



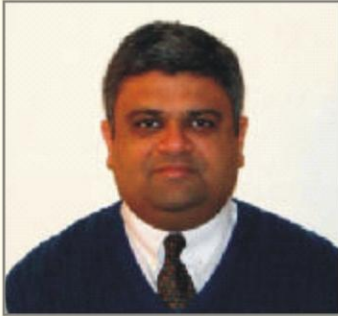
M&N BUSINESS INTELLIGENCE

Serving your BI Needs

Presented by :

Apoorv Chaturvedi | Harsh Vardhan Asthana | Rabindra Singh

About Our Team



Apoorv Chaturvedi

A Delhi College of Engg alumnus with more than 9 years of ETL, BI development experience. Has worked on Business Objects and SAS platforms



Harsh Vardhan Asthana

Graduated from SRM University, Chennai. With close to 2 yrs of experience in ETL. Worked on DWBI tools like Informatica, Cognos, SSIS, SSRS, Quickreports, etc.



Rabindra Singh

An MCA with more than 2 years of .Net development experience. He is involved in implementation and reporting development

Our clients and partners



E2e
Analytix(acquired by
Bodhtree)



Agenda



- Introduction-AC
- How much to order: Harsh
- When to order: Harsh
- Whom to order: Rabindra



Possible Integrations



ORACLE | Hyperion



QlikView

INFORMATICA
The Data Integration Company™



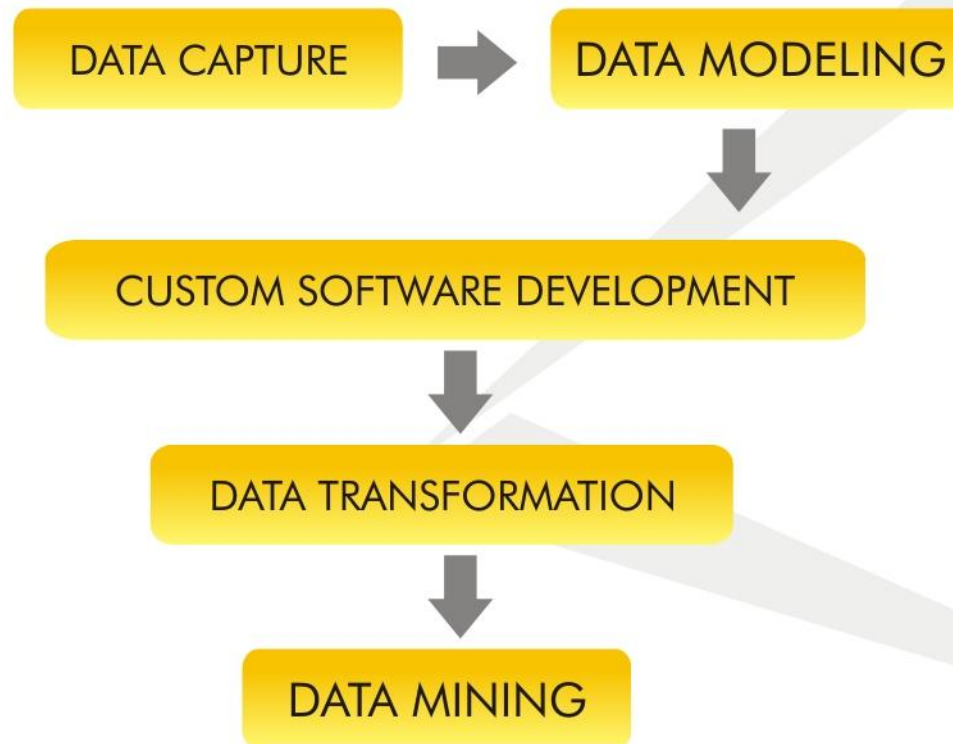
COGNOS
AN IBM COMPANY



What do we offer?



- **Readymade analytic modules**
 - Integrate analytic modules with ERP
 - Readymade datamarts



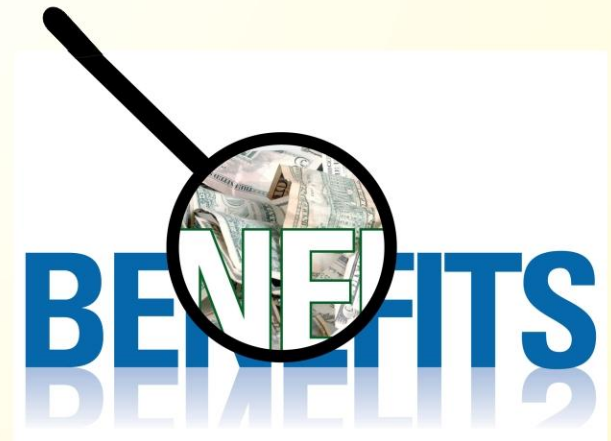
Answers to the following questions:

- When to order for a set of items?
 - Does the client have adequate inventory of items?
 - Which items are overstocked?
 - Which items need to be purchased immediately?
- Whom to order?
 - Which suppliers offer best on time delivery
- At what price to reorder?



Answers to the following questions:

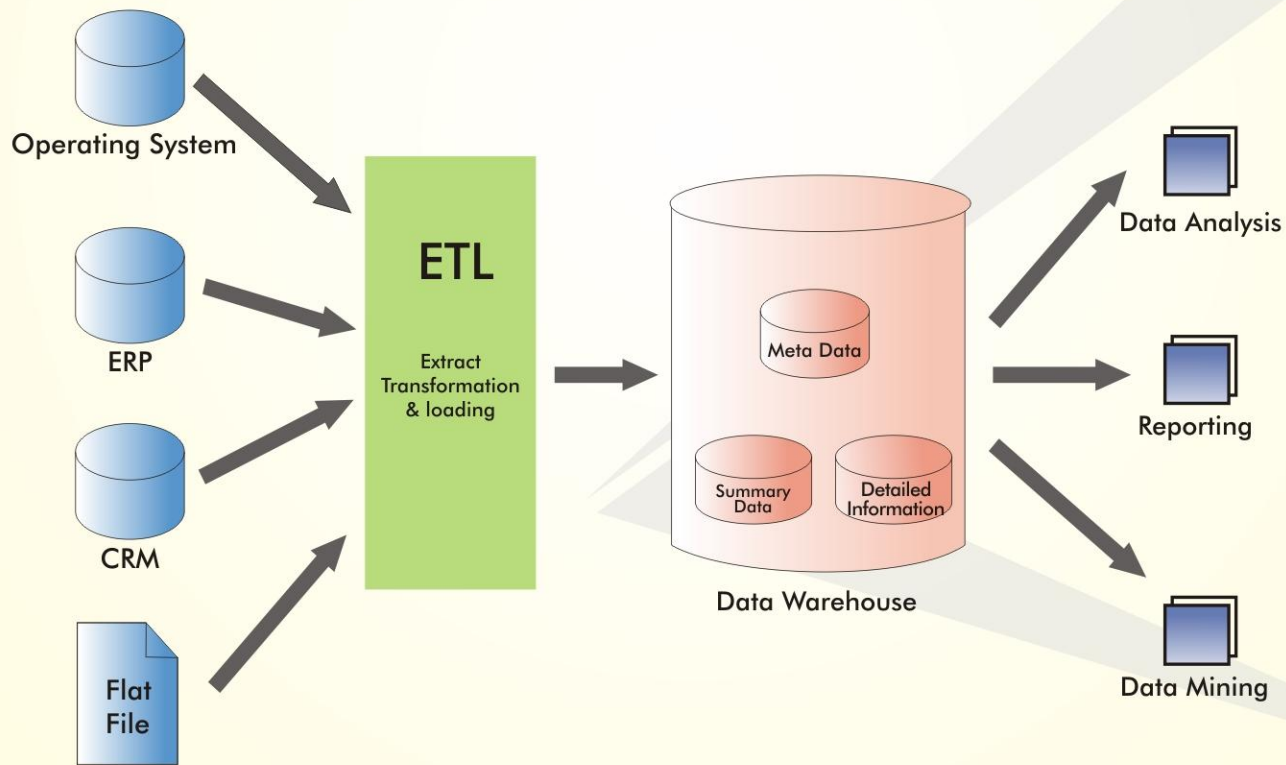
- Business benefits:
 - Better cash flow and profitability
 - Reduced inventory investment
 - Find right balance between inventory investment and customer service
 - More accurate marketing plans
- Operational benefits:
 - Reduced times for analysis
 - Give managers flexibility for analysis



Data Model Design



- Design of data warehouse in 3rd normal form
- Decision on history making entities-base tables, history tables
- Design of conformed dimensions-Date dimension



How much to order?

- Trend-Year on Year, Seasonality-Quarter by quarter.
(Moving average method)
 - We take average of sales over 3 to 5 year period
 - Low standard deviation in comparison to average sales

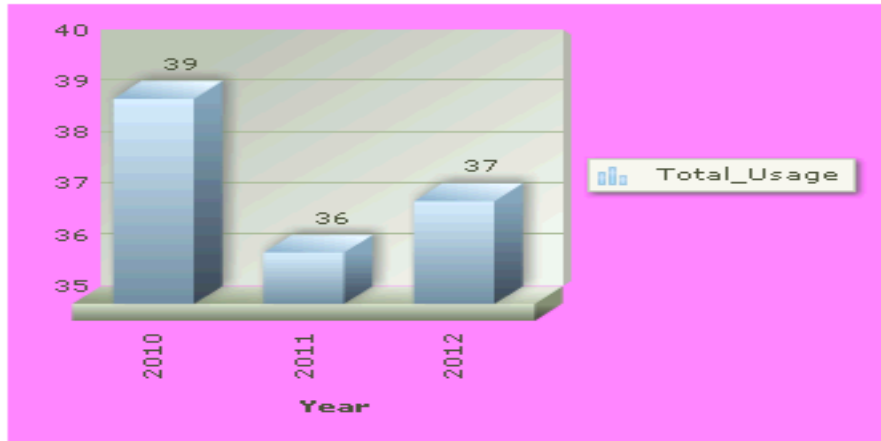


Yearly and Monthly Trends



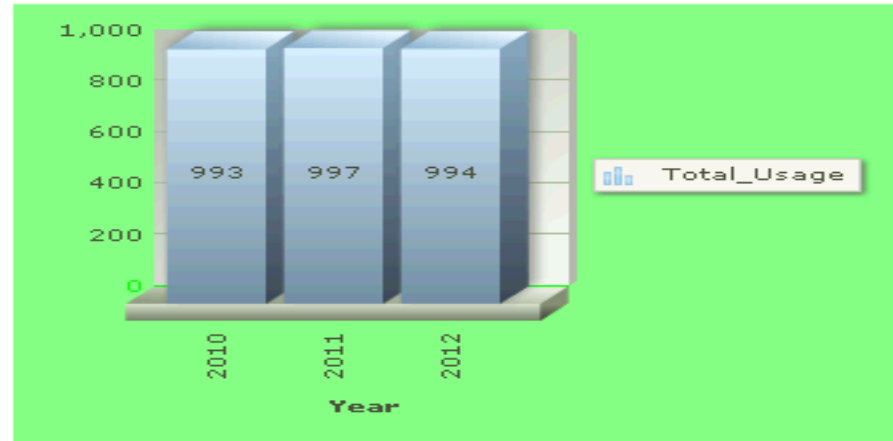
Yearly Trend Analysis For Type-B Items

Item_Dept Equal to Item_Name Equal to B Clothing



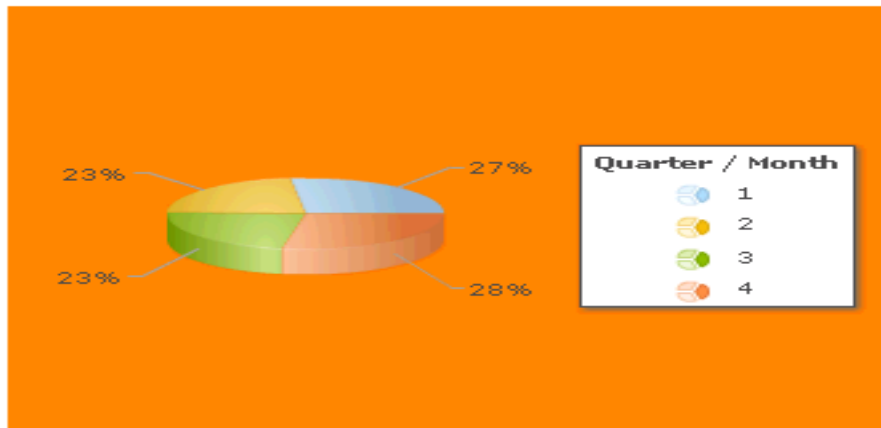
Yearly Trend Analysis For Type-A Items

Item_Dept Equal to Item_Name Equal to A Brick



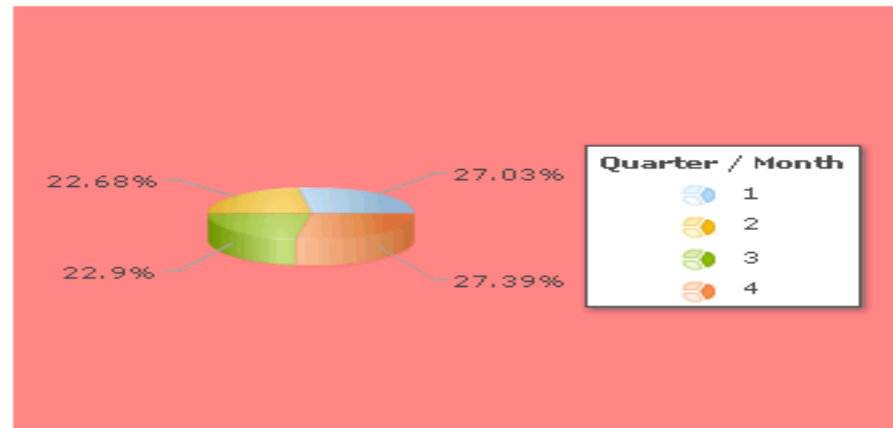
Seasonality Of a Type-A Item Till Date Across the Years

Year Equal to Item_Dept Equal to Item_Name Equal to 2010 A Brick



Seasonality Of a Type-B Item Till Date Across the Years

Year Equal to Item_Dept Equal to Item_Name Equal to 2010,2011,2012 B Clothing



When to order?

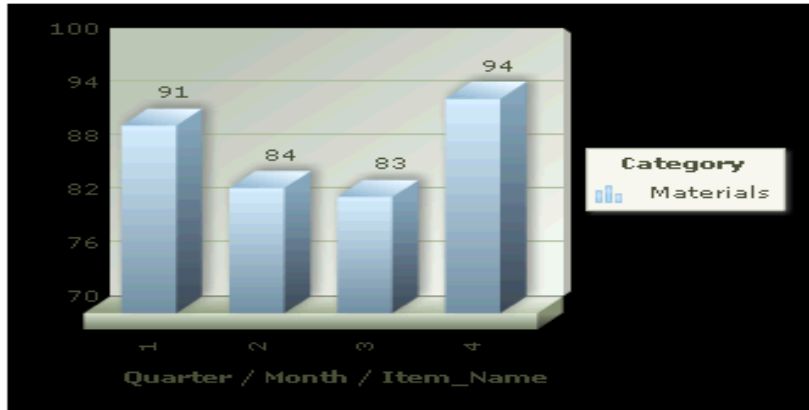
- Prevent stockouts: Establish customer service levels
 - Safety stock
 - Reorder point
- Sales
- Lead time
- Usage
- Current inventory



Safety Stock & Reorder Point

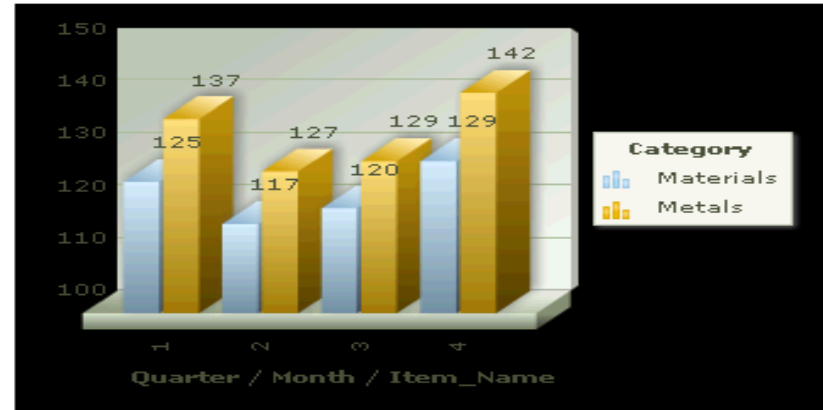
Safety Stock For Item Type-A By Category For Specific Year

Year Equal to Item_Dept Equal to
2011 A



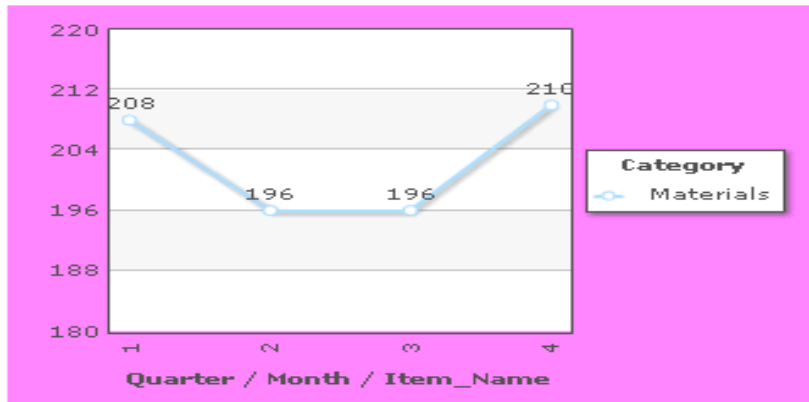
Safety Stock For Item Type-B By Category For Specific Year

Year Equal to Item_Dept Equal to
2011 B



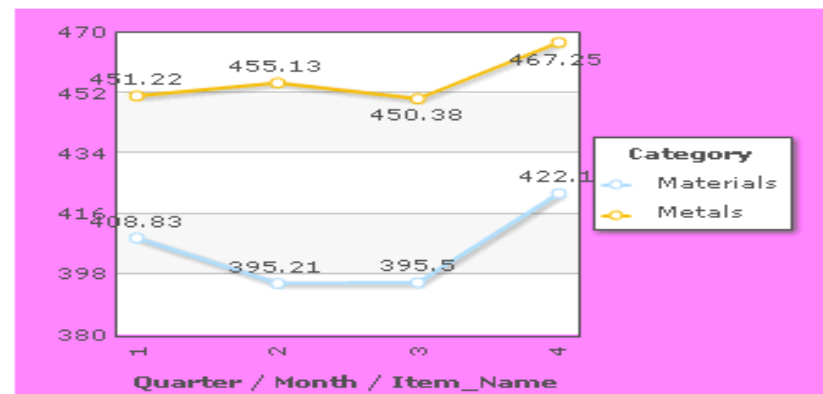
Re-order Point For Item Type-A By Category For Specified Year

Year Equal to Item_Dept Equal to
2011 A



Re-order Point For Item Type-B By Category For Specified Year

Year Equal to Item_Dept Equal to
2011 B



We have assumed 95% service level for the safety stock. Have assumed Reorder Point=safety stock+ average lead time*average usage for the given time period

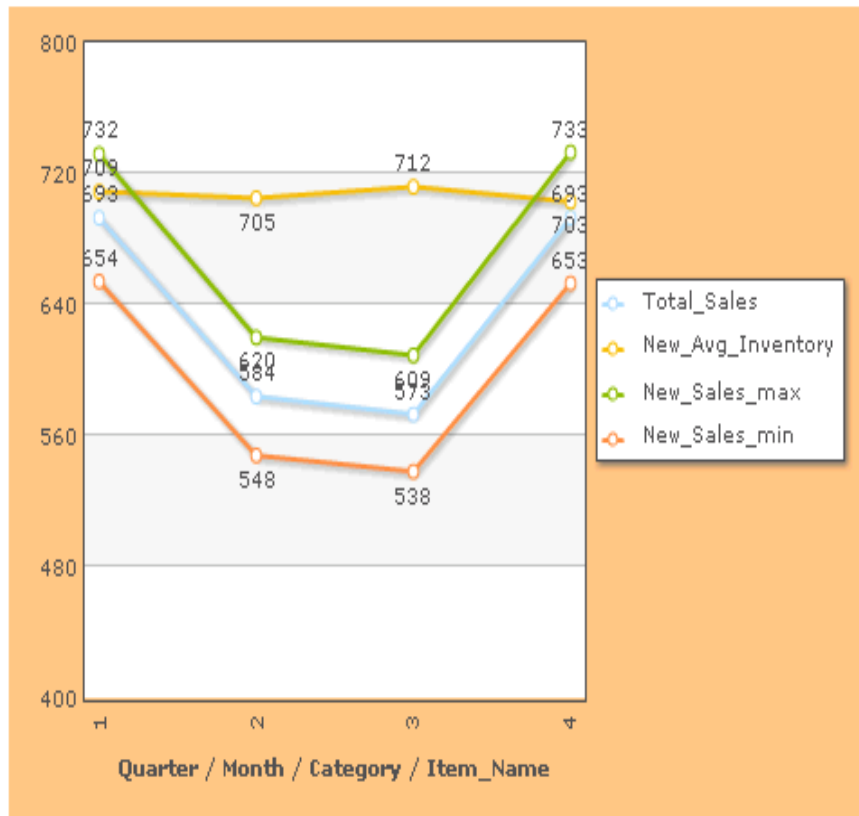
Overstock and Understock Analysis



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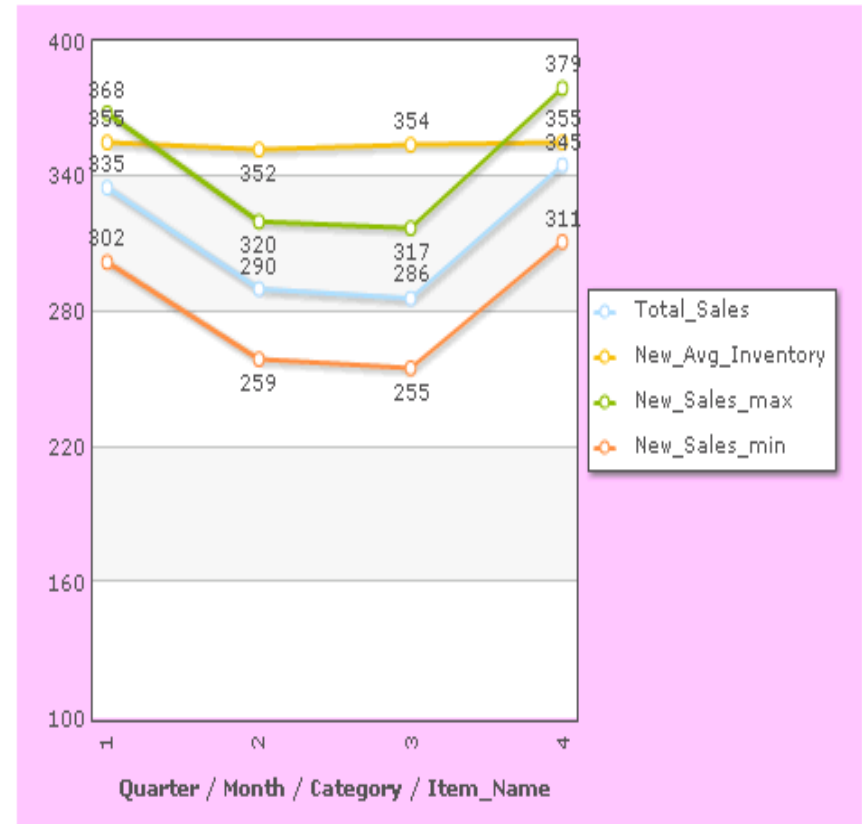
Overstock / Understock For Type-A Items By Category Across Year

Year Equal to Item_Desc Equal to
2011 A



Overstock / Understock For Type-B Items By Category Across Year

Year Equal to Item_Desc Equal to
2011 B



Whom to order?

Supplier Analytics:

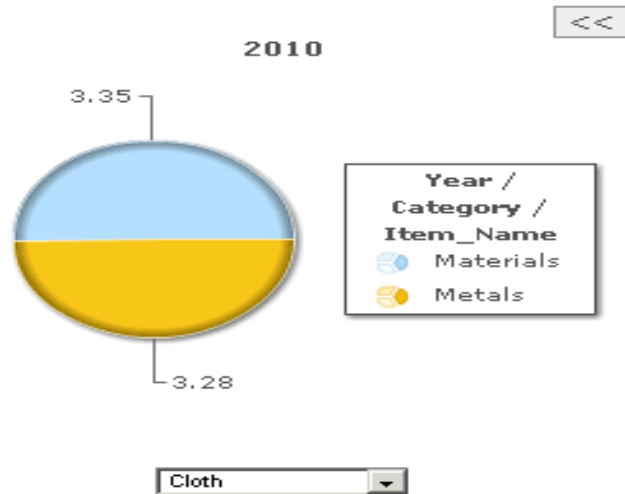
- Multiple suppliers
- Varying Prices Of Item Across Supplier
- Lead Times
- Average Discount Offered
- Average Price
- Return Rate



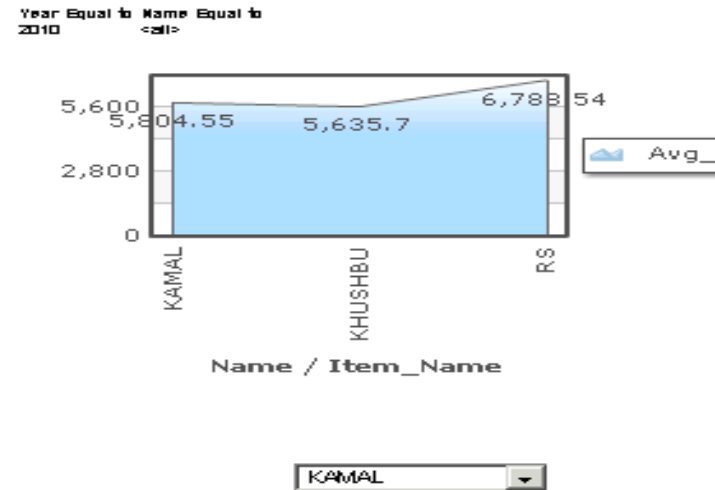
Supplier Analytics



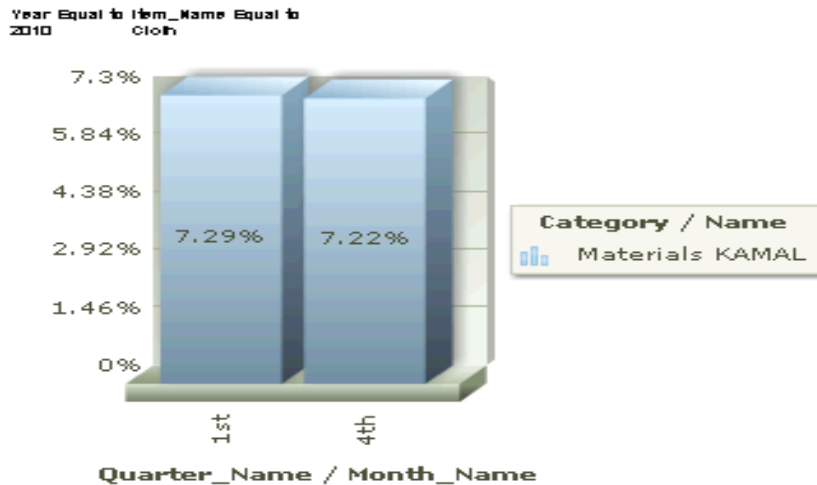
Average Delivery Lead Time Across Different Categories Of Products.



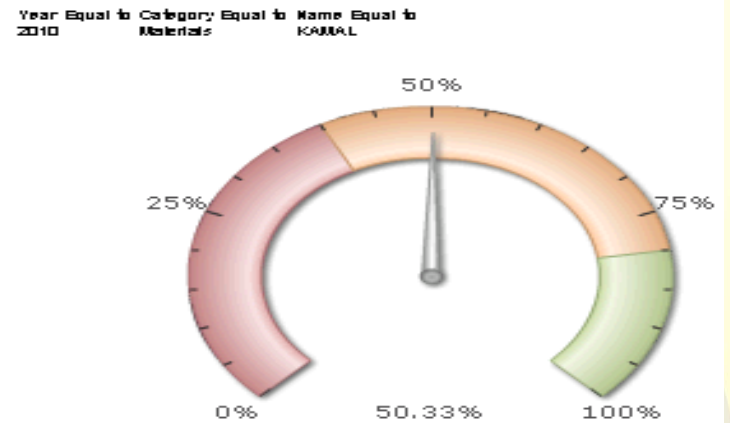
Average Price Of Item Across Supplier



Average Discount By Supplier Across the Different Items for Particular Year



Average Return Rate Of Items By Details



Price

Lead Time

History

Discount

**Just In time
Analysis**

Feel Secure

Hours

Minutes

Real Time

Days

**Just In time
Analysis**



History Dashboard



Historical Lead Time Analysis For Item X

(Type A: 1 to 2 weeks, Type B: 3 to 4 weeks, Type C: >4 weeks)

order_date_Year Equal to
2007



Historical Price Analysis For Item X

(Type A: 3000 to 5000, Type B: 5000 to 6000, Type C: >6000)

order_date_Year Equal to
2007,2008



Historical Discount Analysis For Item X

(Type A: 10% to 11%, Type B: 12%, Type C: >12%)

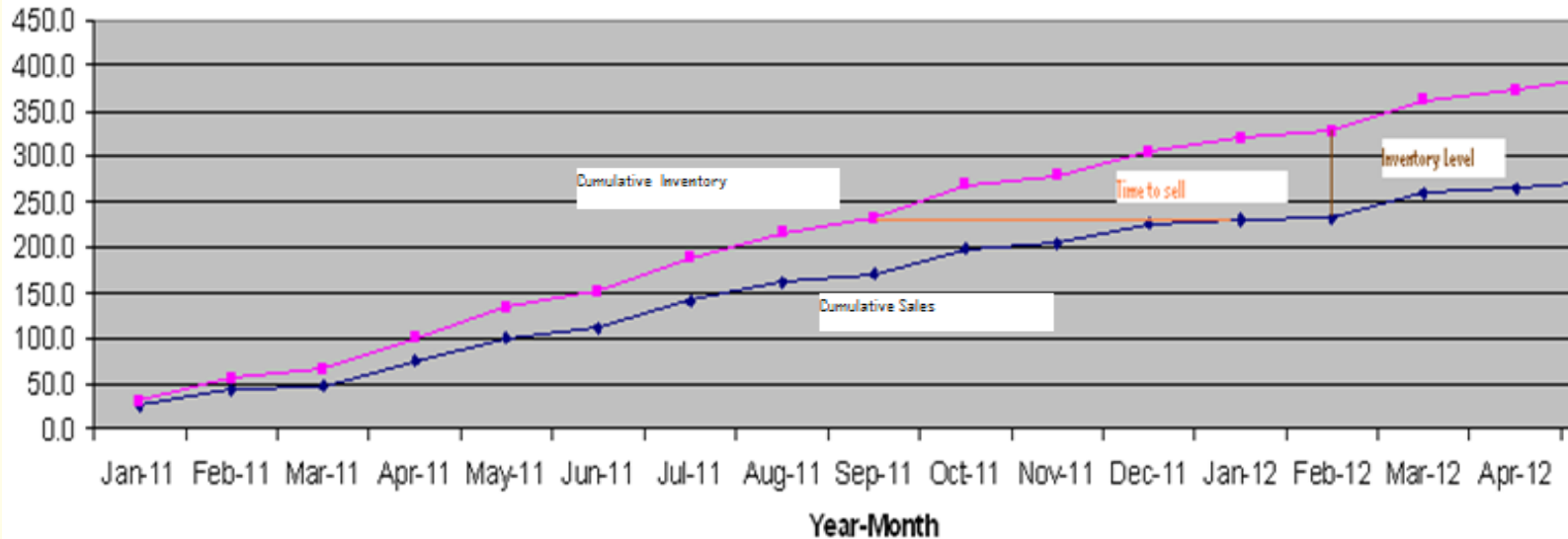
order_date_Year Equal to
2009,2010,2011



JIT Inventory Analysis



Cumulative Inventory Analysis



Month-Year	Item Name	Days of Inventory	Days to sell
Apr-11	Item A	9	2
May-11	Item A	1	1
Jun-11	Item A	6	5
Jul-11	Item A	9	4
Aug-11	Item A	9	9
Sep-11	Item A	9	2
Oct-11	Item A	9	4
Nov-11	Item A	5	10
Dec-11	Item A	1	8

Easy Data Access



Tally
Power of Simplicity



SAP Business
One



Tally Integration



More Power to Tally Reports

- Hold huge amounts of data from Tally: **Datawarehouse**
- Reliable and Easy Integration with other ERP systems: **normalization(help capture insert updates and deletes). No duplication of data**
- Reporting through modular approach
 - **Inventory**
 - **Accounts**
 - **Marketing**



More Power to Tally Reports

- Tracking History of changes: Items, transactions-**Datawarehouse(history tables)**
- Integration of data among large number of locations that deploy Tally
- Access Tally data from anywhere-**web reporting and I-pad applications**

More Power to Tally Reports



- Scalability of reporting
 - Handle multiple locations
 - Handle multiple types of data
- Real time access
 - Get Historical data updated on an hourly basis

Why M&NBI?



- End to end implementation
 - System design
 - ETL development
 - Implementation
 - Dashboard development
- Readymade analytic modules
- Lower implementation time and lower implementation cost



Questions?