

Business Analytics and Data Mining for CRM: Jumpstart workshop**Date and Place:** Bangalore, Sep 1st (Sat) and 2nd (Sun) 2012**Registration Link:** <http://compegence.com/Open-Programs.php>
<http://compegence.com/workshop-analytics-for-crm.php>**Audience:**

Experienced CRM, Sales, Marketing Professionals
Analysts supporting CRM /Sales / Marketing functions
Data / DW / BI Professionals with CRM / Sales / Marketing focus
Managers responsible for CRM / Sales / Marketing functions
Business Owners keen to adopt data driven CRM methodology

In the customer centric world, it is important and imperative that the organizations are proactive about the customers, learn from their preferences and anticipate and cater to their future needs in a cost effective way that creates a win-win scenario for the customers and the enterprises.

The customer predictions generated by data mining help define and deliver more relevant and appropriate services and offerings to each customer, improving response rates, buying behaviour, retention and overall profit.

Business Analytics and Data Mining for CRM is the jumpstart, skill oriented work-through workshop. This course is custom designed for the experienced professionals in the field of CRM / Sales / Marketing / Business Analyst backgrounds. Familiarity and good understanding of Data Analysis is expected, with at least one full life cycle project execution in the CRM context.

This is a two day WORK_THROUGH workshop. It provides the foundations, fundamentals, techniques and methodologies with relevant hands on case studies for real world scenario. The course covers the most important skills required for doing Data Mining and building business models for CRM. It addresses the most important techniques of Customer Segmentation, Churn Prediction and Retention Lifecycle with hands on case study.

The workshop uses open source tool kits, with hands-on sessions and work-through examples.

At the end of this workshop, we expect the participants to have a good foundational jumpstart understanding of how to initiate a Data driven CRM analytics initiative, with methods and methodologies spanning from the basics to the specific techniques in the space of CRM Analytics.

Welcome to the journey into the mysterious world of “Learning to Compete with Analytics”.

The best way to put distance between you and the crowd is to do an outstanding job with information. How you gather, manage, and use information will determine whether you win or lose.

Bill Gates in *Business @ The Speed of Thought*

Day 1:

Foundational Understanding

- Basic Data Analysis from the world of DW/BI Reporting
 - 80-20, ABC, RFM, Top N, Rule Based;
 - Data Explosion and Limitations

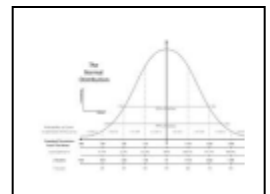
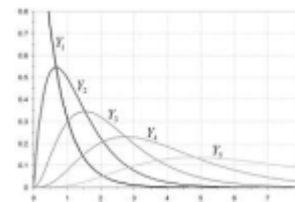
- Basic principles and terminology for Data Mining
 - What is Data Mining
 - Gain Charts
 - Decile Analysis

- What Can we do with the Data
 - Visualization
 - Description
 - Classification
 - Estimation
 - Prediction
 - Association
 - Clustering



Essential Statistics

- Variable Type
 - Continuous Vs Categorical (Discrete)
 - Univariate vs Bivariate and Multivariate
- Mean, Mode, Median – measures of central tendenc
- Variance and Standard Deviation – measures of deviation



Data Mining for CRM

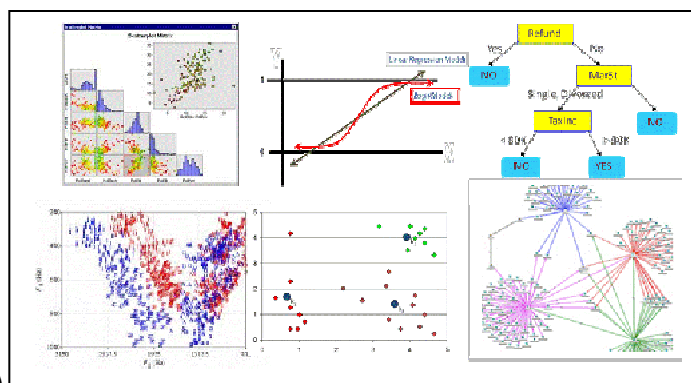
- **Data Mining in CRM**

- What is Data Mining?
- What is CRM?
- How does Data Mining help in CRM?



- **Data Mining Models & Techniques - with Demos/Exercises in R**

- Visualization
 - Univariate, Bivariate, Multivariate
- Classification
 - RFM, Decision Tree
- Clustering
 - K Means
- Association
 - Affinity Analysis
- Regression
 - Logistic
- Forecasting
 - Linear, Non Linear (Neural)
- Optimization (Net Lift Model)



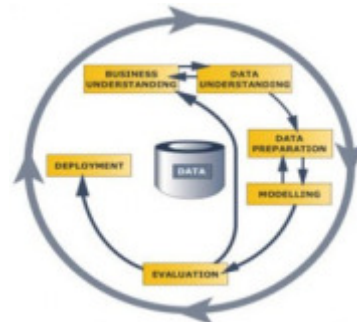
- **Let us relate to the Data Mining terminology**

- Directed / Undirected
- Supervised / Unsupervised
- Exploratory / Confirmatory
- Descriptive / Predictive or Prescriptive:
- Verification driven / Data driven Analysis
- Outcome type: Continuous, Discrete

Day 2:

- **Methodology and Analytical Modeling Process**

- CRISP DM for Project Lifecycle
 - Business understanding
 - Data understanding
 - Data Preparation
 - Modeling Methods
 - Model Building
 - Model Evaluation: Evaluating and Validating the Model
- SEMMA for Model Building



- **Data Mining Applications in CRM – with Case Study/ Do it with me / Exercises in R**

- Business Case
- Data Preparation
- Building the Analytical Data Model
- **Customer Segmentation – With Hands on Case**
 - Business Intent
 - Model Building
 - Validation and Deployment
- **Customer Churn Prediction – With Hands on Case**
 - Business Intent
 - Model Building
 - Validation and Deployment
- **Customer Retention – With Hands on Case**
 - Business Intent
 - Model Building
 - Validation and Deployment



Follow through discussions and Business examples

- Business Benefits Examples
 - Telecom Analytics
 - Banking and Financial Analytics
 - eCommerce Analytics
 - Retail Analytics

Workshop SME:**Dr. Rajaram Kudli, SME Advisor, Data Mining Competency**

COMPEGENCE is focused on Process, Data and Domain driven “Information Excellence”, helping companies address the growing challenges of Data explosion, Information Overload and Interconnected processes / enterprises, towards insightful decisions.

Dr. Rajaram helps guide companies across multiple domains navigate the “Competing with Analytics” Chasm, with sharp focus on business application of technology.

He comes with the industry, academic and research background, having earlier set up Analytical competencies for Symphony Marketing Solutions. His prior stints include eKnowVenture technologies, Parametric Technology (R&D) India and IIT Kharagpur. His industry experience spans across global companies in the space of FMCG, CPG, Retail, Telecom, Healthcare and Manufacturing companies.

He has M Tech and Doctorate in Computational Intelligence from IIT Kharagpur; his focus areas include Neural Networking, Fuzzy Logic, Genetic Algorithms, Visualization and Analytical Process Automation across industry verticals.

**Dr. Jay B. Simha, Chief Technology Officer, ABIBA Systems**

He has over 15 years of experience in R&D, Business Intelligence and Analytics consulting. He has implemented large scale systems for telecom, BFSI and manufacturing industries in Business Intelligence and analytics. Prior to this he worked on medical data analysis with Siemens, working on algorithm design and data analysis.

He holds a Doctoral degree in Data Mining and Decision Support and Post Doctoral from Louisiana State University, USA. He has a post graduate in Mechanical Engineering and Computer Science.

He is active in research and has interests in business visualization, predictive analytics and decision support. . He has so far published about 40 papers in international journals and conferences in the areas of business intelligence and analytics. He has won numerous best paper awards in prestigious conferences.

**Nagaraj Kulkarni, Advisor, Information Excellence Services**

COMPEGENCE is focused on Process, Data and Domain driven “Information Excellence”, helping companies address the growing challenges of Data explosion, Information Overload and Interconnected processes / enterprises, towards insightful decisions.

His role includes enabling the corporate “Information Excellence Journey” with current state assessment, focused roadmap, competency building, consulting and consultative mentoring.

His prior stints include TCS (India), Indigo technologies (US), PricewaterhouseCoopers (US), Sun Microsystems (US and India), Intel (India) and HansaCequity (India) in that order.

He is an Alumni of UVCE in Bangalore, and IISc Department of management Studies in Bangalore. His continued learnings have included UCSC Leadership & Management program, ISB’s Venture capital program, Marshall Goldsmith’s Executive Coaching