

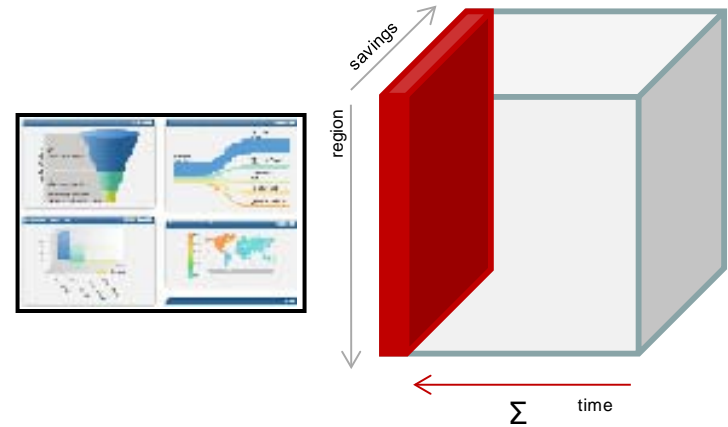
*Optimizing Enterprise Information and Knowledge through*  
***ANALYTICS, SEARCH & COLLABORATION***

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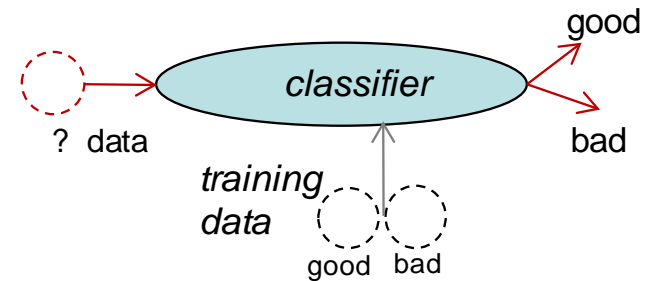
– Vice President and Head, TCS Innovation Labs Delhi

# Analytics

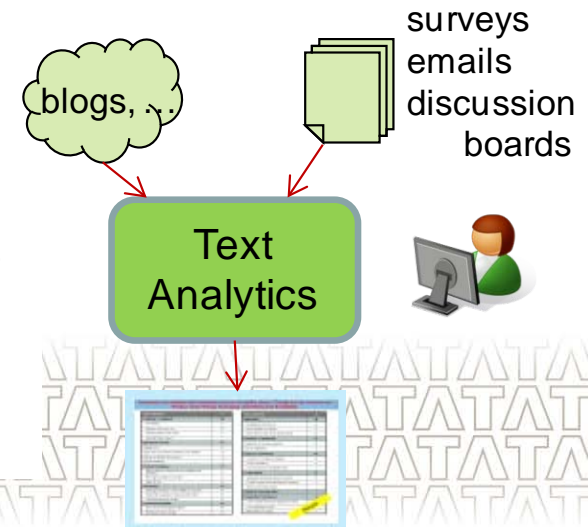
- Traditional Business Intelligence
  - summarize and report *performance*
  - ✓ tools exist, can be deployed and used



- Predictive Analytics
  - techniques exist, along with toolkits (e.g. SAS)
  - need to tune techniques to training data
  - *manual process, need to repeat regularly*



- Causal Analytics (CA)
  - *what* are customers/employees/citizens saying?
  - *which* products/services/policies are problematic?
  - *why* are there problems and what are the remedies?
  - tools are new, analytical expertise needed
  - ✓ often results in directly actionable intelligence



# CA Example: Voice of the Customer

**OPTRA**

Repository:

Home Knowledge Base Show most frequent Drill Down Saved Query Search

Model = E71-2 -> concept [Component, Accessory]

Minimum Count  
 Maximum Count  
 Don't Remove Stopwords  
 Group Synonyms  
Noun Entities  Display Column  
Cloud View  Display Type  
Show  Most frequent  
  Tag Selected Words

Select All Deselect All Add as Synonyms Opinion  Draw Chart

**battery** (14)  battery charger (2)  battery store (2)  charger (2)  **device** (9)  
 display (4)  key (3)  **keyboard** (6)  lcd screen (2)  memory card (5)  part (2)  
 **phone** (16)  power (2)  **problem** (6)  repair center (2)  **screen** (7)

[Show all sentence \(59\)](#)

# CA Potential: Voice of the Citizen

## E-Filing:

- What problems do taxpayers face while e-filing returns?
- Which aspects of the process are these related to?
- What possible solutions could remediate these, and with what impact?

## Availability of Credit:

- What difficulties are small businesses facing while getting credit?
- Which specific regulations are becoming bottlenecks for which class of borrowers?
- What regulatory adjustments could improve the availability of credit to deserving borrowers?

# New Directions in Enterprise Search

- Enterprise Search is more difficult than Web Search:
  - no links, security, mix of structured and unstructured data ...
- Traditional knowledge management systems are flawed:
  - use a fixed taxonomy; but organizations operate in a fluid environment
  - rely on people uploading data; ignoring the wealth of information on individuals' desktops
  - structured data can't be 'searched'

The screenshot shows the eSearch interface with a search bar containing 'Graphics and LSI'. The results page displays a list of documents with details such as file names, locations, and relevance scores. Two items are circled in red: 'Introduction to Computer Graphics 17' and 'Latest Semantic Indexing: An overview'.

The screenshot shows search results for 'energy'. It features a 'Matching Topics' section with links to 'renewable energy', 'carbon emissions', and 'climate change'. Below this is a list of WWF articles with their titles and dates, such as 'WWF - Wind farms in the Philippines Tuesday, Mar 22, 2005 WWF' and 'WWF - Shipping industry must act on carbon Thursday, Sep 24, 2009 WWF'.



# Collaboration: Seeking Ideas from Stakeholders


The screenshot displays the IdeaMAX web application interface. At the top, there are navigation tabs for Home, Ideas, Challenges, Champions, and Activity. A search bar is located in the top right corner. Below the navigation, a banner explains that IdeaMAX is a social ideation platform for TCS. A 'Find idea' search bar and an 'Advanced Search' link are provided. The main content area is divided into sections: 'Hot Challenges' and 'Recently Submitted Ideas'. Under 'Hot Challenges', two challenges are listed: 'TCS as a Business Advisor' (Bounty: 150, Expires: 8 days left, 174 ideas) and 'Articulating tangible benefits from KM' (Bounty: 100, Expires: about 10 hours left, 136 ideas). Under 'Recently Submitted Ideas', three ideas are shown: 'Earth Hour-Saturday 8:30-9:30pm' (submitted 2 minutes ago), 'Library activity automation' (submitted 3 minutes ago), and 'SMS-Alert to LotusNotes/WebMail users when mailbox is full' (submitted 7 minutes ago). On the right side, a user profile for Ashok Krish (Karma: 527) is shown, along with notification counts (Abuse: 0, Duplicate: 1, Ideas: 2, Tasks: 0) and buttons for 'Submit an Idea' and 'Show Random Idea'. A 'Browse by GDC' dropdown menu is set to '—Select—', and a 'Browse by Category' list includes Audit and Compliance, Data Security and Operational Risk Management, Finance, Physical Infrastructure and Administration, Digitization, Human Resources, and BMC (M/ATC).

# Collaboration: Tapping the Wisdom of Crowds

market place

Home Trade Network Blog Help


Welcome Terry Leahy Net worth : 47,000 T£ ▲ My portfolio | My messages | Logout



### Should open a store in Second life?

You can buy at 45.0 BUY

You can sell at 39.2 SELL



### Sales for Groceries in East London.

You can buy at 350 BUY

You can sell at 290 SELL

#### Top Gainers

Today Week Month Year

Electronic sales in Birmingham	172.76	+3.74%
sales in Q4	345.40	+3.14%
Mobile sales in Manchester	237.13	+2.04%
Grocery sales in Leeds	81.60	+2.00%
Profit margins for Q4	143.02	+1.87%

#### Top Decliners

Today Week Month Year

Investment in Green technologies	70.43	-7.64%
Flower sales in Liverpool	488.34	-4.02%
Seafood sales in Leeds	46	-2.19%
Should open a store in second life?	851.29	-1.94%
Organic food - Should go serious...	86.24	-1.64%

#### Categories

- Sales (15)
- Strategy (4)
- Innovation (6)
- Product launch (11)

#### Today stats

400 Trades worth 513,240 T£ Users : 48

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# Summary

- Causal Analytics
  - *new way to focus: yields actionable intelligence*
  
- Enterprise Search
  - *harder than one thought: huge untapped potential*
  
- Collaboration
  - *innovation platforms: idea generation, wisdom of crowds ...*