Providing World-Class Customer Experience via Big Data Analytics

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Design Thinking Focus: Customer empathy

What does the customer value?
QUALITY: Totality of **features** and characteristics of a product or service that bear on its ability to satisfy needs (TQM)

SATISFACTION: Customer’s **feeling** of pleasure or disappointment resulting from comparing a product or perceived performance in relation to expectations (Bain NPS)

VALUE: **Satisfaction** with the total quality received **minus** the **sacrifice** necessary to obtain it (Value Chain)
Cost-Plus vs. Value-Based Approaches

Value-Based

Differentiated product
Differentiated service

Cost → Price → Value → Customer

Customer → Value → Price → Margin
Benefits of Improving Customer Experience

5x more costly to acquire than to retain a customer¹

68% willing to pay more getting better customer service²

80% of referrals from promoters³

2x CAGR by customer loyalty leaders³

¹ Amy Gallo, “The Value of Keeping the Right Customers”, HBR, 2014
² Harris Interactive Consumer Experience Impact Report, 2011
³ Bain & Company, “Net Promoter System”
Maximizing Returns on Customer Experience

- Focus here
- Maintain

- Conserve funds
- Minimal opportunity

High perceived value
Low satisfaction
High satisfaction
Low perceived value
Operational performance may impact each stage of the customer journey... How much?
This Is Big Data

Wide **variety** of data:
- Operational
- Transactional
- Survey
  - Numerical
  - Verbatim comments

High **velocity** of data
- 10,000s of transactions daily
- Each may have a survey
- 100’s of attributes per transaction

High **volume** of data
- 10,000s of customers
- 10,000s of products
- 1,000,000s of transactions
- 10,000’s of surveys

Varying data **veracity**
- Accuracy
- Completeness
- Interpretability
Textual Analysis

Analyze verbatim comments for

- Sentiment
- Topic areas
Structural Equation Modeling

Thicker arrows indicate stronger relationships
Relationships are for illustration only and do not reflect real data
Pareto Analysis to Prioritize Improvements

Business Performance

- Improvement #1
- Improvements #1-#2
- Improvements #1-#3
- Improvements #1-#4
- Improved customer experience \(\rightarrow\) improved customer value

- Different aspects of the customer experience \(\rightarrow\) valued differently
  - by different types of customers

- Fusing together many types of data \(\rightarrow\) tie together entire value chain

- Structural equation modeling \(\rightarrow\) quantify and prioritize improvements