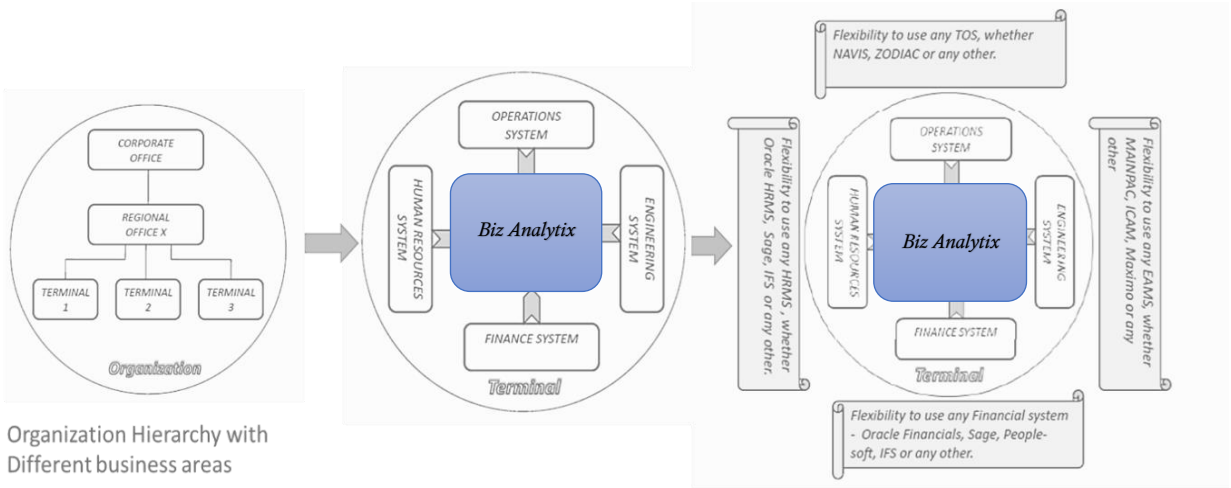
# *Biz Analytix* – Data modelling tool to ascertain business performance

***Biz Analytix*** provides an intuitive platform for queries that can drill down all the way to detailed Terminal data to produce analytical reports related to our Customers, our Products, our Expenses, and our Operational efficiencies. Having this multi-dimensional view allows us to accurately appreciate our Yield - and permits for an interesting gamut of statistical information that we can use to increase our competitiveness, sharpen our strategies and overall create better value for ourselves and our customers


***Biz Analytix*** gives clear visibility of the business based on different parameters and different views. Each stake owner of the business describes based on his expertise. But ***Biz Analytix*** provides organizational information with multiple views and clear visibility

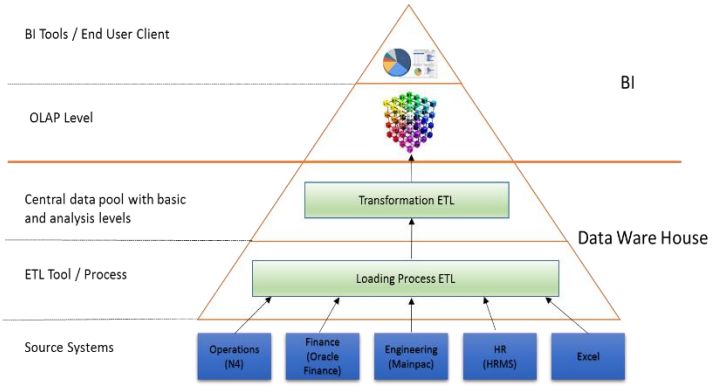
**Organization Hierarchy with Different business areas**




Organization Hierarchy with Different business areas

***Biz Analytix*** provides the apparatus to easily analyze data by and within any of our 5 perspectives – CUSTOMER / PRODUCT / ACTIVITY / RESOURCE / EXPENSE

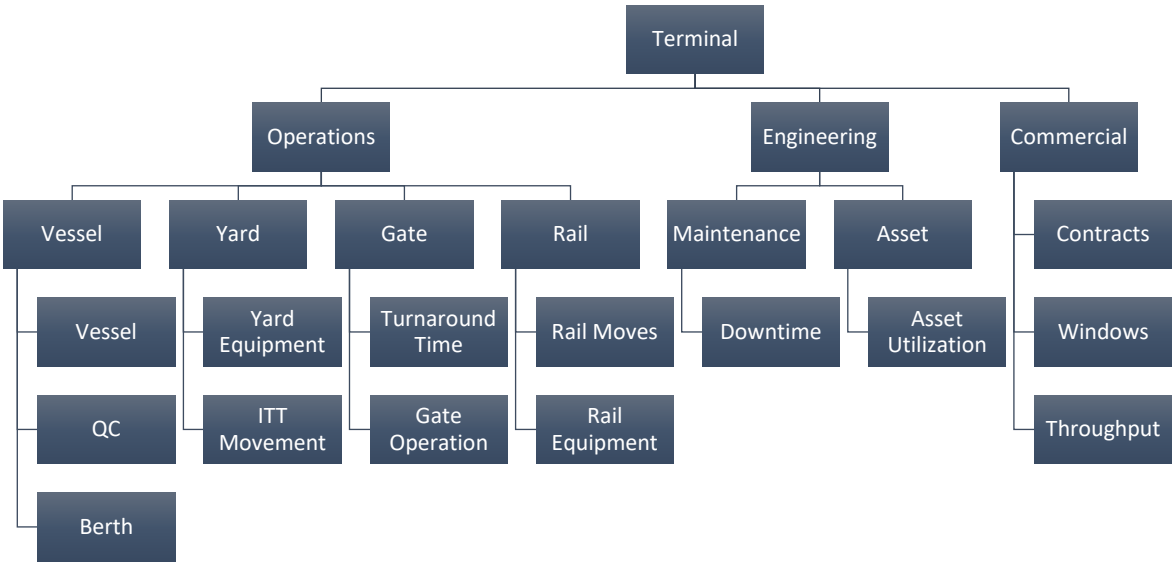
For example, for all or any specific CUSTOMER, easily view the corresponding PRODUCTS (used) , ACTIVITIES (engaged) , RESOURCES (applied) and actual EXPENSES (incurred) per transaction (as in a VESSEL / Rail / other modes, as per TEU / Metric Tons / Volume , as in a MOVE). Also be able to determine the true YIELD… Likewise, for all or any specific RESOURCES, easily view on which CUSTOMERS they were applied, which PRODUCTS they were part of delivering, which ACTIVITIES they contributed to and all at what Cost (Expense) – in time (effective HOURS) and in money…
So on and so forth…

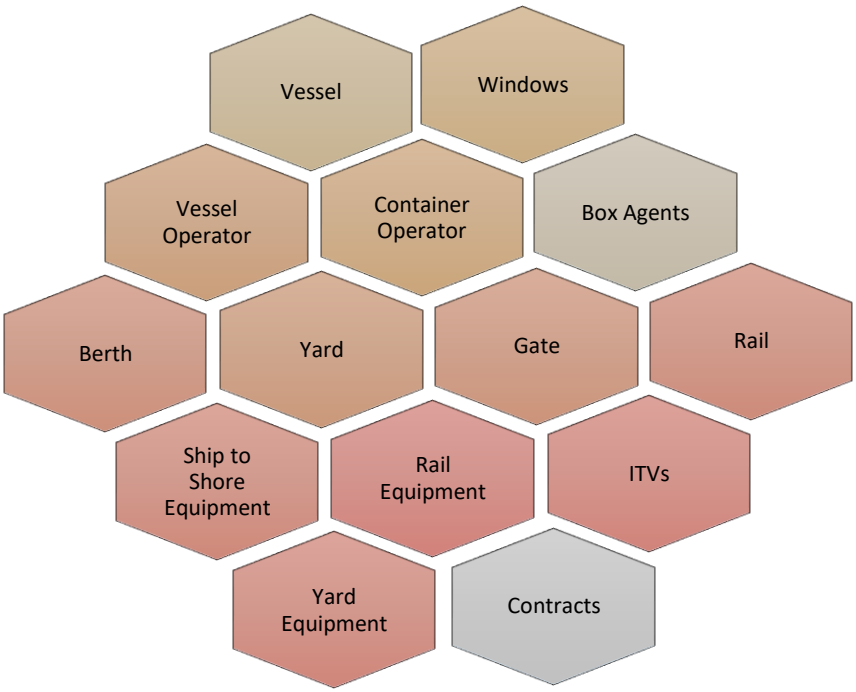



Terminal data from Operations, Maintenance, Finance, Human Resources and Assets feeds into ***Biz Analytix*** as Source Data and is process within the system to provide a wide variety of analytical reports. As such there is no limitation or constraint on what type or brand of systems are in use at any particular location, so long as the data can be made available in the manner that ***Biz Analytix*** needs it

## Configuration Approach

| Step Objective | Group or Department | Description of Result |
|---|---|---|
| Identify all conducted activities | Terminal operations and Commercial Dept. | Breakup of each service into Activities and Time based |
| Identify all invoiced activities | Terminal Finance and Commercial Dept. | Direct and Indirect costs of Personnel, equipment, and material from GL |
| Identify all Performance measures | Terminal Operations, Global Operation Efficiency, Global Operations Apps and Systems | Establish KPI's and Identify sensor points for performance data capture |
| Identify relation between cost and activities | Terminal Finance, Terminal Operations, Commercial Dept. and Global Operations Efficiency | Will result in ***Biz Analytix*** based set of Tariffs and Service Catalogue |
| Identify Cost Drivers | Terminal Finance, Terminal Operations, Commercial Dept. and Global Operations Efficiency | |
| Model the Costs | Terminal Finance, Terminal Operations, Commercial Dept. and Global Operations Efficiency | |
| Interpret the results | Terminal Finance, Terminal Operations, Commercial Dept. and Global Operations Efficiency | Will result in Continuous refinement of ***Biz Analytix*** model and revisions to Tariffs and Contract Agreements over time |


Terminal
Operations
Engineering
Commercial
Vessel
Yard
Gate
Rail
Maintenance
Asset
Contracts
Vessel
Yard Equipment
Turnaround Time
Rail Moves
Downtime
Asset Utilization
Windows
QC
ITT Movement
Gate Operation
Rail Equipment
Throughput
Berth


Vessel
Windows
Vessel Operator
Container Operator
Box Agents
Berth
Yard
Gate
Rail
Ship to Shore Equipment
Rail Equipment
ITVs
Yard Equipment
Contracts

## KPI for Vessel

- Productivity VSL GMPH – Mainliners / Feeders
- Productivity VSL BMPH – Mainliners / Feeders
- Crane Intensity
- Vessel Delay Analysis
- Vessel Average Waiting Time

## Summary / Dashboard for Vessel

- Total QC moves completed and remaining with completion percentage.
- Moves details by lift type (single, twin, tandem, quad).
- Moves details by QC and QC Operator
- Moves details by Category (Import, Export, Transshipment, Restow).
- Moves details by Status (Loaded, Empty, FCL, LCL).
- Moves details by Commodity (General, Reefer, Haz, OOG).

## KPI for Yard

- Productivity VSL GMPH – Mainliners / Feeders
- Productivity VSL BMPH – Mainliners / Feeders
- Crane Intensity
- Vessel Delay Analysis
- Vessel Average Waiting Time

## Summary / Dashboard for Yard

- Total QC moves completed and remaining with completion percentage.
- Moves details by lift type (single, twin, tandem, quad).
- Moves details by QC and QC Operator
- Moves details by Category (Import, Export, Transshipment, Restow).
- Moves details by Status (Loaded, Empty, FCL, LCL).
- Moves details by Commodity (General, Reefer, Haz, OOG).

## KPI for Rail

| |
|---|
| • Productivity VSL GMPH – Mainliners / Feeders |
| • Productivity VSL BMPH – Mainliners / Feeders |
| • Crane Intensity |
| • Vessel Delay Analysis |
| • Vessel Average Waiting Time |

## Summary / Dashboard for Rail

| |
|---|
| • Total QC moves completed and remaining with completion percentage. |
| • Moves details by lift type (single, twin, tandem, quad). |
| • Moves details by QC and QC Operator |
| • Moves details by Category (Import, Export, Transshipment, Restow). |
| • Moves details by Status (Loaded, Empty, FCL, LCL). |
| • Moves details by Commodity (General, Reefer, Haz, OOG). |

## Vessel Operation KPIs

| | |
|---|---|
| • Window Arrival Variance | System facilitates to define the contract for vessel operators which defines windows for vessel with frequency.<br><br>System check the variation of windows based on a actual arrival v/s defined window, and system provides Arrival Variance, On window Arrival Percentage, Departure Variance, On window departure Percentage and Off Window details |
| • On Window Arrival | |
| • On Window Arrival % | |
| • Window Departure Variance | |
| • On Window Departure | |
| • On Window Departure % | |
| • Terminal Window Success Rate | |
| • Actual BMPH | System provides Actual BMPH based on container exchange and Berth Time |
| • Actual GMPH | System provides Actual GMPH based on container exchange and equipment hours |

## Terminal Throughput KPIs

| | |
|---|---|
| • Volume Data | System facilitates to view the terminal throughput based on different parameters with respect to Vessel, Period, Customer, Terminal etc |
| • Crane Productivity | System facilitates to view crane productivity based on Vessel, duration, terminal and equipment |
| • Throughput based on Category | |
| • Throughput based on Commodity | |
| • Throughput based on Shipping Line | |
| • Throughput based on Vessel Operator | |
| • Throughput based on Box Agents | |