

# IS660J

## Lecture 6

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## Agenda

### Customer Relationship Management

- Overview
  - What
  - Enablers
  - Why
  - Characteristics
  - Metrics
- Operational CRM
- Closed-loop Analytic CRM
- Customer centricity & Customer Dimension
- Dimension Outriggers
- Rapidly Changing Monster Dimensions
- Other Design Considerations

## What is Customer Relationship Management?

- CRM is a business strategy designed to optimize customer profitability, revenue, and satisfaction.
- Customer-centric business philosophy and culture to support effective marketing, sales, and service processes
- CRM applications can enable effective Customer Relationship Management, provided that an enterprise has the right leadership, strategy, and culture.

## Different than traditional marketing

In traditional product-focused marketing, marketer tries to extract maximum possible revenue from the current transaction and there is no future to the relationship. Thus it is a zero-sum game. CRM, by contrast recognizes that keeping customers over the long term is the road to profitability. CRM approach advocates that instead of trying to find new customers for the products you've already got, you find new products for the customers you've already got.

## Four step process

The core of CRM is the four step process:

1. Identify your customers
2. Differentiate them in terms of both their needs and their value to your company.
3. Interact with them in ways that improve cost efficiency and the effectiveness of your interaction.
4. Customize some aspect of the product or services you offer that customer. Treat the customer differently based on what you have learned from your interaction.

The Industrial Revolution ushered in factory production and advances in transportation, thereby creating huge economies of scale. This allowed big companies to sell mass produced goods and mass-delivered services to ever-larger numbers of people. Product-focused marketing strategies capitalized on these scale economies. Over time, however, competitors' offering in many industries came to resemble one another. The commoditization of mass-produced goods and services made it difficult for a company to differentiate its products and services which left it vulnerable to intense price competition.

The following three technologies make it possible and economical for a company to engage in the core activities of CRM.

1. Database technology-storage capacity apart from the ability to analyze and map large amounts of data.
2. Interactivity- Web sites, call centers, kiosks, and any other means by which a company can interact with its customers.
3. Mass customization technology-enabling a company to break products or services into modules and templates. For example an Airline company can create personal travel profiles of its premium members and then market customized travel packages to them.

## Why - Motivators

- CRM is a mission critical business strategy → requiring sponsorship, a strategy and a plan
- “The better you know your customers, the better you can maintain long-lasting, valuable relationships with them.” → collect data at every interaction with the customer (prospecting, quotes, purchases, fulfillment, payment, servicing, ect.)
- Increased revenues and greater operation efficiencies (reduced COS) → customer profitability, retention and demand generation
  - New customers cost more (investment) therefore how do we best maintain our customer base and convert non-profitable customers to profitable ones
  - Cross-selling and Up-selling

## Characteristics – 4Ps

- Planning - strategic
- Existing business processes for customer interactions have evolved over time as operational or organization works-arounds (not planned for)
  - CRM requires new ways of interaction
  - CRM requires new flows of information (acquisition and dissemination of customer “touch point” data) → more complex ETL; potential use of ODS
- Platforms – OTS products
  - Large data volumes and greater need for conformed customer dimension
- People - Leads to organizational changes and changes in incentives (culture)
  - People often resist change. Therefore, strong executive sponsorship is needed to succeed (cross functional)

## CRM Key Metrics

- a) The lifetime value of the customer- Some customers are worth more to your company than others, and this calculation help you determine just how much more.
- b) Share of customer- This key measure calculates what the potential value of a particular customer is over and above that customer's current estimated lifetime value.
- c) Productivity - Closure rates, cost of sales

## Case Study

Cisco example shows as how can a company strike a balance between achieving customer satisfaction through improved CRM and meeting corporate goals? Networking giant Cisco Systems was an early-mover, implementing its B2B Internet strategy by offering customers online technical support in 1994. Now, Cisco saves \$75 million annually by handling 79% of its tech support online. 90% of Cisco's software products are sold and distributed via the Internet. Customers can also configure their networking products online. Cisco's hassle-free online service has improved its customer satisfaction and loyalty rating by more than 25%.

## Two Aspects to CRM

- Operational
- Analytical



The data warehouse sits at the core of CRM. Repository to collect and integrate the breadth of customer information found in both the operational systems (ie. CIC) and external sources (ie. demographics).

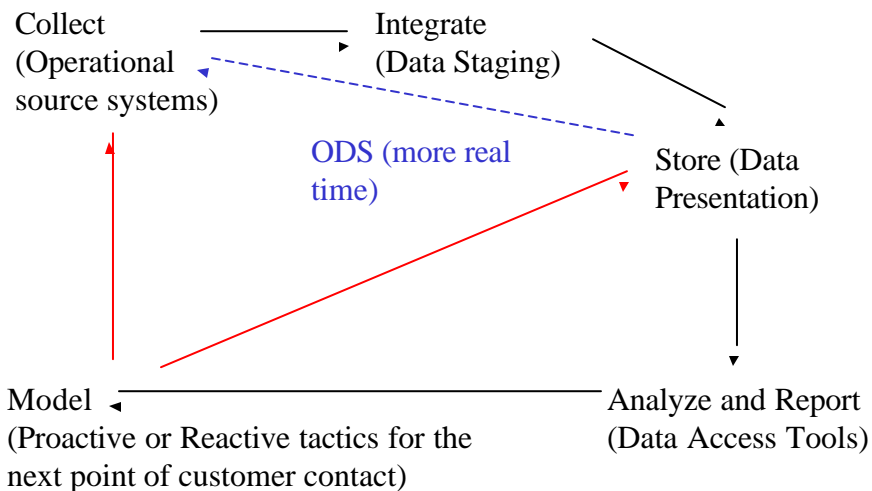
IDC defines operational CRM as comprising the following components:

1. Call centers/customer interaction centers (CIC), with centralized call-handling facilities and procedures that deliver various services to customers, including customer service, sales, billing, technical support, help desk, field service, dispatch, scheduling, etc. and evolving away from the traditional voice-based model toward a multichannel model that includes voice, fax, email, Web, and voice over IP (VOIP)

2. Marketing automation, with front-office software used to automate marketing efforts, including the organization and collection of customer data, the management and analysis of campaigns, database marketing, and marketing personalization and can be either telephony- or Web-based

3. Online customer support, with customer care services using online communication channels, including email, text chat, VOIP, self-service, etc. and in most cases, involves integration with a CIC and distinct from Internet services, which design, build, and maintain corporate Web sites and other eCommerce systems and initiatives
4. Sales force automation, with front-office software used to automate and streamline many aspects of the sales process, used primarily by an enterprise's sales force and involves both local and remote functionality

## Closed-loop Analytic CRM





## Packaged Solutions

- Buy
  - + Ready to go solution
  - Integration and interfaces
- Build
  - Longer (time) and more resources
  - + Integration and interfaces
- Common Data Interchange via XML
- Need for conformed dimensions (no stove pipe data marts!!!)

## Customer Centricity

- Migration from Product centric models to Customer centric models to measure the effectiveness of decisions made in the past in order to optimize future interactions
- Entails all aspects of the business: marketing, sales, operations, service
- Single integrated view of the customer
  - “One version of the truth”

## Customer Dimension

- Very large – can be both deep and wide
- Name and Address parsing –tables 6.1 & 6.2
- Dates (ie. date of 1<sup>st</sup> purchase, date of last purchase) – dimension outriggers –figure 6.2
- Segmentation classifiers or scores – see pgs 151-152
- Aggregated facts as Attributes (\$\$\$ spent) vs. using descriptive values (“high spender”); used only for constraining and labeling
  - Consistency
  - Minimize vulnerability of tying back to fact tbl
  - Minimize frequency of updates

## Dimension Outriggers

- Recall low cardinality attribute sets
  - ie. 150,000 products rollup into 50 depts
- Exception rather than the rule
- Demographic data
  - Grain of demographic data (country) is very different than the customer dimension
  - Data is loaded at different intervals
- Figure 6.3

## “Rapidly Changing Monster Dimensions”

- Problem: Takes too long to constrain & difficult to use our slowly changing dimension techniques
  - Type 2 would only add more rows to an already large (deep) dimension; Type 2 option ~< 100,000 rows
- Minidimension – Demographics - table 6.3
  - Frequently analyzed, frequently changing
  - Continuously variable attributes → Banded discrete values
    - Design issue – difficult to change later
  - Joined to the fact tbl
  - Outrigger dimension - Can also be a fk in the customer dimension (most recent – type 1 change)
- Multiple Minidimensions – figure 6.5



## Other Design Considerations

- Customer Behavior Study Groups
- Commercial Customer Hierarchies
  - Fixed Depth – simple – predictable levels
  - Variable Depth - Figure 6.8
    - Bridge Table –Figure 6.9, Table 6.4
- Combining Multiple Sources of Customer Data
- Analysis across business processes

## Conclusion

Some companies are better positioned to than others to adopt CRM. The companies whose customers have highly differentiated needs, highly differentiated valuations, or both will see the quickest impact of implementing CRM. Taking example of a computer company needs are highly differentiated-each customer wants a different configuration for his computer system. But so are valuations-a corporate client looking for thousands of workstations is obviously going to be worth more than an individual looking to buy a computer for the home. Businesses where lifetime value of the customers is low or where the consumer is not in contact with the marketer aren't logical candidates for CRM.