contd..

Managing Expectation

- It is important to communicate with users, mid-level managers, head of department that software does not always lead to tangible reduction in human involvement.
- In some cases the steps may actually increase with the implementation of a new system. More so, if we are integrating multiple systems.



Maritime Shipping and Information Technology - Pitfalls

- **Misapplied Implementation Methodology**
 - The problem is not with a methodology itself but how it is applied to individual projects
 - Rather than blindly following methodology, customizing the methodology to suit our requirements
- **Data Migration**
 - One of the most pressing concerns when moving to a new system is a desire to migrate all data from the old system
 - This could be extremely time consuming and expensive, especially when there are too many database tables involved
- **Customizations to Handle Exceptions**
 - No software can handle every exception. Workarounds to be suggested for handling them.
- **Project Tracking**
 - Adopting a phased approach
 - Insisting on short-term milestones and deliverables that demonstrate tangible progress



Maritime Shipping and Information Technology – Pitfalls ...contd.

- **Unrealistic Expectations**
 - Every software has got its limitations. Especially in the case of shipping industry where local and regional dynamics are prevalent, every case scenario may not be handled by the system
- **Software integration within the Organization**
 - Well-defined business specifications must be written before attempting any integration.
- **Dependencies on Other Projects**
 - Organizations typically have several IT initiatives going on concurrently.
 - Projects may have dependencies on other projects over which the implementation team has no control.



Varun - Project Objective

- To develop an IT infrastructure where correct, precise and relevant information can seamlessly flow from all specialized business softwares to the accounting software and work in collaboration.
- Generating Operational and MIS reports on- line for the management to take prudent decisions.
- To embrace the latest technology available and be competitive in the world market, Varun shipping decided to take a major step to computerize all the operations aiming at a very difficult goal of paperless office.



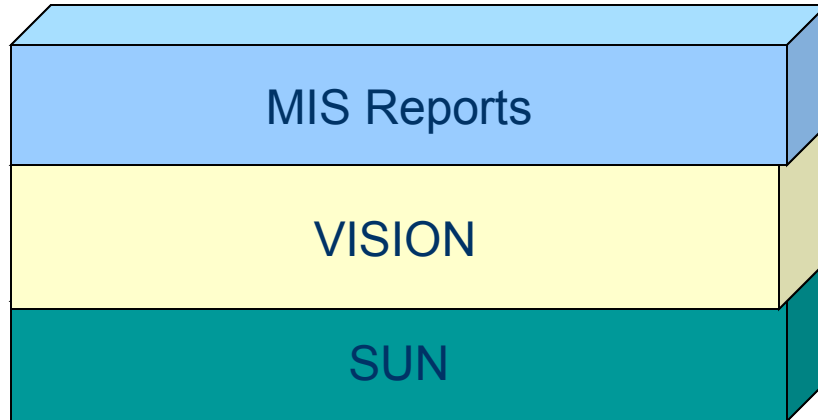
Software Evaluation – Constraints

- At present no Shipping ERP System is available that provides end to end solution for Non liner shipping trade
- Specialized softwares are available to cater to the specialized business needs of operations /commercial functions.
- Varun Shipping decided to procure these specialized software and integrate them with the financial accounting software.

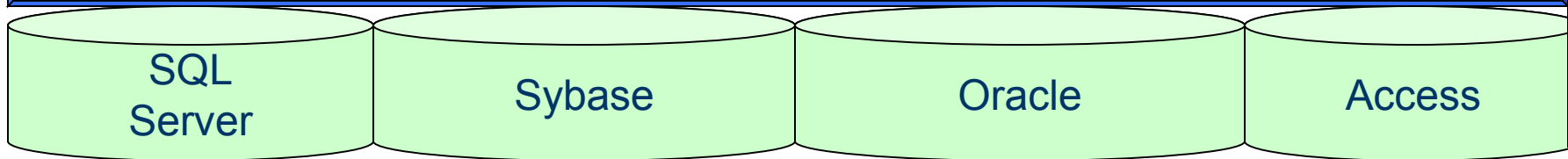
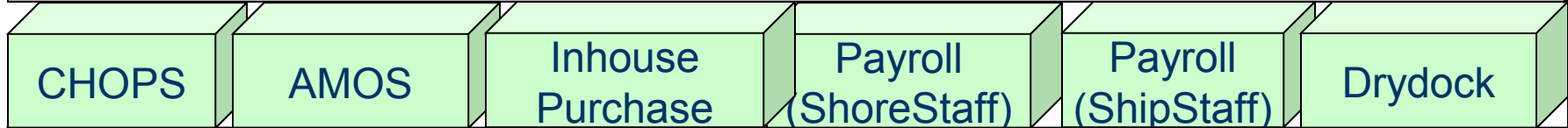


Software Integration

Varun
(Web Portal)



INTERFACE



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Key Implementation Challenges

- Integration of following specialized business software within the organization :
 - IMOS Chartering software
 - AMOS Business suite
 - Amos Crew Management
 - Floating Staff Web Portal
 - Purchase software [In-House developed]
 - Payroll system –ship staff [In-House developed]
 - Payroll & HR system –shore staff [In-House developed]
 - Dry-dock Software
 - SUN Systems [Financials]



Key Implementation Challenges *contd.*

- Working with different databases
 - Oracle
 - Sybase
 - Sql server
 - Assorted data in various text formats.
- Interface generation to link front end modules to Sun Accounting Packages.
- Productivity to be increased to maximum possible extent
- Multi location, Multi currency, Multi accounting practices.
- 24x7 services as ships are plying all over the world and information to be processed on real time basis
- Optimize the different Business Process cycle duration
- As information is collected and processed from different sources, the accuracy and verification of information to be done comprehensively



Sun Systems [Financials]

- Shipping business is unique and well diversified in nature, hence selecting the accounting package was a tedious task.
- We closed in on SUN Systems as this software is quite user friendly and implementation duration is short
- In the bargain we have restructured some of our business processes for integration with SUN.
- By and large SUN systems has helped us to achieve our objective of capturing detailed information of every transaction and extracting MIS reports based on them.
- Provides a reporting tool called Vision tool for flexible reporting requirements.



Amos Business Suite

- We are the first company to implement Amos Business Suite across the fleet in Asia
- Modules Implemented:
 - Planned Maintenance System
 - Quality
 - Voyage Management
 - Crew Management
- Purchase: Still exploring the correct approach for implementation.



IMOS Chartering Software

- **Following modules being used:**
 - Voyage Estimation
 - Contract/Fixture Note recording
 - Voyage Management
 - Voyage Charter
 - Time Charter Out
 - Time Charter In
 - Agent's Port disbursement
 - Demurrage Dispatch
- **Accounting Modules in IMOS**
 - Freight Invoice Generation
 - Time Charter Billing
 - Port Disbursement Invoices
- **Integration**
 - All financial entries are integrated with SUN systems [Financials]



Business Results

- The whole process of implementation and integration was complex and challenging.
- 80% of implementation has been completed. Rest in progress.
- As a result of this combination of software, we have created an integrated IT environment to streamline our system, thereby improving our business processing capabilities.
- In the final analysis, we are improving our operational efficiencies and embracing the world standard business practices.



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Thank You