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Business Intelligence (BI)

For Internal Circulation and Academic Purpose Only

Programme Educational Objectives

- *Our program will create graduates who:*

- *1. Will be recognized as a creative and an enterprising team leader.*
- *2. Will be a flexible, adaptable and an ethical individual.*
- *3. Will have a holistic approach to problem solving in the dynamic business environment.*

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Business Communication & Information Systems Course Outcomes

- CO1-Given the circumstances, student manager will be able to ascertain the barriers to communication and also propose measures to overcome these barriers.
- CO2 In a given situation, student manager will be able to identify essentials parameters of effective communication and will also be able to justify the same.
- CO3 For given situation student manager should be able to draft Business letter for an organization.
- CO4 Given the circumstances, student manager will be able to draft E-mail to concerned authority/person.
- CO5 Given the circumstances, student manager will be able to gather data and make an informed decision based on it.
- CO6 Student manager will be able to identify & explain modern trends in information system.

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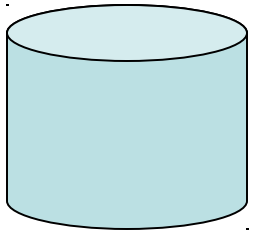
What is Business Intelligence?

Business Intelligence enables the business to make intelligent, fact-based decisions

Aggregate Data



Database, Data Mart, Data Warehouse, ETL Tools, Integration Tools

Present Data

Reporting Tools, Dashboards, Static Reports, Mobile Reporting, OLAP Cubes

Enrich Data

Add Context to Create Information, Descriptive Statistics, Benchmarks, Variance to Plan or LY

Inform a Decision

Decisions are Fact-based and Data-driven

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CPU – Content, Performance, Usability

- Content
  - The business determines the “what”, BI enables the “how”
- Performance
  - Minimize report creation and collection times (near zero)
- Usability
  - Delivery Method →Push vs Pull
  - Medium → Excel, PDF, Dashboard, Cube, Mobile Device
  - Enhance Digestion → “A-ha” is readily apparent, fewer clicks
  - Tell a Story → Trend, Context, Related Metrics, Multiple Views

For internal information and discussion. Proprietary Infosy

How Important is BI?

Top 10 Business and Technology Priorities for 2011:

1. Cloud computing
2. Virtualization
3. Mobile technologies
4. IT Management
5. **Business Intelligence**
6. Networking, voice and data communications
7. Enterprise applications
8. Collaboration technologies
9. Infrastructure
10. Web 2.0

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Source: Gartner's 2011 CIO Agenda (aka "Reimagining IT: The 2011 CIO Agenda").

The July 2010 Forrester report "Technology Trends That Retail CIOs Must Tap to Drive Growth" identified the following technologies that retail CIOs should be considering as part of an overall architecture strategy:

Mobile

Social Computing

Cloud

Supply Chain

Micropayments

Business Intelligence/Analytics

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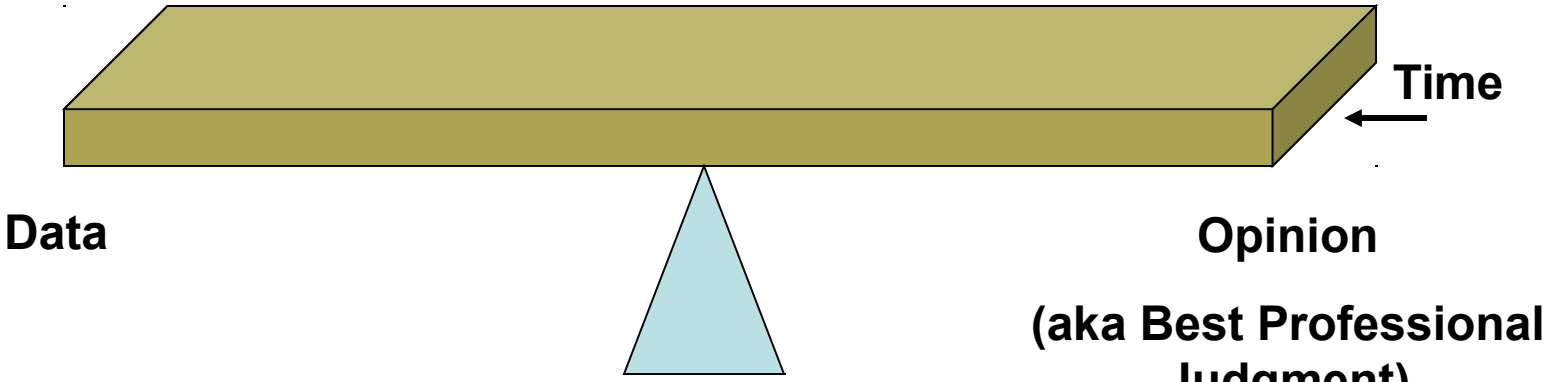
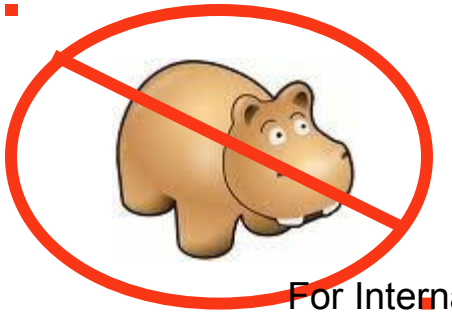
Why is Business Intelligence So Important?



Making Business Decisions is a Balance

In the absence of data, business decisions are often made by the HiPPO.

With Business Intelligence, we can get data to you in a timely manner.



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Major BI Trends

- Mobile
- Cloud
- Social Media
- Advanced Analytics

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TDWI Executive Summit – August 2010

What BI technologies will be the most important to your organization in the next 3 years?

1. Predictive Analytics
2. Visualization/Dashboards
3. Master Data Management
4. The Cloud
5. Analytic Databases
6. Mobile BI
7. Open Source
8. Text Analytics

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Advanced Analytics / Predictive Analytics

- Data Mining
- Regression
- Monte Carlo Simulation
- “Statistically Significant”
- Predicting Customer Behavior
  - Churn/Attrition
  - Purchases
  - Profiling

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BI Today vs Tomorrow

- “BI today is like reading the newspaper”
  - BI reporting tool on top of a data warehouse that loads nightly and produces historical reporting
- BI tomorrow will focus more on real-time events and predicting tomorrow’s headlines

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Collegiate Admissions Criteria

- Test Scores: SAT, ACT, AP Exams
- Grade Point Average
- Class Rank
- High School “Strength”
- Extracurricular Activities: Band/Choir, Clubs, Sports
- Non-School Activities: Work, Volunteer, Community Groups
- Area of Focus – Intended Major
- Family legacy
- Home State or Country

Regression Outcome = Graduation (binary) + GPA (linear)

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Retail Analytics

- Market Basket Analytics
- Text Analytics
- Customer Segmentation/Clustering
- Tailored Product Assortments
- Inventory Forecasting

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Amazon.com and NetFlix

Collaborative Filtering tries to predict other items a customer may want to purchase based on what's in their shopping cart and the purchasing behaviors of other customers

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What Is Text Analytics?

…turning unstructured customer comments into actionable insights

…finding nuggets of insight in text data that will improve our business

From Wikipedia:

… a set of linguistic, statistical, and machine learning techniques that model and structure the information content of textual sources for business intelligence, exploratory data analysis, research, or investigation

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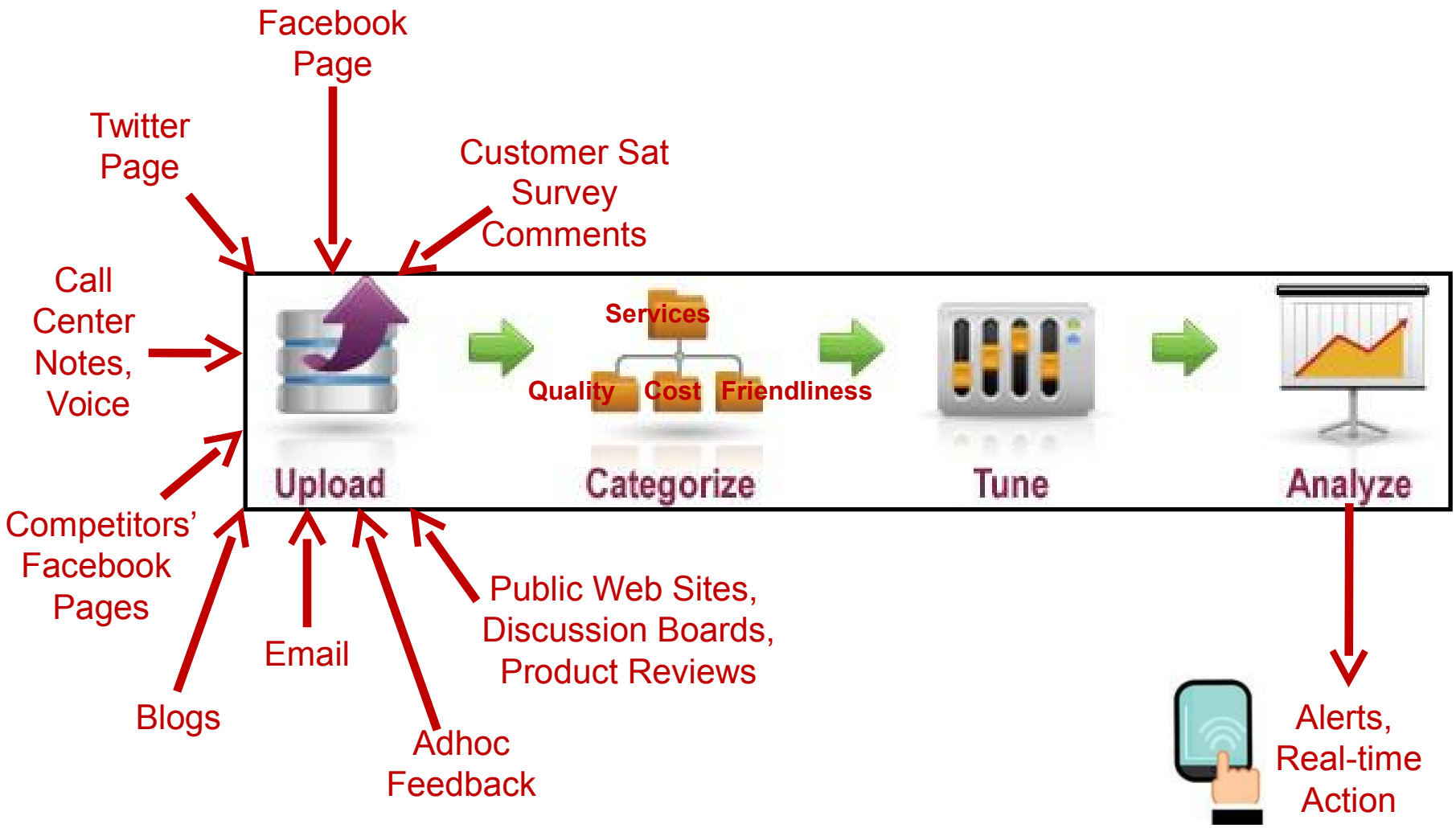
Unstructured Text Processing



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Starbucks

Like

Food/Beverages

Wall

Starbucks · Most Recent

- Wall
- Info
- Starbucks Card
- International
- Ustream StarbucksLive
- Photos (8,737)
- Events
- Starbucks Jobs

More

About

Follow Starbucks on Twitter: http://twitter.com/Starbucks B... See More

20,327,043
people like this

Likes See All

- (RED)
- Starbucks Frappuccino
- Tazo Tea
- Fair Trade Certified
- Seattle's Best

Torbjørn Mcelroy
gett starbucks to norway :)
4 minutes ago

Jeanette A. Vollman
MM LOVE ME SOME ICE MOCHA!
19 minutes ago
2 people like this.

Renee Leo
I wonder if I could make more money and be happier if I worked in a Starbucks than at my job taking calls from irate citizens who have received traffic citations.
25 minutes ago
2 people like this.

Debi Jewell Renner I would love to work at Starbucks! Yummy!! Seriously though..I have the two best dream jobs ever!!! Thank you Jesus!!!
19 minutes ago

Kristen Pistro Neadow
I think some people need to learn how to fill the cup up and not with just ice.....

38 minutes ago
2 people like this.

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Wall
Info
Local
LATEST

McDonald's

Like

Food/Beverages

Wall

McDonald's
Today is Respect Your Cat Day!

Celebrate today
Source: community.mcdonalds.com
And in honor of your furry friend (or even just the neighbor's), celebrate with a new McCafé Shake – now with real whipped cream and a cherry on top.

23 hours ago via McDonald's · Share

1,433 people like this.

View all 341 comments

McDonald's
It's Make Up Your Own Holiday Day! What will you celebrate?

Celebrate today
Source: community.mcdonalds.com
Whatever holiday you create, celebrate it with a new McCafé Shake – now topped off with real whipped cream and a cherry.

Saturday at 9:00am via McDonald's · Share

1,211 people like this.

View all 471 comments

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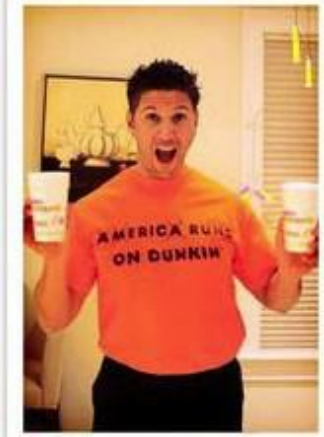
Dunkin' Donuts

Like

Food/Beverages

Wall Dunkin' Donuts · Most Recent



FAN OF THE WEEK

AMERICA RUNS ON DUNKIN'

- Wall
- Info
- DDSMART® Talks
- Maurice
- Dunkin' Perks
- News/Promos

Abby Versackas
Has an idea for D.D.....maybe u could like have like a fiesta with all your products,,,,it would sell, make more money and then u can expand your store business!!! 8-D
about an hour ago via iPhone

Angela Capettini
I discovered limited time DD Strawberry Shortcake coffee. YUM!!! Didn't buy the toasted almond flavor that was there too, but should have. Gotta go find it again. I just don't remember which Publix I found it at. ???
about an hour ago

Colleen Henderson Oliveras
sigh...another lovely day at Dunkin' Donuts
about an hour ago · View Post

Nancy Bartlett
YO DUNKIN PEOPLE! What the heck is up? First I get addicted to the french toast bagel sticks and yhou get rid of them. Then a friend tells me try the choco chip ones, so I do, LOVE them too. so now you get rid of those too???? COME ON!!!!
about an hour ago

Austin Chika Nduka
No 1 Coffee ^in D' World
about an hour ago
Austin Chika Nduka likes this.

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What is Information Governance?

Information Governance

PREVENTS

Garbage In

Garbage Out

BY ENCOMPASSING

- **Data Stewardship**
  - Data Quality
- **Data Governance**
  - Master Data Management
  - Data Stewards for Master Data “Hubs”
  - Customer, Vendor, Product, Location, Employee, G/L Accounts
- **Report Governance**
- **Metric Governance**

CREATING SIGNIFICANT BUSINESS VALUE

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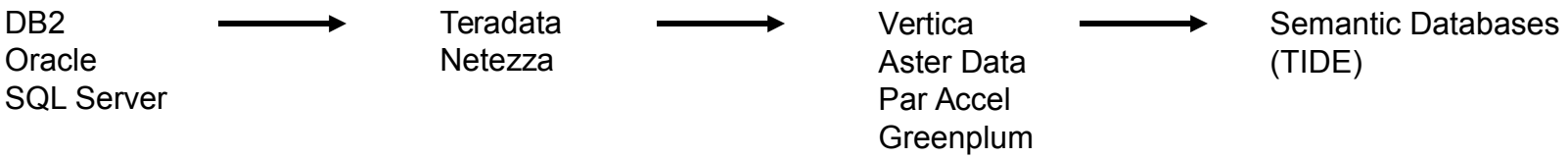
BI Technologies

- Analytic Databases



- BI is a consolidating industry
  - Oracle: Siebel, Hyperion, Brio, Sun
  - SAP: Business Objects, Sybase
  - IBM: Cognos, SPSS, Coremetrics, Unica, **Netezza**
  - EMC: **Greenplum**
  - HP: **Vertica**
  - Teradata: **Aster Data**
- Independent vendors: MicroStrategy, Informatica, SAS
- Reporting standards determined mainly by Microsoft, Apple and Adobe

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BI Technologies (cont'd)

- If you want to learn more about Analytic Databases:

http://hosted.mediasite.com/mediasite/Viewer/?peid=120d6b7ba227498b96a8c0cd01349a791d

- If you want to learn more about BI in the Cloud:

http://hosted.mediasite.com/mediasite/Viewer/?peid=e6d91148a71a47969824c22b3b20d6221d

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Recommended Reading List

1. Outliers -- Malcolm Caldwell
2. Moneyball -- Michael Lewis
3. The Black Swan -- Nassim Nicholas Taleb
4. Competing on Analytics -- Tom Davenport
5. How to Lie with Statistics -- Darrell Huff
6. Bringing Down the House -- Ben Mezrich
7. Super Crunchers -- Ian Ayres
8. Priceless -- William Poundstone
9. Drilling Down -- Jim Novo
10. The New Rules of Marketing -- Fred Newell

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Reference

- Goyal D. P. Management Information Systems, Managerial Perspectives, Macmillan India Ltd. Second Edition 2008
- Oka, M. M. Management information System14th Edition, Everest Publication.
- Sadagopan. S. Management information System, PHI publication

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