

BusinessConnect 2015



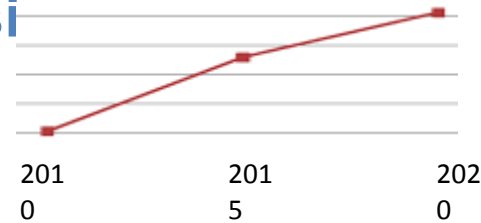
A New Way To Work

The Secret life of a Data Scientist

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Narrow Framing by a CFO based on just performance numbers limits a company's vision



- Expense prediction is based on historical numbers
- The CFO knows where the expenses are going but does not know what value these expenses are creating

Is being asked the value of each investment: Generate a 360 view of the company that shows how each event internal and external to the company is affecting money flow

The CIO holds the key to informed decision making in a company



- Enables easy access to data systems, joins marketing, CRM, Transaction data, etc.
- Aids in reporting function

Is being asked to provide contextual information about customers, products and competition: Generate 360 views of individual customers

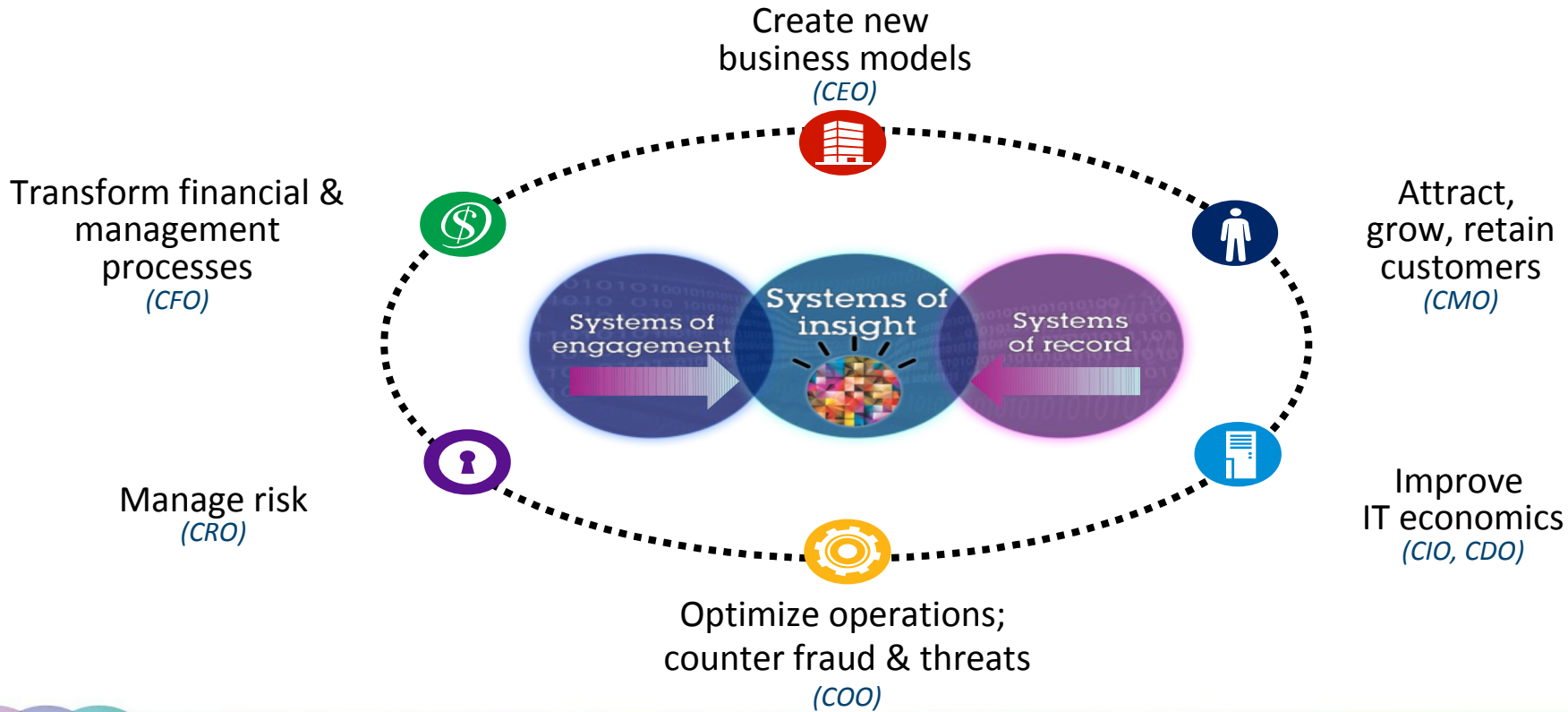
The average tenure of a CMO is less than 4 years, compared to 5.1 years for CIO, 8.4 years for CEO and 10+ years for CFO



- Customer segmentation based marketing
- Marketing decisions based on past trends

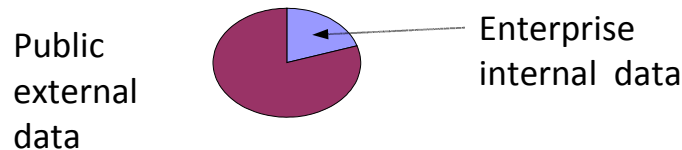
Is being asked to answer questions at segment size of 1: New mothers from Delhi who live within 2 kms of our retail outlets and who have visited our store at least once?

Data
is transforming professions and every business process



Data Science

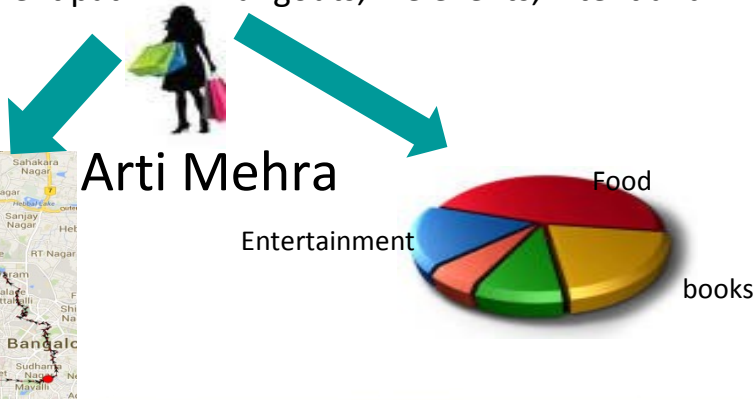
- Provide a comprehensive view of entities from both **publicly available** and **enterprise internal** data
 - **Public external data (TB/PB-scale) gives a broad and rich view of a consumer, company or product, going beyond the limited view within any single enterprise source**
 - *e.g., Financial Company profiles*, with insiders and counter-party relationships
 - *e.g., Consumer profiles*, based on historic information from *social media*
 - Enterprise internal data (GB-scale) **augmented** by master entities obtained from public external data



Customer 360

- Understand Customer Needs: Target individual customers better by understanding their spend patterns, spend locations, intent, sentiment, life events and propensity
 - Combine internal and external data for a 360 view of the customer
 - For each customer determine their product propensity
 - Predict where, when and what spend is likely for a customer
 - Roll out offers based on customer propensities

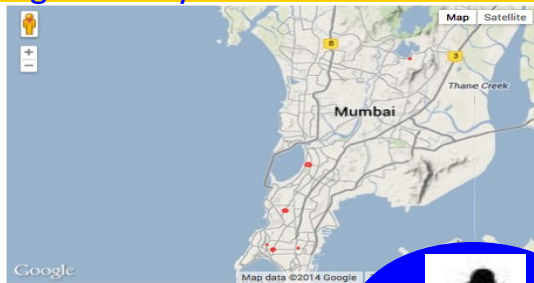
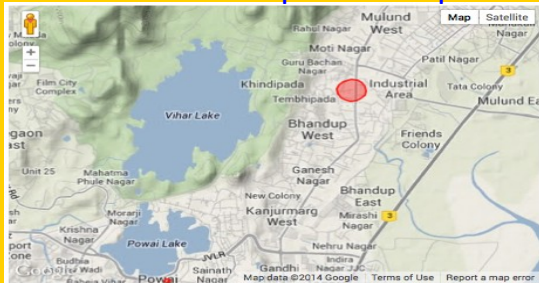
For each customer determine his/her behavior or signature in terms of movement patterns, hangouts, life events, intent and spends



- By combining internal and external data from enterprise, social and mobile, determine where, when and what her next spend will be

Analyzing Internal and External Data

Spatio-Temporal Hangout Analysis



Spend Analytics

Distribution of Card Expenses

Category	# of Transactions	Amount spent	% spend
utility	9	45000.0	39.15%
grocery	13	24893.3	21.65%
restaurant	12	20098.6	17.48%
electronics	7	11430.0	9.94%
hospital	7	9456.6	8.22%
online	2	4052.6	3.52%

Splitup of Card Expenses

Category	# of Transactions	Amount spent	% spend
Debit	24	66577.2	57.92%
Credit (Visa)	26	48353.9	42.07%

Distribution of POS Expenses

Category	# of Transactions	Amount spent	% spend
Other	28	63851.9	55.55%
ICICI	22	51079.2	44.44%

Social Media Analytics

Recent Buzz

Category	Date	Product/Company	Text
BIRTHDAY	2013-08-01		thanks all for your birthday wishes!! had a blast !!
CREDIT CARD	2013-11-08	HDFC	hdfc banks emails me "as per rbi mandate, your hdfc bank credit card will now have a limit for all international transactions"wtf man!
BABY BIRTH	2014-05-22		we are blessed with a baby girl , feeling happy!!
TRAVEL	2013-11-11		enroute to bengaluru..headed to the airport
MOVIES	2012-02-09	SKYFALL	@007 what is the update on 'skyfall'??when will it be releasing?

Recent Product Intent

Date	Product/Company	Text
2014-05-15	CAR	this june i will buy a car for my family!!

Life Events

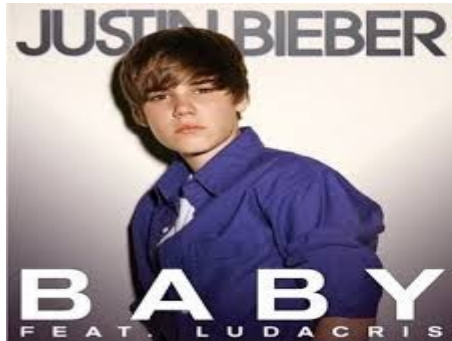
Event Type	Date	Kind
Birthday	2013-08-01	
Baby birth	2014-05-22	

Personalized search results

Arti when searching for 'baby' gets baby products



A teenager when searching for 'baby' gets Justin Bieber



Social Influenced Offers:

- ❖ Live offers are ranked using customer propensity based on life events, spend behaviour, hangout analysis
- ❖ Customers are sent offers with highest likelihood of acceptance
- ❖ Right time offers, like when the customer is in the mall shopping

Benefits:

- ❖ Allows customers to be presented with precisely relevant offers based on specific needs

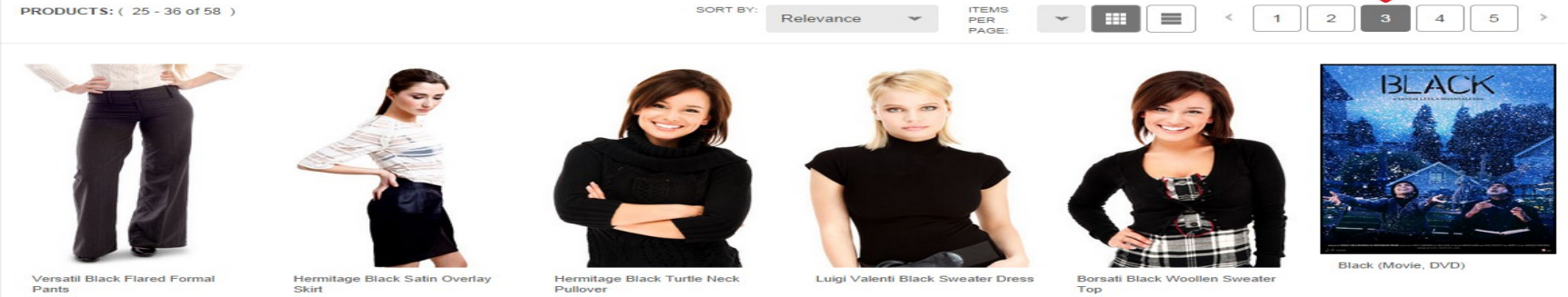
Personalized search results – example – before and after

Before – the movie Black is the 30th product and on page 3
Search results for "Black" (58 matches.)

PRODUCTS: (25 - 36 of 58)

SORT BY: Relevance

ITEMS PER PAGE: [1] [2] [3] [4] [5]



Versatil Black Flared Formal Pants

Hermitage Black Satin Overlay Skirt

Hermitage Black Turtle Neck Pullover

Luigi Valenti Black Sweater Dress

Borsati Black Woolen Sweater Top

Black (Movie, DVD)

After – the movie Black is the 1st product and on page 1
Search results for "Black" (58 matches.)

PRODUCTS: (1 - 12 of 58)

SORT BY: Relevance

ITEMS PER PAGE: [1] [2] [3] [4] [5]



Black (Movie, DVD)

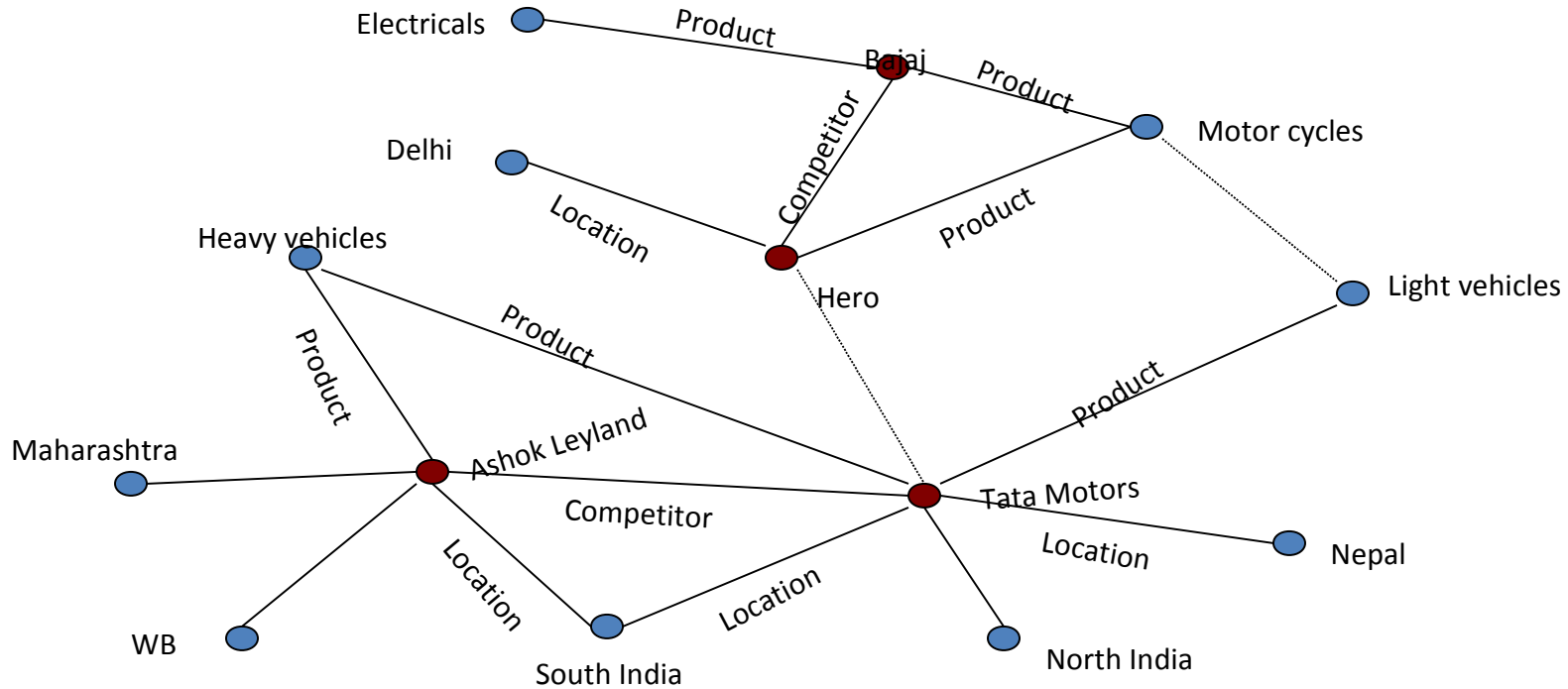
Albini Black Wool Suit

Luigi Valenti Black Suit

Hermitage Black Skinny Suit

Albini Black Leather Aviator

Enterprise 360



Investment Decisions: Analysis of companies based on counterparty relationships (e.g., lending, investment, ownership) and financial information obtained from **regulatory data (e.g., Annual Reports, SEBI filings, SEC)**

Risk Assessment: Analysis of credit health of a borrower based on past & recent loans for borrower and related entities (parent company, guarantors, subsidiaries) from **social media, regulatory data and 3rd party providers**

Thank You ù
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