



INVESTIGATEANDCREATE.COM

Proprietor – Suma Gopalakrishna



ABOUT THE COMPANY

INTRODUCTION

- ✦ INVESTIGATEANDCREATE.COM IS A PROPRIETORSHIP BASED COMPANY REGISTERED ON 08/08/2014 WITH CENTRAL BOARD OF EXCISE AND CUSTOMS, INDIA.

WHAT DO WE DO?

- ✦ WE PROVIDE,
ONLINE INFORMATION AND DATABASE ACCESS SERVICE AND RETRIEVAL SERVICE THROUGH COMPUTER NETWORK.
INFORMATION TECHNOLOGY SOFTWARE SERVICES.

PROJECTS COMPLETED

- ✦ WWW.PRATYANGIRADEVI-HINDU-MATRIMONY.COM

PROJECTS IN PLANNING PHASE

- ✦ WWW.PRATYANGIRADEVI-FOOD-FOR-ELDERS.COM
- ✦ ULTRA INVESTIGATOR

PROJECTS IN PROGRESS

- ✦ BUSINESS ENHANCER

PROJECTS WE WOULD LIKE TO UNDERTAKE

- ✦ DEVELOPMENT PROJECTS TELECOM DOMAIN - SS7, SIGTRAN, AAA PROTOCOLS - RADIUS AND DIAMETER
- ✦ ANY VC++ - MFC, COM PROJECTS
- ✦ ANY PHP, MYSQL PROJECTS
- ✦ ANY CORE JAVA PROJECTS
- ✦ ANT AND MAVEN TECHNOLOGY
- ✦ TESTING PROJECTS IN TELECOM AND DATACOM DOMAIN

VISION AND MISSION

- ❖ *Mission - Service Over Self*
- ❖ Vision - An IT Product or IT Service of InvestigateAndCreate.com - A Ray Of Hope
- ❖ *Quality Policy - "Deliver Quality IT Services and IT Products that solve others' problems"*



TEAM MEMBERS AND BACKGROUND

- ❖ **Suma Gopalakrishna**
- ❖ **Role – Proprietor**
- ❖ **Suma Gopalakrishna founded this company in 2014. She is a B.E in Electrical Engineering and has completed Senior Management Program from IIMC, Kolkata.**
- ❖ **She has 11.8 years of experience in software development and testing in telecom/datacom domain, Financial Services domain and in the Oil And Gas domain.**



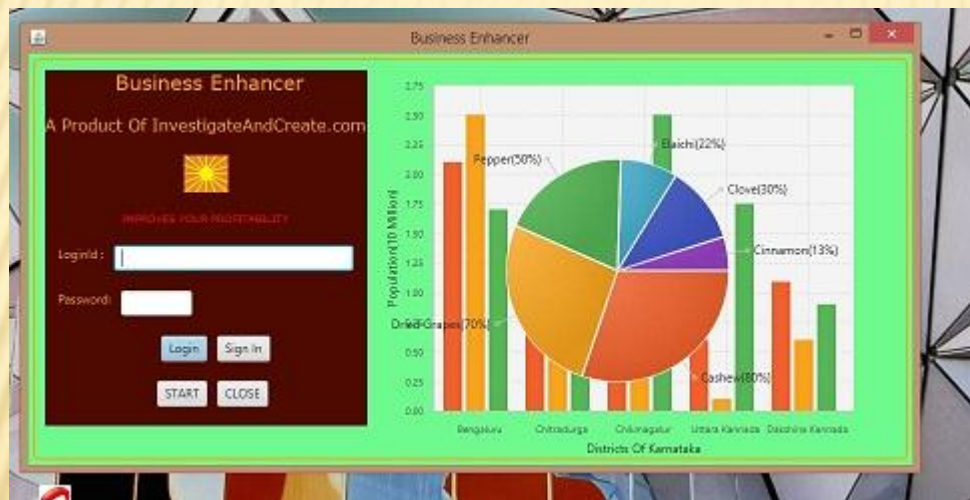
CUSTOMER (NEED AND TARGET)

Project Name	Need	Target
Business Enhancer	A tool for making business decisions based on Predictive Analytics.	Board Of Directors , Management , Managers Business Analysts Six Sigma Coaches Employees



BUSINESS ENHANCER

❖ PREDICTIVE ANALYTICS TOOL



Predictive modelling provides the ability to automatically create accurate predictive models about future. There are also options to choose the best solution with multi model evaluation.

Predictive Model Deployment provides the option to deploy the analytical results in to the every day decision making process to get results, reports and output by automating the decisions based on the modelling.



BUSINESS ENHANCER

- ❖ END-TO-END IMPLEMENTATION OF THE DCOVA FRAMEWORK



TECHNOLOGIES LEVERAGED

- ❖ JAVA - JDK 8.1
- ❖ DATA SOURCES- PRESENTLY LEVERAGING MYSQL, DERBYCLIENT
- ❖ DOMAINS –
 - WEB-SERVICES
 - STATISTICS AND MATHEMATICS



BUSINESS ENHANCER

- ❖ *Defines the data leveraged to solve a problem or meet a business objective.*
- ❖ *Collects the data from appropriate sources.*
- ❖ *Organises the data collected by representing them as tables.*
- ❖ *Visualizes the data collected by developing charts.*
- ❖ *Analyzes the data collected.*
- ❖ *Creates reports from the analysis.*
- ❖ *It also publishes to the dashboard webpage.*

- ❖ *Business Enhancer can be leveraged to,*
 - *uncover unforeseen relationships between the various variables.*
 - *develop optimization models that impact an organisation's planning, strategy and operations.*
 - *collects and processes data sets of all sizes including Big Data.*



BUSINESS ENHANCER

- ❖ *BusinessEnhancer product line can be leveraged to increase profitability in any business and generates detailed reports and attractive dashboards.*



BUSINESS ENHANCER FEATURES

- ❖ CONNECTS AND COLLECTS DATA FROM ALL TYPES OF DATASOURCES SUCH AS RDBMS DATABASES, CSV FORMAT FILES AND MICROSOFT EXCEL.
ORGANISES THE RAW DATA INTO,
 - SUMMARY TABLES,
 - CONTINGENCY TABLES,
 - MULTIDIMENSIONAL CONTINGENCY TABLES,
 - PIVOT TABLES,
 - FREQUENCY DISTRIBUTION TABLES.
- ❖ PROVIDES VISUALISATIONS CREATING,
 - ❖ PIECHARTS,
 - ❖ BARCHARTS,
 - ❖ PARETOCHARTS,
 - ❖ SCATTERPLOTS,
 - ❖ GRAPHS,
 - ❖ TIME-SERIES PLOTS,
 - ❖ STEM-AND-LEAF DISPLAYS,
 - ❖ NORMAL PROBABILITY PLOTS,
 - ❖ HISTOGRAMS,
 - ❖ CONTROL CHARTS - X-BAR CHART, R CHART, P CHART AND C CHART.
- ❖ STATISTICAL ANALYSIS
- ❖ REPORTS
- ❖ DASHBOARDS
- ❖ SAVE REPORTS AND DASHBOARDS IN HTML, PDF, MS-EXCEL AND MS-WORD FORMATS



CREATE VISUAL CONTROL SYSTEMS

- ❖ *BusinessEnhancer generates visual dashboards that can be displayed in work area and leveraged by team of people who investigate improvement opportunities on a weekly, monthly or quarterly basis and these visuals have a certain impact.*
Being visual captures one's mind space and makes stakeholders such as employees think and results in improvement in productivity and waste elimination.
It makes employees more involved and encourages them to take ownership of issues they are facing.



BUSINESS ENHANCER- QUALITY MANAGEMENT TOOL

- ❖ *Leveraged to build your Quality Assurance System. Leveraged as a tool in Statistical Process Control in order to develop a quality assurance system that enables one to give useful meanings to variations in the business processes.*
- ❖ *Leveraged as tool for Total Quality Management. It can be used to generate Control Charts for highlighting problems and Histograms, Pareto Diagram, Scatter Diagram and graphs for identifying improvement opportunities.*

❖ *Then what are you all waiting for, come and become a proud owner of the BusinessEnhancer Tool.*



SAMPLE SCREENS OF BUSINESS ENHANCER

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

Database Servers

derby-local

BEDB:

BEDB

Categorical Data

VARCHAR

PRODUCT

BRAND

CITY

RETAILER

Analytics Data

Product	City	Brand	Retailer
Soap	Bengaluru	Orinthal	Food World
Toothpaste	Calcutta	Closeup	More
Shampoo	Srinagar	Sunsilk	Ramesh Stores
Talcolim Powder	Bengaluru	Ponds	Food Hall
Daycream	Bengaluru	Ponds	Food Hall
Soap	Bengaluru	Unif	Food World
Toothpaste	Calcutta	Closeup	More
Shampoo	Calcutta	Sunsilk	Ramesh Stores
Talcolim Powder	Calcutta	Orinthal	Food World
Daycream	Srinagar	VLCC	More
Soap	Srinagar	Lux	Ramesh Stores
Soap	Srinagar	Lux	Ramesh Stores
Toothpaste	Bengaluru	Colgate	Food World
Shampoo	Chimmagalur	Sunsilk	Food World
Talcolim Powder	Chimmagalur	Unif	Food World
Daycream	Chimmagalur	VLCC	Food World
Soap	Mandya	Orinthal	Ramesh Stores
Toothpaste	Mandya	Colgate	Ramesh Stores
Shampoo	Calcutta	Head And Shoulders	Ramesh Stores
Talcolim Powder	Mandya	Ponds	Ramesh Stores
Daycream	Chimmagalur	Clay	Food Hall
Soap	Chimmagalur	Orinthal	Food Hall
Toothpaste	Chimmagalur	Peppodent	More
Shampoo	Bengaluru	Clinic	More
Talcolim Powder	Bengaluru	Yarley	More
Daycream	Srinagar	VLCC	More
Daycream	Srinagar	VLCC	Food World
Daycream	Mandya	VLCC	Food World

Database Servers Analytics Data

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DATA SOURCES , COLLECTED DATA

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

distributor		SUMMARY TABLE		
Name	Product	Brand	Frequency of Brand	Percentage of Brand
Model		Ponds	3	10.714285714285714
Brand		Pepsodent	1	3.5714285714285716
City		Colgate	2	7.142857142857143
Retailer		Head And Shoulders	1	3.5714285714285716
Unit-cost		Orinhol	4	14.285714285714286
Number Of Units Sold		Closeup	2	7.142857142857143
Number Of Defect Products		Lux	2	7.142857142857143
Distributor Name		Olav	1	3.5714285714285716
Transport Company		Clinic	1	3.5714285714285716
		Sunsilk	3	10.714285714285714
		Unif	2	7.142857142857143
		Yarley	1	3.5714285714285716
		VLCC	5	17.857142857142858

Database Servers Analytics Data

Windows Script

SUMMARY TABLE

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

distributor

Name
Product
Model
Brand
City
Retailer
Unit-cost
Number Of Units Sold
Number Of Defect Products
Distributor Name
Transport Company

Brand X Retailer Contingency Table

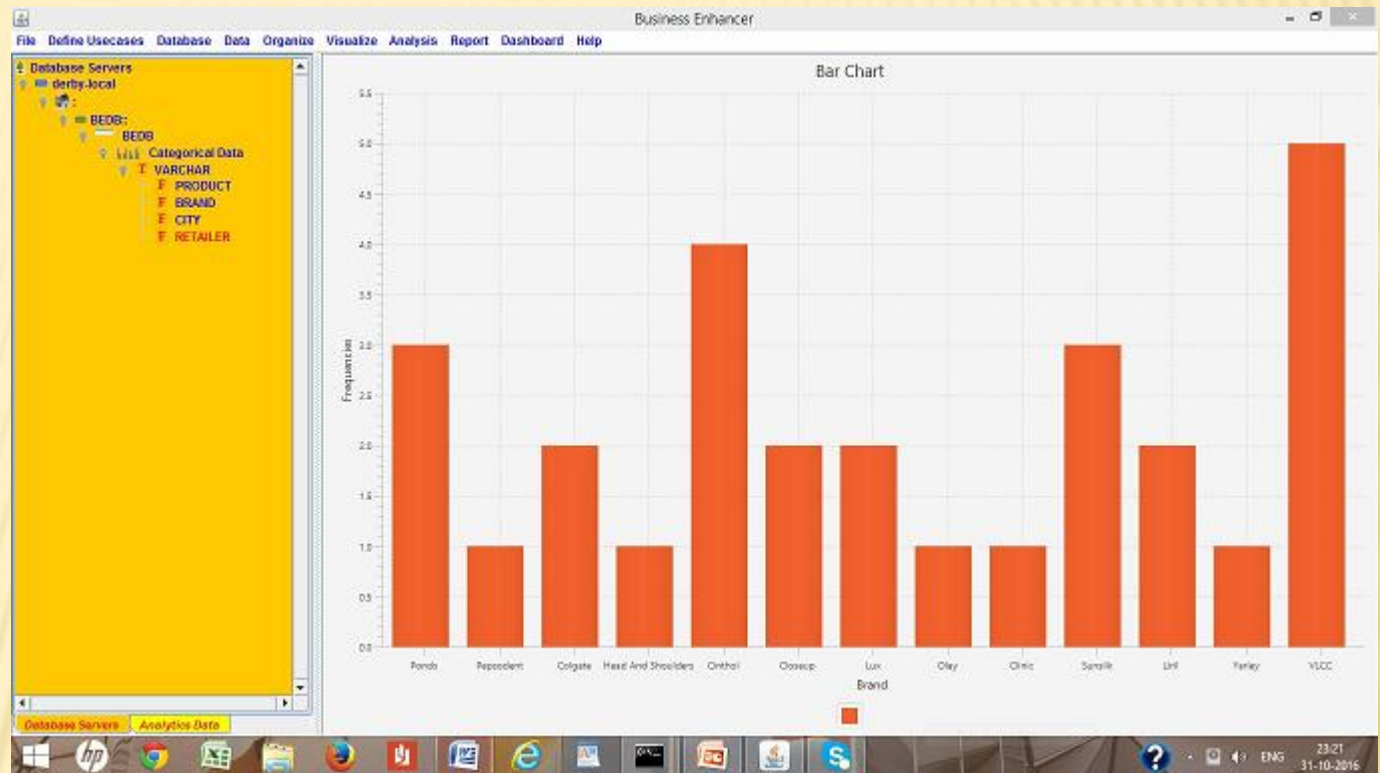
Brand	More	Ramesh Stores	Food World	Food Hall	Total
Orinthal	0	1	2	1	4
Ponds	0	1	0	2	3
Yarley	1	0	0	0	1
Closeup	2	0	0	0	2
Pepsodent	1	0	0	0	1
Colgate	0	1	1	0	2
Liril	0	0	2	0	2
Lux	0	2	0	0	2
Clinic	1	0	0	0	1
Head And Shoulders	0	1	0	0	1
Olav	0	0	0	1	1
VLCC	2	0	3	0	5
Total	7	8	9	4	28

Database Servers Analytics Data

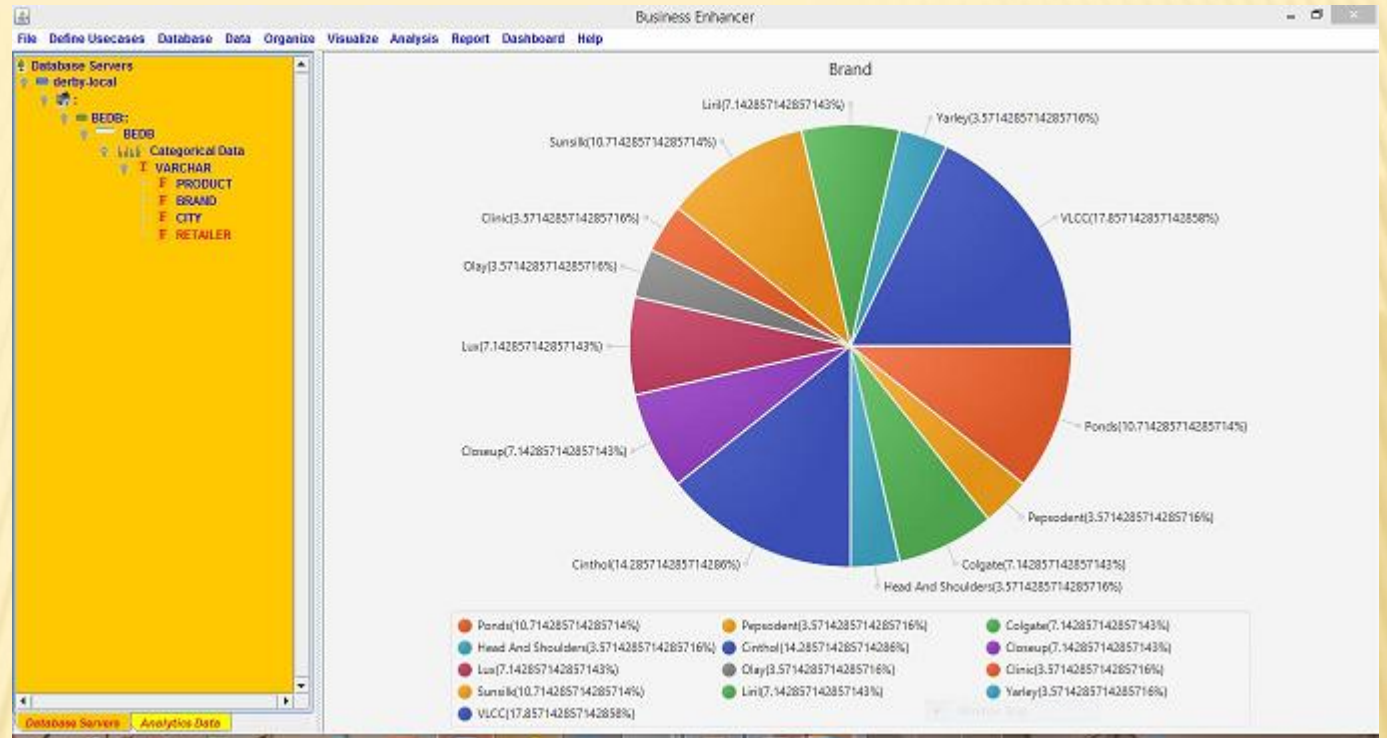
Brand X Retailer Brand X Product Brand X City Retailer X Product Retailer X City Product X City

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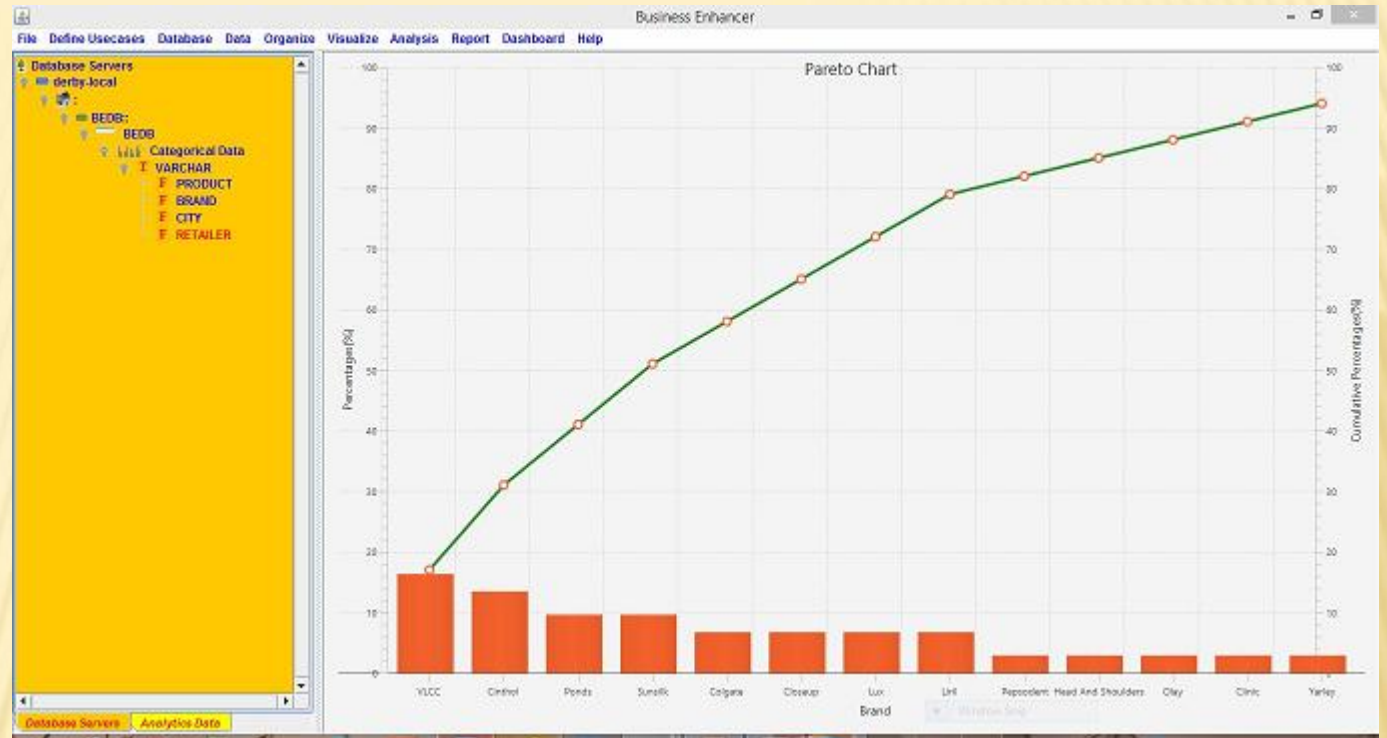
CONTINGENCY TABLE



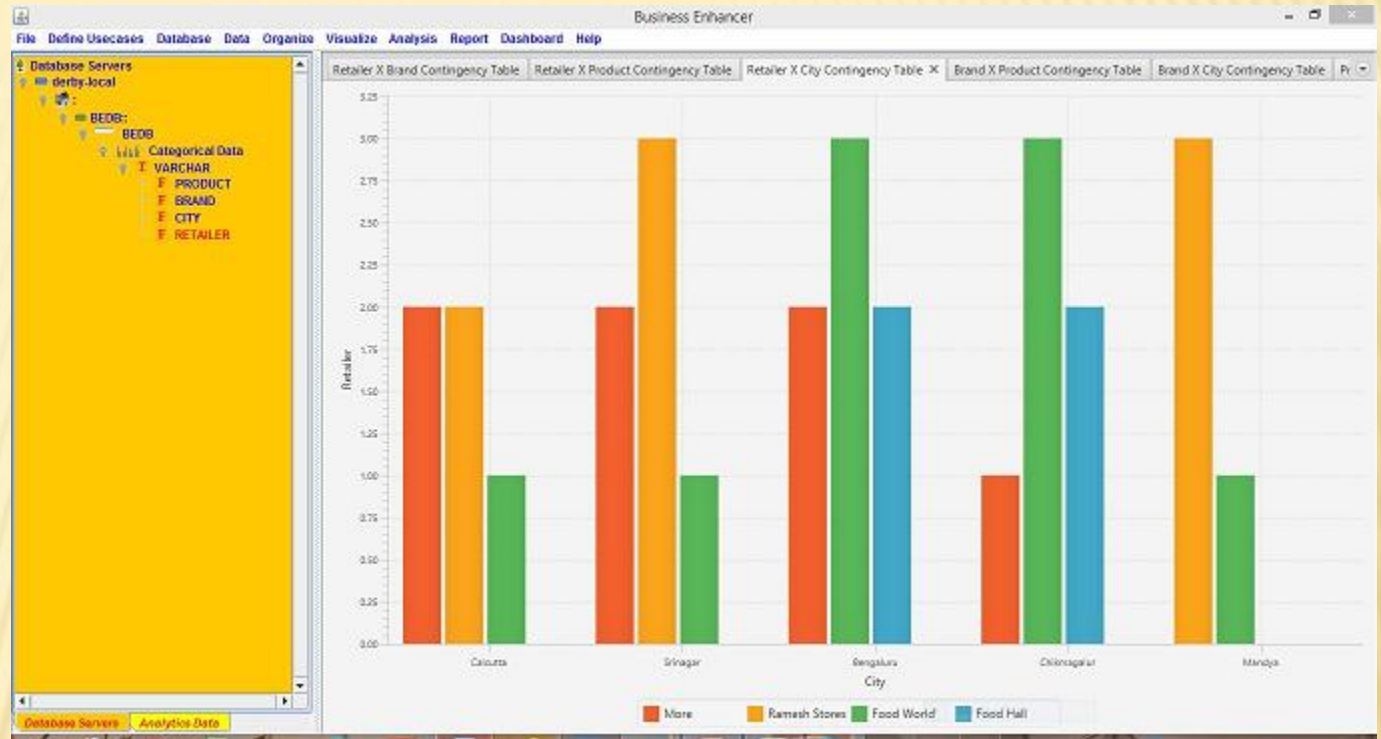
BAR CHART



PIE CHART



PARETO CHART



SIDE-BY-SIDE CHART

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

Database Serv
derby-jcc
BED

Table0

Independent / Dependent Variables	Food Hall	Food World	More	Ramesh Stores
Cinthal	1	2	0	1
Clinic	0	0	1	0
Closeup	0	0	2	0
Colgate	0	1	0	1
Head And Shoulders	0	0	0	1
Liril	0	2	0	0
Lux	0	0	0	2
Olaf	1	0	0	0
Peppodant	0	0	1	0
Ponds	2	0	0	1
Sunsilk	0	1	0	2
VLOO	0	3	2	0
Yarley	0	0	1	0

Database Servers
Analytics Data
Table0 Table1 Table2

PIVOT TABLE - I

LEVERAGED TO GENERATE ALL POSSIBLE MODELS

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

Database Servers
derby-jcc
BEO

Table1

Independent / Dependent Variables	Food Hall * Daycream	Food Hall * Soap	Food Hall * Talcolm Powder	Food World * Daycream	Food World * Shampoo	Food World * Soap	Food World *
Cirithal	0	1	0	0	0	1	1
Clinic	0	0	0	0	0	0	0
Closeup	0	0	0	0	0	0	0
Colgate	0	0	0	0	0	0	0
Head And Shoulders	0	0	0	0	0	0	0
Liril	0	0	0	0	0	1	1
Lux	0	0	0	0	0	0	0
Olay	1	0	0	0	0	0	0
Peppodant	0	0	0	0	0	0	0
Ponds	1	0	1	0	0	0	0
Sunsilk	0	0	0	0	1	0	0
VLCC	0	0	0	3	0	0	0
Yarley	0	0	0	0	0	0	0

Database Servers
Analytics Data
Table0 Table1 Table2

PIVOT TABLE - II

Business Enhancer

File Define Use Cases Database Data Organize Visualize Analysis Report Dashboard Help

Database Services
derby-jcc
BED

Table2

Independent / Dependent Variables	Food Hall * Daycream * Bengaluru	Food Hall * Daycream * Chikmagalur	Food Hall * Soap * Chikmagalur	Food Hall * Talkolm Powder * Bengaluru	Food Work
Cinthal	0	0	1	0	0
Clinic	0	0	0	0	0
Closeup	0	0	0	0	0
Colgate	0	0	0	0	0
Head And Shoulders	0	0	0	0	0
Liril	0	0	0	0	0
Lux	0	0	0	0	0
Olav	0	1	0	0	0
Pepsodent	0	0	0	0	0
Ponds	1	0	0	1	0
Sunsilk	0	0	0	0	0
VLCC	0	0	0	0	1
Yarley	0	0	0	0	0

Database Services
Analytics Data

Table0 Table1 Table2

PIVOT TABLE - III

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

Database Servers
derby-local

BEDS:
BEDS
Categorical Data
VARCHAR
PRODUCT
BRAND
CITY
RETAILER

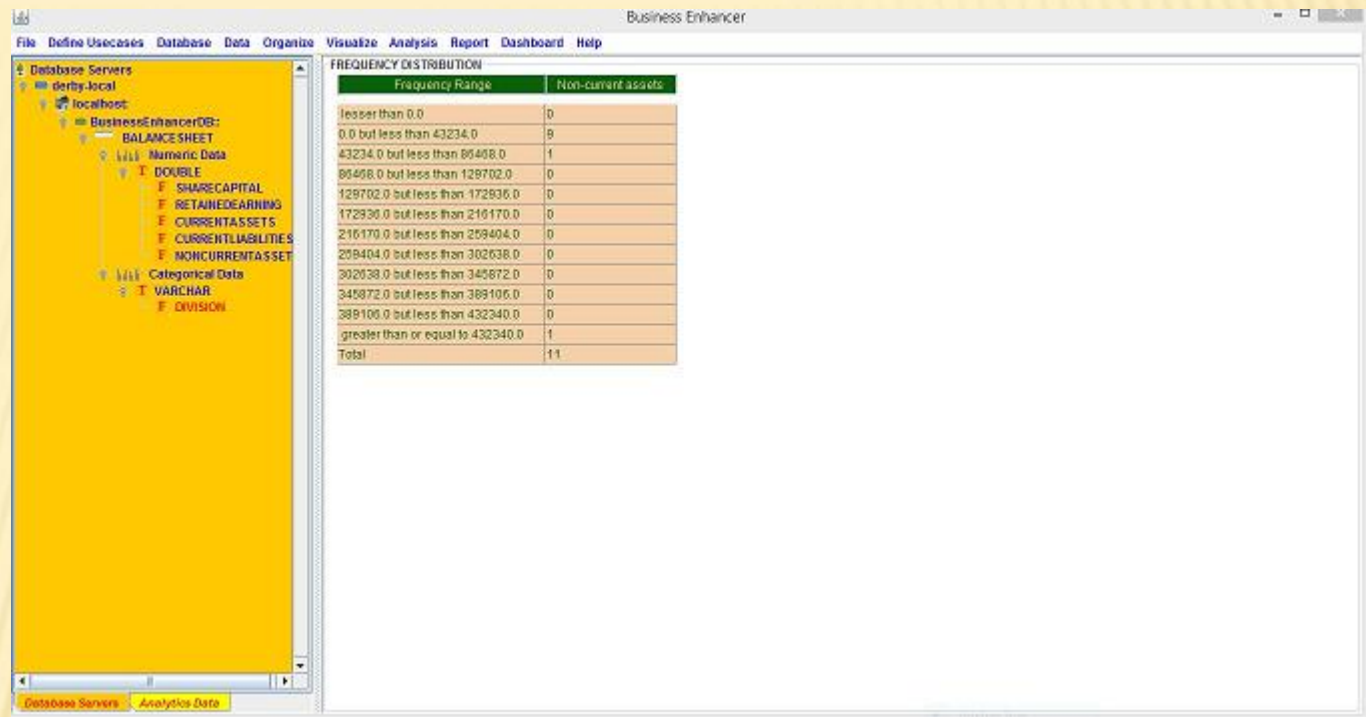
MULTIDIMENSIONAL CONTINGENCY TABLE

City	Bengaluru	Calcutta	Srinagar	Chikmagalur	Mandya
Pepsodent	0	1	0	0	0
Toothpaste	0	1	0	0	0
More	0	1	0	0	0
VLOC	0	1	0	3	1
Daycream	0	1	0	3	1
More	0	0	0	2	0
Food World	0	1	0	1	1
Lux	0	0	0	2	0
Soap	0	0	0	2	0
Ramesh Sto	0	0	0	2	0
Clinic	0	0	1	0	0
Shampoo	0	0	1	0	0
More	0	0	1	0	0
Unif	0	1	1	0	0
Soap	0	0	1	0	0
Talcolm Powder	0	1	0	0	0
Colgate	0	0	1	0	1
Toothpaste	0	0	1	0	1
Food World	0	0	1	0	0
Ramesh Sto	0	0	0	0	1
Sunsilk	1	1	0	1	0
Shampoo	1	1	0	1	0
Varley	0	0	1	0	0
Ponds	0	0	2	0	1
Cinthol	1	1	1	0	1
Talcolm Powder	1	0	0	0	0
Food World	1	0	0	0	0
Soap	0	1	1	0	1

Brand Retailer Product City

Database Servers Analytics Data

MULTI-CONTINGENCY TABLE



FREQUENCY DISTRIBUTION

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

Database Servers

- derby.local
 - localhost
 - BusinessEnhancerDB:
 - BALANCE SHEET
 - Numeric Data
 - DOUBLE
 - SHARECAPITAL
 - RETAINED EARNING
 - CURRENT ASSETS
 - CURRENT LIABILITIES
 - NONCURRENT ASSET
 - Categorical Data
 - VARCHAR
 - DIVISION

STACKED DATA

Company Name	Current liabilities
Procurement	23133.0
Customer Service	223.0
Sales	100000.0
Quality	3.0
Finance	2293.0
Production	500.0
IT Department	2293.0
Manufacturing	4333.0
Stores	133.0
Logistics	43133.0
Marketing	433.0

Database Servers Analytics Data

Stacked Unstacked

STACKED DATA

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

Database Servers

- derby.local
 - localhost
 - BusinessEnhancerDB:
 - BALANCE SHEET
 - Numeric Data
 - DOUBLE
 - SHARECAPITAL
 - RETAINED EARNING
 - CURRENT ASSETS
 - CURRENT LIABILITIES
 - NONCURRENT ASSET
 - Categorical Data
 - VARCHAR
 - DIVISION

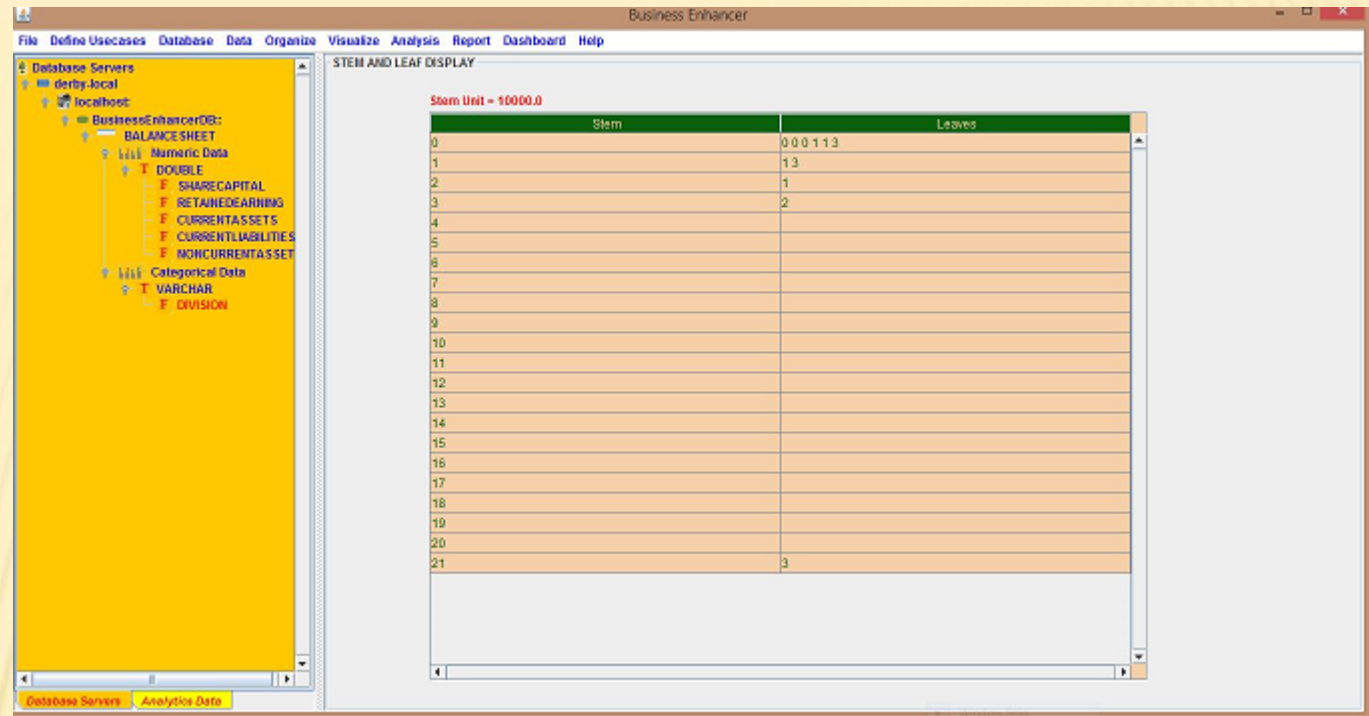
UNSTACKED DATA

Procurement	Customer Service	Sales	Quality	Finance	Production	IT Department	Manufacturing	Stores	Logistics	Marketing
23133.0	223.0	100000.0	3.0	2293.0	500.0	2293.0	4333.0	133.0	43133.0	433.0

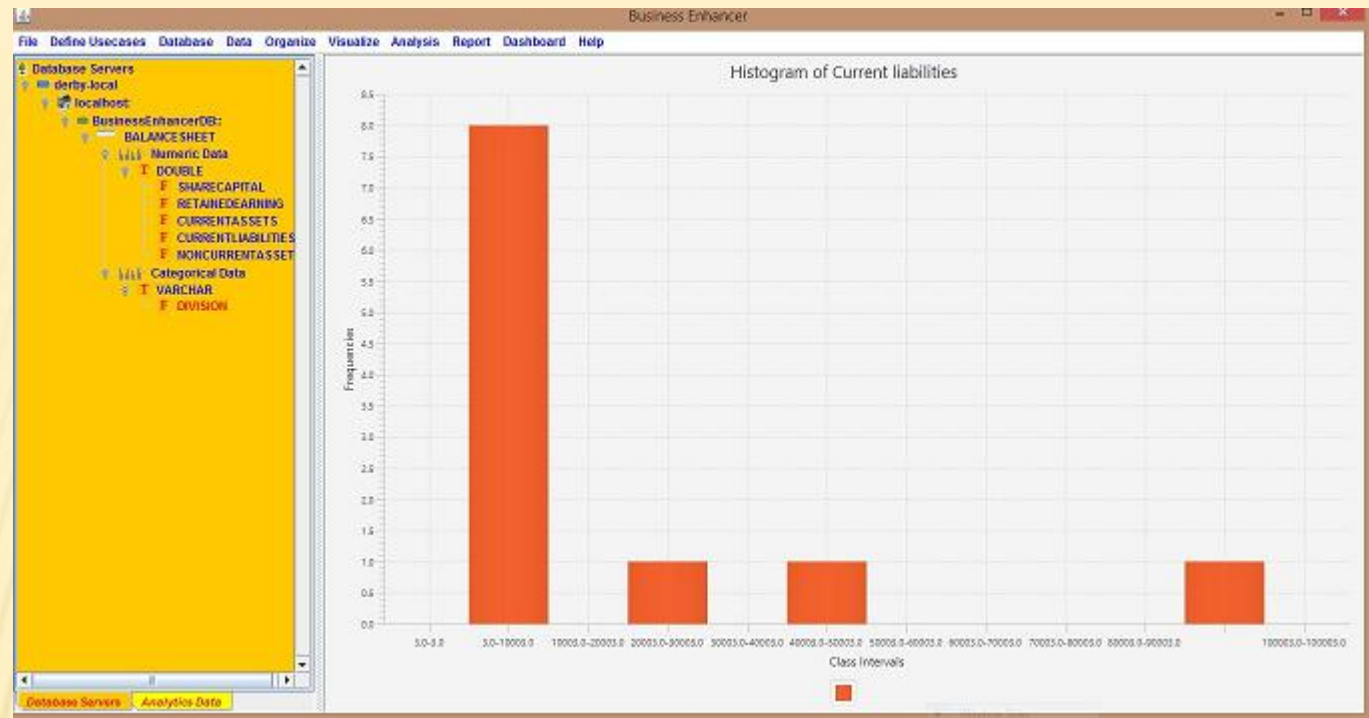
Database Servers Analytics Data

Stacked Unstacked

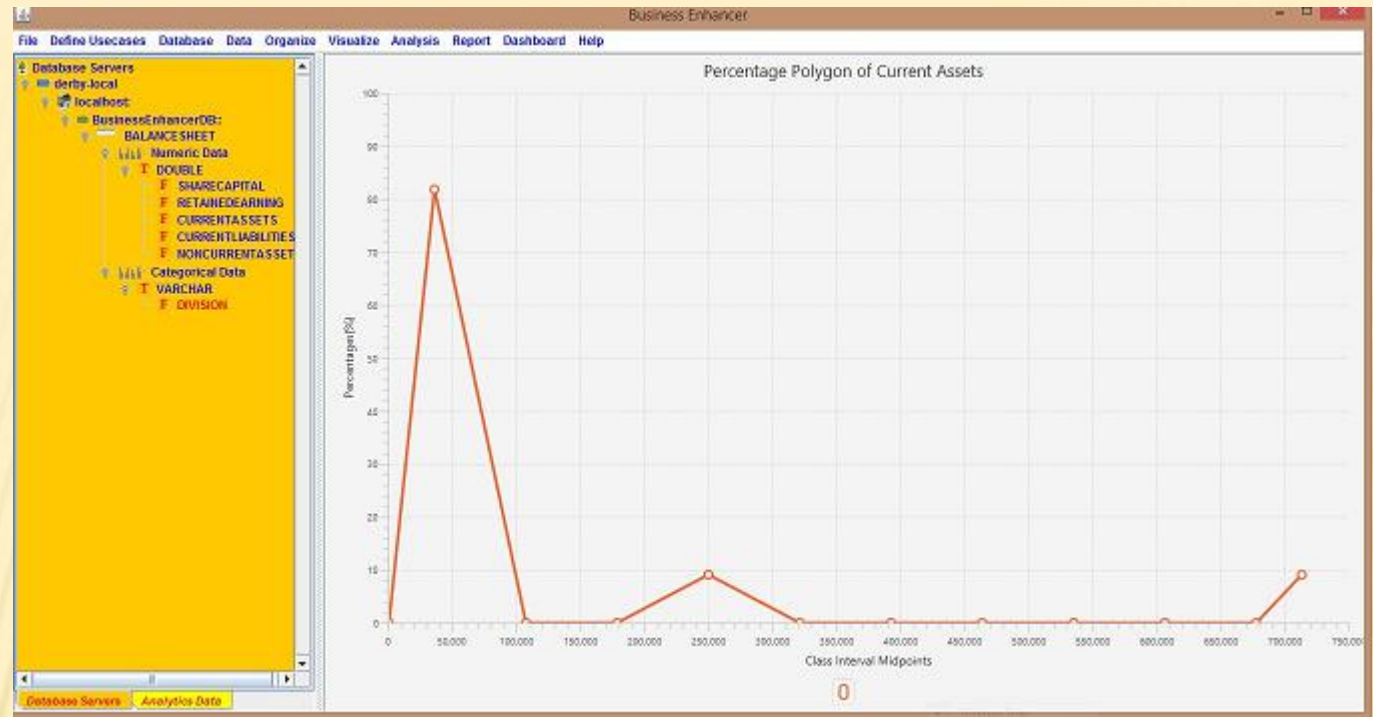
UNSTACKED DATA



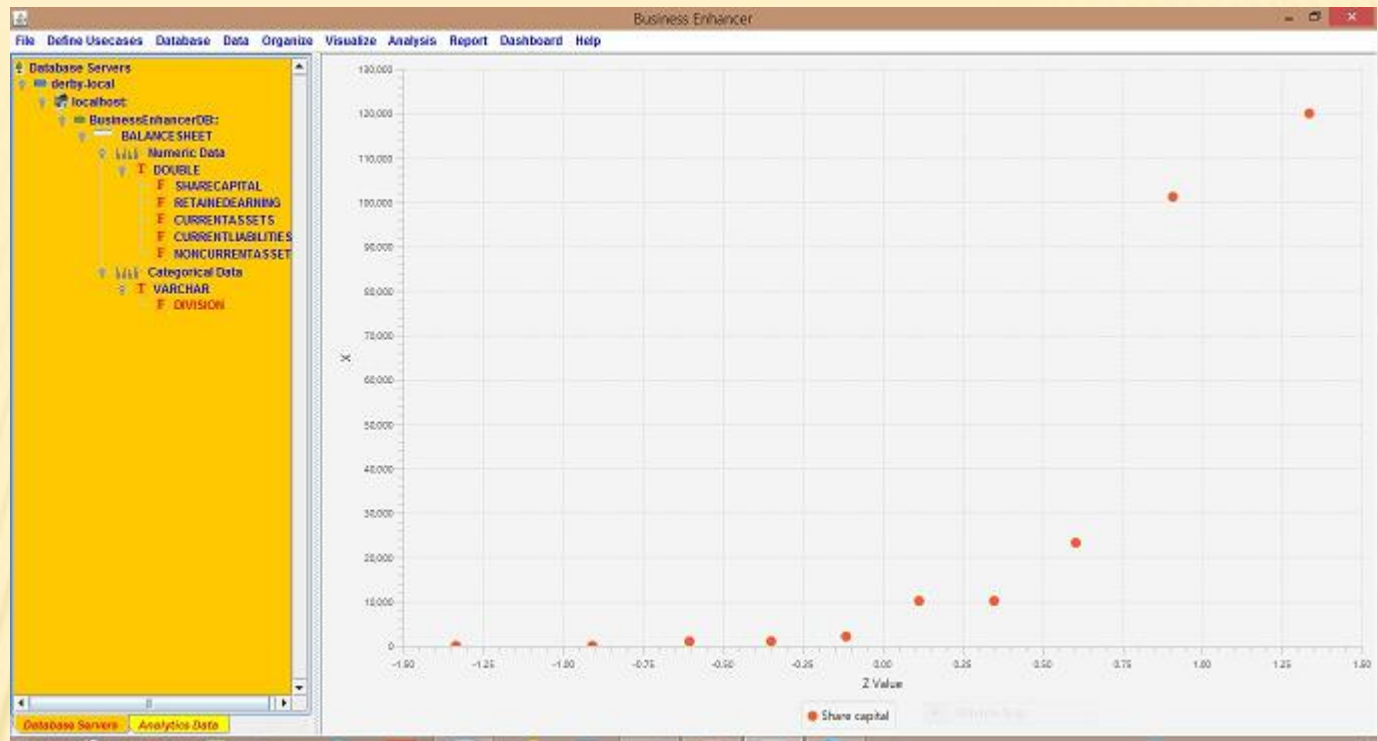
STEM-AND-LEAF DISPLAY



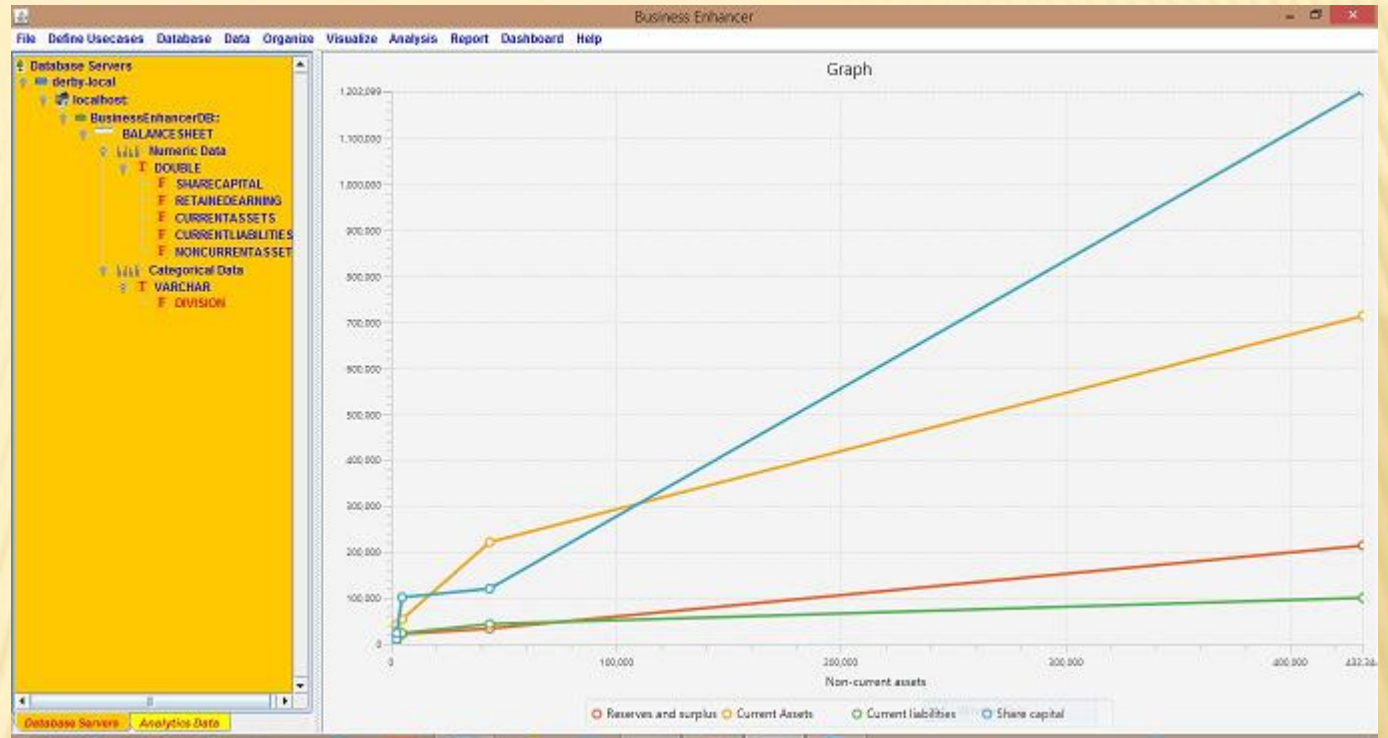
HISTOGRAM



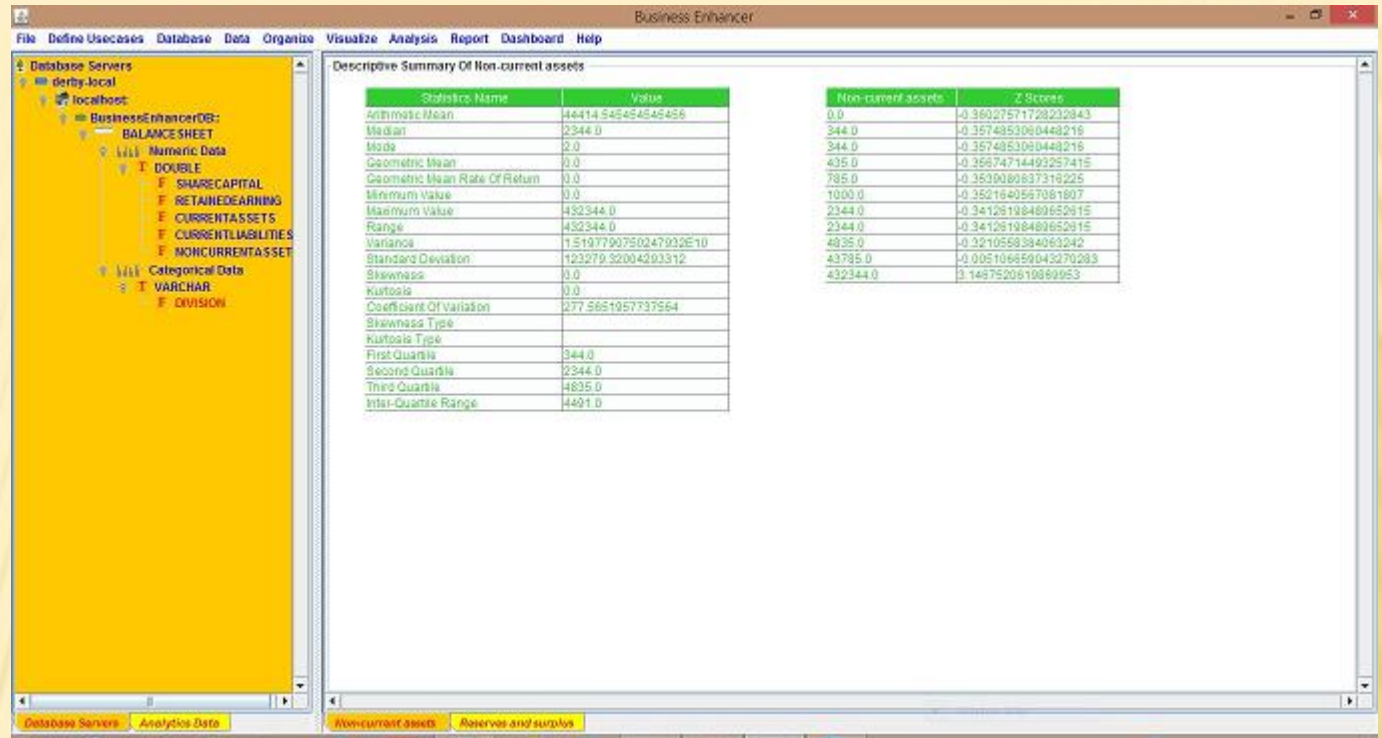
PERCENTAGE POLYGON



NORMAL PROBABILITY PLOT



GRAPH



DESCRIPTIVE SUMMARY

Business Enhancer

File Define Usecases Database Data Organize Visualize Analysis Report Dashboard Help

Database Servers
derby-local
BEDB:
BEDB
Categorical Data
VARCHAR
PRODUCT
BRAND
CITY
RETAILER

Joint Probability	
P(Cinhol And More)	0.0
P(Cinhol And Ramesh Stores)	0.03571428571428571
P(Cinhol And Food World)	0.07142857142857142
P(Cinhol And Food Hall)	0.03571428571428571
P(Ponds And More)	0.0
P(Ponds And Ramesh Stores)	0.03571428571428571
P(Ponds And Food World)	0.0
P(Ponds And Food Hall)	0.07142857142857142
P(Yarley And More)	0.03571428571428571
P(Yarley And Ramesh Stores)	0.0
P(Yarley And Food World)	0.0
P(Yarley And Food Hall)	0.0
P(Closeup And More)	0.07142857142857142
P(Closeup And Ramesh Stores)	0.0
P(Closeup And Food World)	0.0
P(Closeup And Food Hall)	0.0
P(Pepsodent And More)	0.03571428571428571
P(Pepsodent And Ramesh Stores)	0.0
P(Pepsodent And Food World)	0.0
P(Pepsodent And Food Hall)	0.0
P(Colgate And More)	0.0
P(Colgate And Ramesh Stores)	0.03571428571428571
P(Colgate And Food World)	0.03571428571428571
P(Colgate And Food Hall)	0.0
P(Lini And More)	0.0
P(Lini And Ramesh Stores)	0.0
P(Lini And Food World)	0.07142857142857142
P(Lini And Food Hall)	0.0
P(Lux And More)	0.0
P(Lux And Ramesh Stores)	0.07142857142857142
P(Lux And Food World)	0.0
P(Lux And Food Hall)	0.0

Simple Probability
Joint Probability
General Addition Rule
Conditional Probability

Database Servers
Analytics Data
Brand X Retailer
Brand X Product
Brand X City
Retailer X Product
Retailer X City
Product X City

BASIC PROBABILITY