Big Data Deluge

15 out of 17 sectors in the US have more data stored per company than the US Library of Congress[*]

40% projected growth in global data generated per year vs. **5%** growth in IT spending[*]

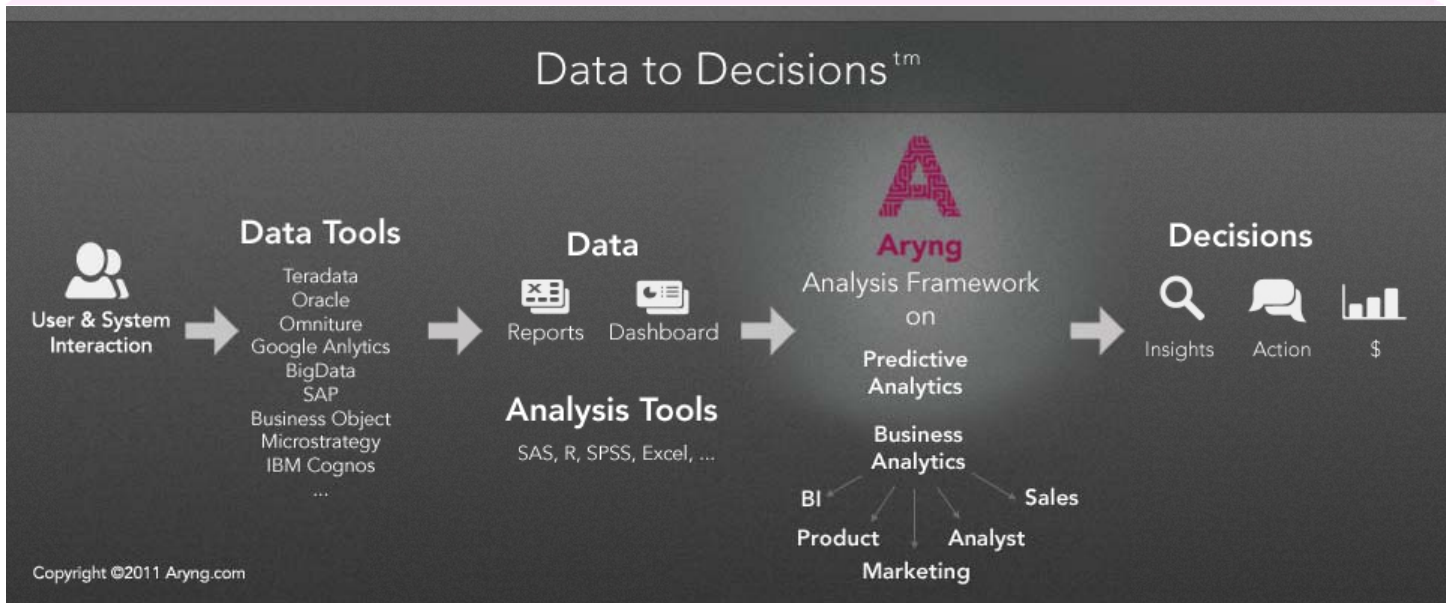**30 billion** pieces of content shared on facebook each month[*]

60% potential increase in retailer's operating margins possible with Big Data[*]

140,000 to 190,000 more deep analytical talent positions, and

1.5 million more data-savvy managers needed to take full advantage of Big Data in the US[*]

Aryng Workshops directly addresses this data deluge!

Data to Decisions[tm]

User & System Interaction →

Data Tools
Teradata
Oracle
Omniture
Google Anlytics
BigData
SAP
Business Object
Microstrategy
IBM Cognos
... →

Data
Reports   Dashboard

Analysis Tools
SAS, R, SPSS, Excel, ... →

Aryng
Analysis Framework on

Predictive Analytics

Business Analytics

BI   Sales
Product   Analyst
        Marketing →

Decisions
Insights   Action $

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Source McKinsey & Company, McKinsey Global Institute, May 2011
Big Data: The next frontier for innovation, competition, and productivity

Aryng's "Data to Decisions™" Complete

Hands-On Business Analytics; Introduction to Predictive Analytics and Test-and-Learn Workshop

Testimonial from past attendees:

"I used the framework yesterday and it worked like a charm! Thanks Aryng!"

Luke S., Partner Solutions Sales, **Google**

"I feel redeemed!

The training content and the quality was excellent. The case studies and real life business examples accompanying every theoretical concept makes understanding so much easier. The interactive learning environment makes this program all the more enjoyable while learning from others experiences as well. This course has given me totally new perspective, boosted confidence, Highly recommended!!"

Jignesh S.. Senior Data Analyst. **PayPal**

INTENDED AUDIENCE

- **Managers:** Project leaders, directors, vice presidents, marketing manager, sales manager, product manager, finance managers and managers involved with data driven decision making
- **Analysts:** Marketing analysts, product analysts, financial analysts and business analysts who want to be more effective in having an impact via data/ analysis
- **Technology experts:** Data analysts, Engineers, BI directors, developers, DBAs, data warehousers, web analysts, and consultants who wish to extend their expertise to business/ predictive analytics

Background Required: Basics of business, and an interest in leveraging data as an asset

WORKSHOP DESCRIPTION

Today all leading organizations are rapidly gaining power by leveraging information to gain insights and drive the business. **Business analytics** delivers actionable insights – new interpretations and evaluations of business performance based on data and statistical methods. **Predictive analytics** on the other hand provide customer level behavior prediction to enable businesses like yours to deliver more relevant content to customers, improve response rate, improve retention and overall profitability of the company. In this workshop, attendees gain **hand's-on experience of business analytics** and operational familiarity with the **power of predictive analytics**.

Hand's On Business Analytics: On Day 1, We will take you on a journey that begins with a **business**

question, proceeds to core analysis methods, **deriving insights** and concludes by making an **impact**. The agenda covers approaches to communicate **analytical findings**, delivering **powerful presentations**, and best practices to build impactful **KPI dashboards.** Examples, **hands-on exercises**, case study and templates empower attendees to return to their organizations with the processes and **toolkit** that ensures they are ready to approach any business problem and drive towards impact.

Case Simulation: On Day 2, we review the 5-step framework to get from inquiry to impact and attendees **work in groups to solve a real life business case** using the framework learnt. The case starts with a business problem and ends with **attendees presenting their executive deck** laden with recommendations and insights in a span of 1-day! We also spice the day with **role plays** for effective collaboration in cross-functional organization.

Power of Predictive Analytics and Testing: On Day 3, we will cover some of the common Predictive techniques like **Logistic Regression** and **Decision tree.** Then we will walk you through powerful real life **examples** from **Fortune 500 companies** where predictive analytics was used to solve complex business problem, to enable you to think how you can apply these techniques in your business setting. Finally we take you through **test and learn techniques** and conclude with a **case study** in which you solve a business problem using the techniques learned so far to come up with impactful insights/recommendations. *[Optional]*

Topics covered include:

1. **Business Analysis**
   - **Business Problem**: How to identify the real business problem behind the data pull ask
   - **Prioritization:** How to prioritize between different asks by quantifying impact
   - **Analysis Plan**: Structure analytics using Hypotheses driven approach
   - **Derive Insights/ Impact**: How to derive insights from data for portfolio dynamics, campaign analysis, product launch, **business case**, trend analysis, driver analysis, pre-post, test-control.
2. **Communication/Presentation**
   - Communication/ **Influencing** with business partner
   - Make powerful presentations with strong recommendation and actionable insights
     - o **Graphical** representation of insights
3. **Tools/ Techniques**
   - Analysis using Excel: Functions, Pivot table, charting, dynamic refresh, formatting
4. **Metrics/ Dashboard**
   - How to build impactful KPI Dashboard/ meaningful metrics
5. **Test and Learn analytics:**
   - Overview of test design, evaluating results in business terms and bottom lines, incorporating statistical significance and confidence intervals computation
6. **Predictive analytics methods:**
   - **Overview** of commonly used predictive analytics techniques, mapped to business objective.
   - **Use Case**: Attendees are guided through business cases from **Fortune 500 companies** where predictive analytics was applied to solve challenging business problems. The use cases demonstrate how to: **Increase ROI, Improve product adoption** and **increase profitability, Increase online conversion**, **Decrease churn, Optimize profitability**, **Improve budget** and **resource planning** and **Optimize offers** and **reduce losses** using advance analytics techniques like **Logistic Regression**, and **Decision Tree**
7. **Case Simulation:** Work with your team to solve a real life business problem starting with an inquiry and finishing with a powerful presentation.

Software/Hardware: Attendees are asked to come with their own laptop with Microsoft Excel or equivalent software for hands-on group exercises and case study.

KEY TAKEAWAYS

1. A proven approach to **driving decisions based on data** using 5-step analysis framework**.**
   - **Real Business Question**: Learn how to get to real business question behind any ask, working effectively with the stakeholders
   - **Hypothesis:** Understand hypothesis; structure data pull and analysis based on hypothesis
   - **Definitive read on any business question with actionable $/decisions with quick analysis**
2. Learn how **to make successful business case** for a new product/feature launch with limited historical data. Also learn to **effectively present it to peers and management.**
3. **How to build impactful KPI Dashboard/ meaningful metrics**
4. **Learn how to do actionable analysis using Excel pivot tables, functions and charts**
5. Learn **how to prioritize** between different projects based on prioritization framework.
6. **Why is Predictive Analytics important?**
7. **What is Predictive Analytics?** The most **common terminologies** and **tools**
8. Overview of commonly used Predictive analytics techniques: **Logistic Regression, Linear Regression and Decision Tree**
9. **How to build a predictive model?**
10. **Case Studies from Fortune 500 companies** where predictive models were used to drive **$100mm+** impact
11. **Predictive Analytics Checklist** and Resources

Schedule Day1- Day3
- Workshop starts at 9:00am
- Morning Coffee Break at 10:30am - 11:00am
- Lunch provided at 12:30 - 1:15pm
- Afternoon Coffee Break at 2:30pm - 3:00pm
- End of the Workshop: 4:30pm

Attendees receive:
- A course materials folder
- An official Certificate of Completion (at the conclusion of the workshop)
- Templates: Data to Decision Templates, Analysis Plan, Project Plan, Effective Deck Template, Statistical Significance Worksheet

INSTRUCTORS

Piyanka Jain, **CEO, Aryng.com**

Piyanka is a **thought leader** in analytics, speaking regularly at conferences and consistently being recognized as the **"Best Speaker"** in **Business and Analytics conferences** such as Predictive Analytics World, Integrated Business Planning and Business Performance Conference.

Piyanka's interest lies in deriving actionable insights from data to enable informed trade-offs and decision making. She enjoys problem solving and finds herself driven towards **empowering business professionals to make better data driven business decision** through Aryng's "Data to Decisions"™ framework she teaches. With Aryng, she is creating an organization **to drive business transformation through the power of analytics**.

Before founding Aryng, she was **heading the NA Business Analytics at PayPal**, leading strategic analytics, managing and setting agenda for the team, defining strategic roadmap to find NA business drivers. At PayPal, she and her team have delivered several high impact projects including product portfolio analysis, merchant lifecycle analysis, Voice of Customer analysis, Next Best Product Model for Merchant **with $84+ mm revenue impact**.

Prior to this, Piyanka drove direct measurable revenue impact of **$18 mm through Strategic/Marketing analytics** in partnership with **Adobe** Product Marketing and Relationship Marketing team. Within Marketing Operations and Analytics department, her role was to lead the organization into learning more about their products and customers through establishing appropriate engagement model with BU and rigorous mining of data. Within Relationship Marketing, Piyanka and her team's role involved designing and analyzing campaigns, creating and executing appropriate segmentation and targeting strategy, Fine tuning messaging, creatives and offers by Test & Control and improving targeting and increasing marketable universe by building response models and propensity models.

Before Adobe, Piyanka **co-founded Out of Box Media** in **2003**. The company's first Ad Campaign started with Chinese boxes and then grew to incorporate other types of containers including Pizza boxes, cake boxes etc, delivering up to 2% campaign response rates.

Piyanka enjoys networking with other industry professionals, sharing and learning about technical and organizational challenges and solutions.

Puneet Sharma, *Technical Consultant, Aryng.com*

Puneet is a creative, **awards-winning leader with nearly 15 years' track record** of spearheading/executing highly effective marketing and product strategy initiatives in financial /consulting industries, especially as they relate to consumer behavior. His expertise is in driving strategy through consumer insights, deep analytics, and by providing actionable recommendations for effective change execution. With his leadership background he has spearheaded many analytics-based initiatives in the financial space (PayPal, Capital One, and HSBC) that have transformed how consumer-based retail business in this space can capture lucrative & previously unclaimed opportunities. Past roles include **VP Marketing Strategy**, Business Manager, Subprime Portfolio, and GM of $750M BU.

ABOUT ARYNG

Aryng is a premier analytics training company; a unique partnership of analytics professionals, with decades of experience in Fortune 500 companies, conducting analytics, building and managing Business Intelligence and Analytics teams, delivering cumulative results in the $100s of millions. Aryng offers 1-3 days Data to Decision™ boot camp series for Marketing, Sales, Product, Analyst and BI Professionals and also Exec series on Predictive Analytics and Testing.