NBA 600: Day 9
IT Bringing Customers Inside
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Fedex: Broader Lessons

- Recognizing the value of information as a part of a product or service
  - First to see how to increase that value
  - New entrant can have advantage if driven by clear business value goals
    • Have to build an infrastructure
      - Build a better one than incumbents
  - Execution, execution, execution

- Bringing customers inside your business
  - Creating value by sharing information to and from the customer
Value of Information

- Information often has high value
  - Even when it is a component of some other product or service
  - Value may change substantially with new technology
  - Value may not be captured under some models

- Important to explicitly understand value and how to get paid for it
  - Can be difference between large business and nothing
    - E.g., search engines rapidly grew to billions in revenue after introducing “ad words” model
Bringing Customer Inside

- Save money by informing customer more efficiently
  - Customers want access to information, what is it costing you to provide it
- Better customer loyalty by providing more information
  - Adding value for the customer, such as direct airline reservations or package tracking
- Learn more from the customer
  - Don’t let intermediaries become more knowledgeable than you
Challenges of Bringing Customer In

- Can directly expose customer to internals of how company operates
  - Harder to hide problems/errors
  - May make easier for customer to compare with other providers (commoditization risk)

- High standards for system performance
  - Constant availability
  - High variability in load
  - “Real time” nature of information
    - Potentially including connections to suppliers or partners
Example: IT in Airline Industry

- Mid 1970’s larger airlines create computer reservation systems – CRS
  - E.g., Apollo (United), Sabre (American)
    - Terminals directly in travel agent offices
    - Fares and reservations for any airline paying fee
  - Prior discussion among travel agents about building common reservation system
    - Less resources and not as organized
  - A common airline system rejected by United

- Prior to CRS’s travel agents used printed fare book, telephoned in reservations
Airline Reservations Before CRS’s

- Manual processing of calls from agents
- Costly call centers to handle growing air travel volume
Value of CRS’s

- Airline operating savings on call centers
  - Major motivator; ROI’s were 70-100% a year
- More convenient for agent (customer)
  - No sitting on hold; direct access to information
- Enabled differential pricing
  - Manual system did not support complex pricing
  - Airlines able to de-commoditize their product
    - Charge more for business traveler who values buying at last minute or not staying weekend
  - Yield management was born – algorithms to obtain maximal revenue for seats
Evolution of CRS’s

- Each travel agency installed single system
  - High fixed costs needed to be distributed over many ticketed reservations
    - Charges were “per segment”
  - Competition and consolidation

- Winners such as Sabre became large profitable businesses
  - Spun out from American, served travel agents

- CRS’s and agents had considerable power
  - Controlled flow of information and access to customers
Industry Structure 1990

- Two layers of intermediary between airline and customer
  - Substantial costs associated with each layer
- Customer value in CRS layer
  - Routing and pricing across airlines
  - Airline value diminished by in-house systems
- Customer value in agent layer variable
  - Airline value if agent drove customers to them

Diagram:
- Airline
- CRS
- Agent
- Customer
Rapid Adoption of Internet

- Customers and airlines both motivated to change – benefits to both sides
  - Customers wanted more information and control than getting from agent
    - Agent profits tied to airline bonus programs and not necessarily customer interest
  - Airlines wanted to cut costs
    - Agent fees were 10% of ticket; CRS fees rising
- Airlines rapidly developed direct Web sales and Orbitz consortium
  - Bypassing agents and own reservation centers which were also costly
Rapid Adoption of Internet

- New entrants such as Microsoft/Expedia
  - Exploited early technology leadership
  - Driven by frustration with agents as “information bottlenecks”
  - Spun out from MS, later acquired by Interactive

- Successful online agents keep evolving
  - Offering wide range of travel products
  - Experimenting with revenue models
    - E.g., merchant revenues now larger than agency revenues (act as re-sellers taking inventory risk)
  - Travelocity becomes part of Sabre CRS
Business and Pricing Models

- Acting as agent
  - Fee paid by travel provider, customer or both

- Acting as merchant
  - At risk for unsold inventory
  - Travel provider or block purchaser reselling

- Seller-set pricing
  - May change dynamically but purchaser only decides yes-or-no

- Buyer-set pricing
  - Has turned out to be niche (e.g., Priceline)
  - Surplus inventory, only certain customers
Internet Travel Today

- 60% researched travel online in 2002
  - Similar percentage to 2001
  - Calls and visits to traditional travel agents down each year, many agents closed

- Over 39 million people booked travel online in 2002
  - Up 25% from 2001
  - 70% of them booked over half travel online
  - 30% of them booked over $2500/yr online

- Southwest books over half revenue online
  - More than $3B in 2003
Industry Structure Today

- Web access supports very different models although may look same to user
  - Airline sites
  - Travelocity part of a CRS (Sabre)
  - Expedia an independent travel agent
  - Orbitz a consortium of airlines

- Each arguing other is anti-competitive
Internet Changed All Players

- CRS’s (Sabre/Travelocity)
  - Allowed Sabre to bypass agents
    - Complicated model as Sabre still claims to be in business of serving agents

- Individual airline web sites and new consortium (Orbitz)
  - Allowed airlines to bypass CRS’s and agents who they view as over priced

- Online agent new entrant
  - Expedia started with technology lead, kept evolving its model

- Traditional agents have been big losers
Change Waiting for Enabler

- CRS’s and travel agents had become information bottleneck
  - Relatively large rents compared to value added
    - Due to position in the information chain
    - Both consumers and providers (airlines) viewed them this way
- Warning: not all apparent information bottlenecks are real
  - Many viewed broker-dealers on Wall Street as information bottlenecks
    - They turn out to provide substantial value in many cases
Two Generations of IT Led Change

- First generation: CRS’s
  - Lowered airline costs through outsourcing
  - Increased airline revenue through differential pricing of business and leisure
  - Made travel agents more powerful

- Second generation: Internet
  - Lowered airline costs by enabling elimination of commissions
  - Damaged traditional travel agent business
  - Challenge to differential pricing through better access to information
Corporate Travel

- Individuals are transaction oriented, corporations more relationship oriented
  - Transaction: price focused, own time cheap
  - Relationship: total cost focused
    - Person time expensive, flexibility and convenience key
    - One of largest controllable costs
      - Managed travel
      - Appetite for lowering total cost

- How and where technology can benefit relationship customers?
Where Technology Good or Bad

- Compliance and pre-approval of travel
  - Apply rules and get approvals via email and/or Web
- Repeat travel
  - Store old itineraries, make simple to rebook
- Availability of tools for own research and booking where desired
  - Use to double check agents?
- Expert human assistance can’t be beat in case of problems en route
Evolution of Online Travel

- Continued dominance of corporate agencies such as Amex but with help of new technology
  - Build on relationship and service expertise
  - Use Internet to provide more information direct to traveler and to travel coordinator

- New entrants such as Expedia
  - Build on technology expertise to provide Internet information wherever possible
  - Grow or buy relationship and service experts
  - Particularly for underserved smaller businesses
Assignments

- Scheduling
  - First group assignments due Thu. 3/18, right before break
  - Third short paper due Thu. 3/11
    • Move to Tue. 3/30, right after break?
    • Note: fourth short paper due Thu. 4/8

- First group assignment
  - Write case study of a company that has had either substantial success or failure in using IT as competitive differentiator
  - Email me your choice by next Tue. 3/2 (dph2)