



# Business Data Analytics

Intelligence  
Information  
Mining Analytics  
Market Modeling  
Performance  
Pattern  
Discover  
Business  
Query  
Planning  
Optimize  
Decision  
Knowledge  
Success  
assessment  
making  
Risk Predictive  
Statistical  
Metrics Algorithms

# 1.Introduction



Shipping Industries operation is extremely competitive and challenging environment. Vast volume of data is generated from various operational systems and these are used for various analytics. Having analytics is one thing, but to generate value from the analytics is an art. Within Shipping analytics covers areas of Vessel Scheduling, Voyage estimation, Booking, various terminal costs, Container management, accounting, document management and more. Data processing strategies and Business Intelligence (BI) technology are widely used for handling the business issues in this trade. Liner companies are now demanding quicker more efficient data analytical services, which can generate substantial value to their businesses in terms of cost savings, operations and Commercial strategy. Business data underlines that in view of issues in highly dynamic business environment; only the most competitive enterprises will achieve sustained market success.

**"Implementing enterprise BI solutions will continuously improve operational efficiency through more effective resource utilization, allowing for time and money savings"**

It is necessary that every liner companies need access of up-to-date business information, relevant data analytics and it must be presented in a way that is meaningful to the user. Analytics generated from Business data needs to be segmented, based on the end-users and users throughout the organization will be able to view information on the area of their interest.

Liner companies will have to rely more on their business intelligence systems to stay ahead of trends and future events and real time analysis relating to their business, particularly in frontline operations. None of the application provides a successful solution that addresses liner's analytical complication of business requirements.

# 2. Business Challenges without BI



# 3. Different Phases of BI



## 4. What BI Can Generate for Liners?

BI traditionally has been used for creating graphs and charts, which are very colorful but does not give much value to the users. It is imperative that any graphs and charts which are created are analyzed from different dimensions, to extract value from the charts. Example, if you are analyzing terminal handling cost from a port, it is important to know the contractual value of handling costs, and the components which contribute towards the handling cost. Handling cost from different ports and terminals have different components such as Stevedore Handling, Lashing, Unlashing, Tallying etc. A substantial portion of the costs can be due to the overtime, weekend or night calls etc.

To understand the value, it is important that the analyses are done by the domain specialist, who understands the variables involved in analyses. If analyzed properly and thoroughly by expert analyst, the savings can be substantial, which can actually turn around the company.



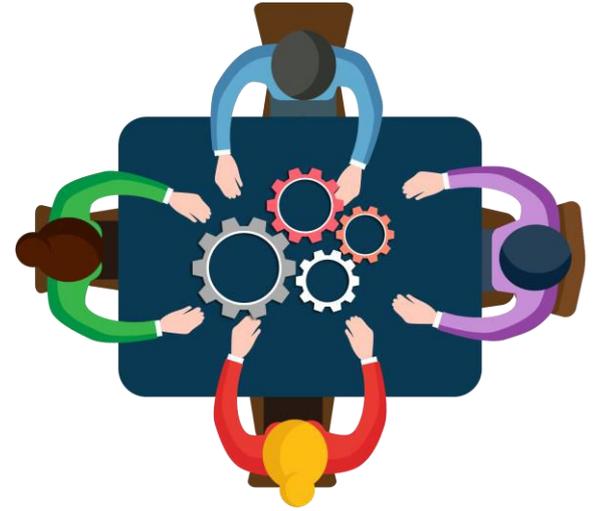
## 5. Maintaining Database for BI Dashboard



Maintaining a database and regular refresh of the shipping data can be challenging. Automatic database services / ETL set up can ensure up-to-date flow of data into BI tool, thus providing valuable insights into the shipping operation and commercial data. Storing and managing the different data system is greater challenges for liners and becomes more difficult, if the underlying systems are not fully integrated. Integrated systems with automation can substantially reduce the effort of creating a data warehouse. If integrated system does not exist, then Data Warehouse needs to be created. Data warehouse is a system used for reporting and data analysis. Data Warehouse's are central repositories of integrated data from one or more disparate sources.

# 5. Challenges in setting BI Environment

Business Intelligence is vital role of liner business. Due to complex database of combined structured and unstructured data, analyzing data manually and presenting actionable information is intricate process for the liners to make more informed business decisions. Majority of organizations still continue to struggle to get the desired value out of their data, even though organization has invested in tools, resources and trainings.



Recognizing the importance of data and performing analytics on quality data is most desired in liner business. The companies need to have technology-driven process for the business and tools required delivering data and analytics in the most efficient and appropriate way to meet the needs of business decision makers. Liners shipping industry should enable the effective operational BI system in a unified data environment to achieve maximum value out of numerous data sources and continue to monitor the metrics and key performance indicators.

# 6. Unique Features of SVM Insights

- Provides container and port terminal analysis to user to understand the business scenario, where efficiency and revenue can be improved
- Provides individual reefer monitoring cost summary helps the user to concentrate on cost side
- Arrival and departure date analysis provides the overall operation details in pivot table
- Statistics about vessel arrival / departure on weekends provides the user to know cost
- Provides vessel delays details against terminal and provides statics for number of vessel per days with delay and non-delay to understand the commercial data
- Haulage distance analyzer provides the chart to the user for each terminal and Region/Sector/Location to know the instant haulage invoice impact
- provides top level port pair based on the Business seasonality details to the user to get commercial information and instant visibility of KPI
- Provides forecasting analysis of item type, contribution, commodity and customer to the analyze commercial information and revenue KPI for the activity
- Provides the analysis for instant visibility about the top customer activity in revenue aspects

# 7. Conclusion



The focus of what is analytics and who needs to look its important in real time is necessary. Analytic applications play a major role in the shipment industry as a necessity of data for the customers and the exact competition in the sector. The recent developments in the BI field had enhanced the customers with complete data which help them in executing the business of import and export in knowledge based manner. The implementation and enhancement of existing techniques and methods ensure the continuous growth and compatibility of shipping companies that make use of them.

SVM Business Intelligence solution provides a powerful decision making and analysis tools that can access virtually any structured / unstructured data. It provides the key features to unlocking the critical information to grow liner business and supports decisions based on not only what will happen but also what has already happened. By SVM BI solutions, users can access data mining tool such as EDGE analytical tools, which can discover business needs information from large amounts of commercial / operations data. The EDGE of BI has ability for knowledge data discovery using various inbuilt algorithms, statistics, pattern recognition and interlinking correlation between various fields. In summary, the analytics produces dashboards with value in terms of cost savings, plugging revenue leakages, future business requirements and actions, and achieving operational efficiency.