

Consumer Behavior

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Learning Objectives

- Describe the factors that influence consumer behavior online.
- Understand the decision-making process of consumer purchasing online.
- Describe how companies are building one-to-one relationships with customers.
- Explain how personalization is accomplished online.
- Discuss the issues of loyalty and trust in EC.

NETFLIX

The **best** way
to rent movies.

Plans start at
only \$9⁹⁹
a month!



Netflix.com

opening case

Recommendation Systems

- information filtering system that seek to predict the 'rating' or 'preference' that a user would give to an item (such as music, books, or movies) or social element (e.g. people or groups) they had not yet considered
- using a model built from the characteristics of an item (content-based approaches) or the user's social environment (collaborative filtering approaches)[

Recommendation System Examples

- When viewing a product on **Amazon.com**, the store will recommend additional items based on a matrix of what other shoppers bought along with the currently-selected item.
- **Pandora Radio** takes an initial input of a song or musician and plays music with similar characteristics (based on a series of keywords attributed to the inputted artist or piece of music). The stations created by Pandora can be refined through user feedback (emphasizing or deemphasizing certain characteristics).
- **Netflix** offers predictions of movies that a user might like to watch based on the user's previous ratings and watching habits (as compared to the behavior of other users), also taking into account the characteristics (such as the genre) of the film.

Collaborative Filtering

Pandora uses the properties of a song or artist (a subset of the 400 attributes provided by the Music Genome Project) in order to seed a "station" that plays music with similar properties. User feedback is used to refine the station's results, deemphasizing certain attributes when a user "dislikes" a particular song and emphasizing other attributes when a user "loves" a song. This is an example of a content-based approach.



Last.fm

Last.fm creates a "station" of recommended songs by observing what bands and individual tracks that the user has listened to on a regular basis and comparing those against the listening behavior of other users. Last.fm will play tracks that do not appear in the user's library, but are often played by other users with similar interests. As this approach leverages the behavior of users, it is an example of a collaborative filtering technique.



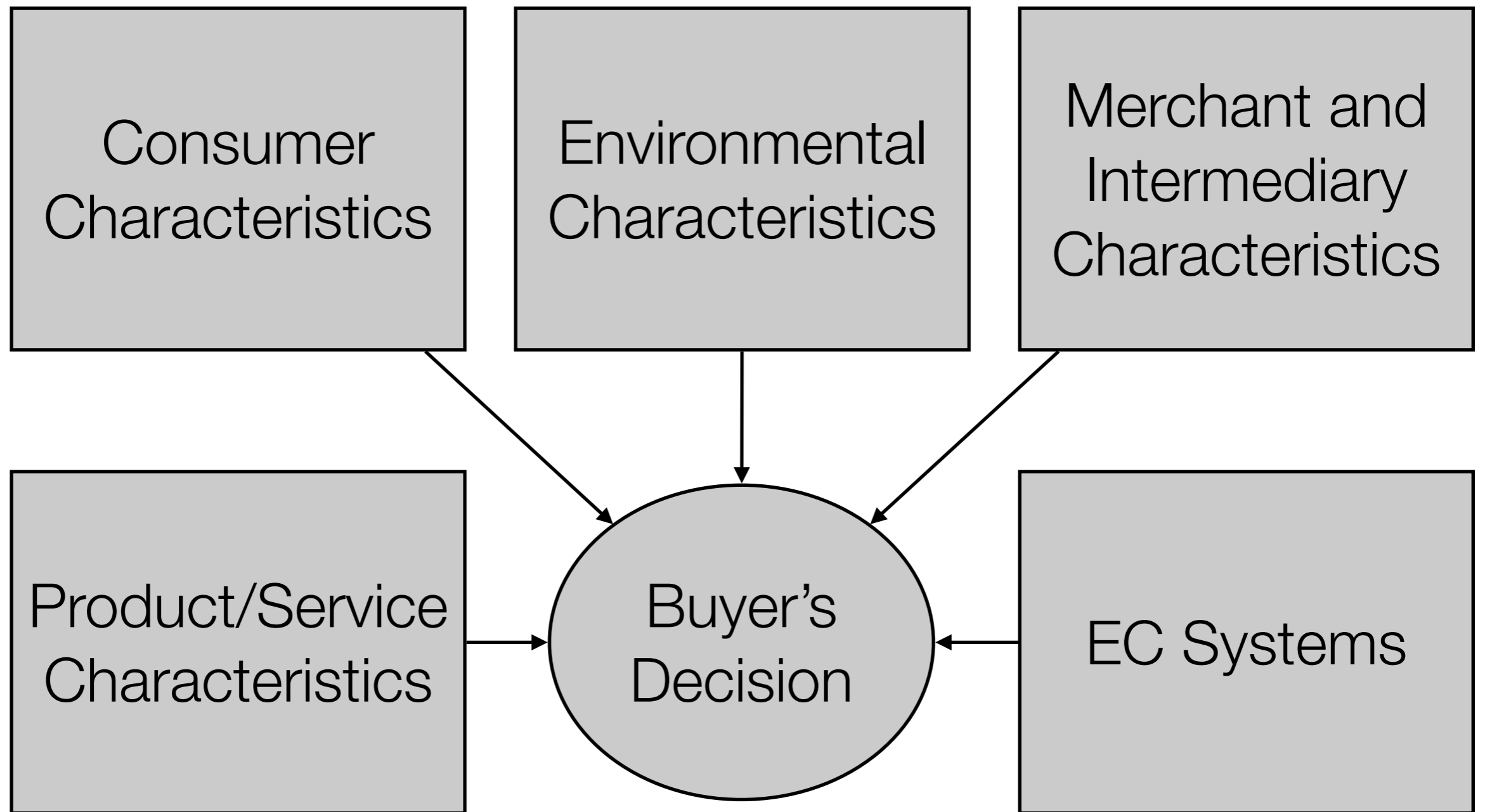
Consumer Behavior

Learning about Consumer Behavior Online

- Finding and retaining consumers is a major critical success factor for most businesses
- Apply both online and offline
- Key: understanding consumer behavior and model it

Learning about Consumer Behavior Online

- The purpose of a consumer behavior model is to help vendors understand how a consumer makes a purchasing decision
- If a firm understand the decision process, it may be able to influence it
- A Model of Consumer Behavior Model
 - two major parts: influential factors and the consumer decision process



Basic Factors of a Consumer Behavior Model

Exhibit 4.1

Influential Factors

- Influential factors are those that may affect the consumer's intention to buy
- Major influential factors

Consumer/Personal characteristics

- demographic factors, individual preferences, and behavioral characteristics
- major demographics that sites track: gender, age, status, ethnicity, income, occupation
- gender is roughly balanced. imbalances are found in specific sectors
- Some of them can be correlated. for instance higher education = more income -> result in more online shopping
- More experience in online shopping = more online shopping

Environmental Factors

- The environment can influence a buyer decision
- Social variables: influence by friends, what's "fashion" this year, internet communities, social networks opinions
- Community/Cultural Variables: differences in behavior between countries (Usa, China, Nepal, Italy) or regions
- Other: law, moral (<http://www.allfacebook.com/ellen-degeneres-facebook-2012-02>), others...

Product/Service Factors

- Controlled by vendors
 - pricing
 - promotions
 - the products themselves and their quality
 - the physical environment
 - customer services



Philips ShopLab

http://www.youtube.com/watch?v=qMj-OaS_n7g

Merchant and Intermediary Factors

- Online transactions can be also affected by the merchant that handle the product
- Reputation, trust, marketing

EC Systems

- The platform for online transaction
- Security, protection, payment mechanism, etc.
- Consumers are more likely to buy from well designed e-tailers
 - sites with large set of functions
 - functions to prevent possible trouble

Behavior Process Model

- Product of the decision making process
 - $f(p, pr, me, sy, en) \rightarrow d$
- As with all models, the exact function is unknown
- Reality is complicated, but we aim to approximate the function to model the behavior of the masses

AIDA(S): a Classical Model

- AIDA model 1898 model to describe advertising effectiveness
 - A-Attention: Attract the attention of the customer
 - I-Interest: Raise the customer interest by demonstrating features, advantages, benefits
 - D-Desire: consumer may be convinced that the product satisfy its needs
 - A-Action: consumer take action toward purchasing
- Additionally: S-Satisfaction: generates loyalty and repurchases

Generic Purchase-Decision Model

- A general purchasing-decision model consists in five major phases
- each composed of one or more activities and actions
- not every consumer decision proceed this way

Generic Purchase-Decision Model

- 1. Need identification: sbilanciamento fra il suo stato di necessità attuale e quello desiderato. uno degli obiettivi di mercato è quello di rendere consapevoli i clienti di questa situazione*
- 2. Information search: ricerca delle varie alternative per colmare il divario*
- 3. Evaluation of alternatives: uso delle informazioni collezionate per settare dei criteri di scelta*
- 4. Purchase and delivery: operazione di pagamento, spedizione, etc*
- 5. After-purchase evaluation: uso del servizio clienti, facilità delle istruzioni, valutazione delle funzionalità*

Players in the Consumer Decision Process

- Roles people play in the decision-making process:
 - Initiator
 - Influencer
 - Decider
 - Buyer
 - User

From Mass Marketing to One-to-one Marketing

- One of the greatest benefits of EC is to match products with individual consumers
- in one-to-one marketing each consumer is treated in a unique way
- In marketing and advertising three major approaches are used
 - mass marketing
 - market segmentation
 - one-to-one marketing

Mass Marketing

- Marketing efforts traditionally were targeted to everyone (the masses)
- Ads on newspaper or tv for instance
- Such marketing is effective for:
 - brand recognition
 - launching new products

ALL-NEW '09 F-150
MAN, TRAILERS ARE LIKE

**WILD
ANIMALS.**

They're always trying
to get away from you.

Until now. Trailer sway control, standard.



FIND OUT MORE AT FORDVEHICLES.COM



CARADVICE.COM.AU

Ford F-150 Campaign

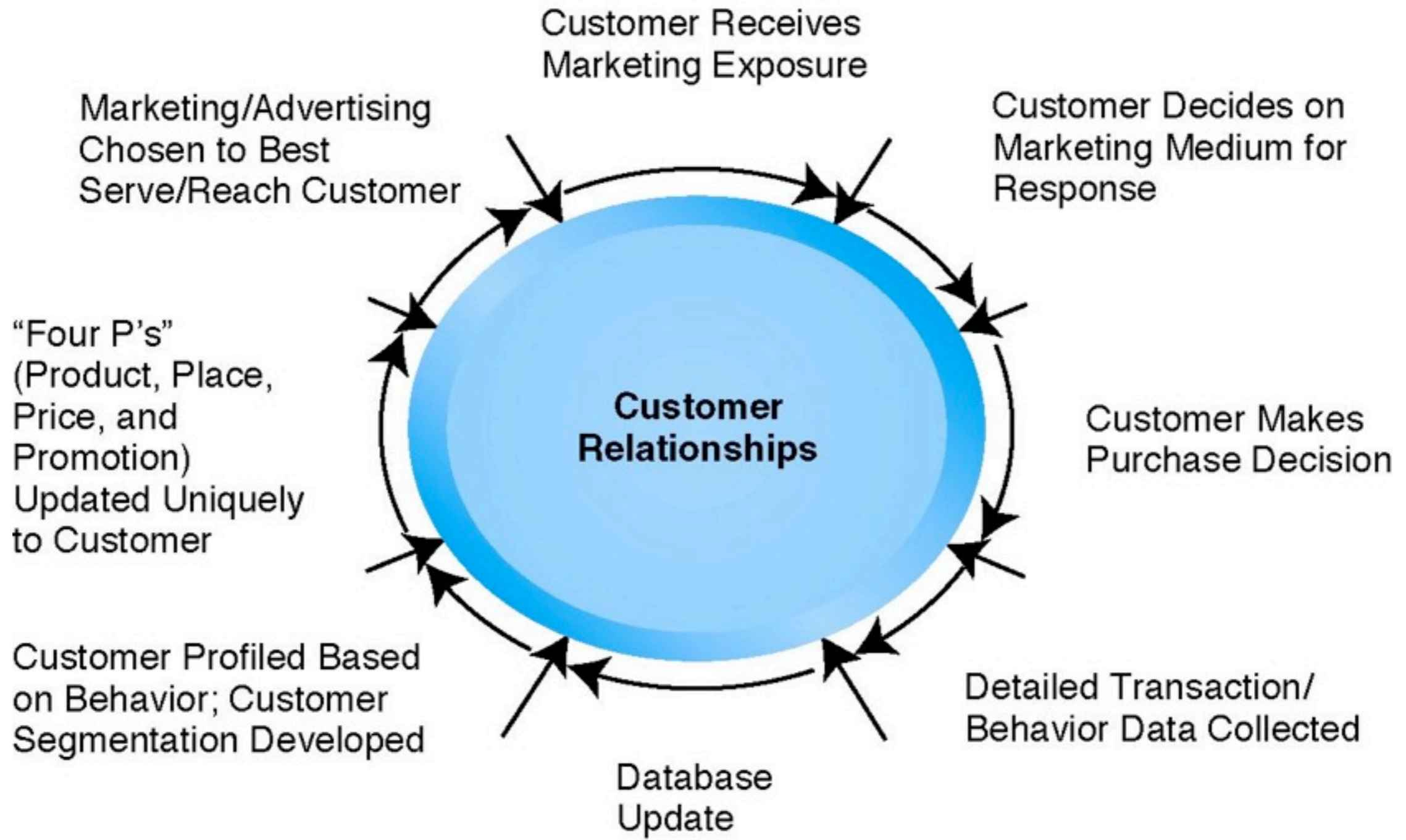
Promote a new product

Market Segmentation

- Promoting a product to a subset of customers
- Better response rate if the segment is “right”
- Statistical data mining methods are often used to identify valuable segments for promotion or advertising
- A simple way to do it: go to specialized websites and promote there

One-to-one Marketing

- Also called “Relationship marketing”
- As people begun to buy online more data become available about them
- 1-to-1 marketing shifts the target for marketing from a group of consumers to each individual
- marketing departments must know their customers and understand their preferences
- increased customer retain
- corporate-wide policies to build 1-to-1 relationships



A Marketing Model

Exhibit 4.4

Personalization

Personalization

- Key concept in 1-to-1 marketing
- Matching of services to and advertising content to individuals according to their preferences
- Based on user profiles: what the company knows about an individual
 - direct information from the user
 - observe what people are doing online
 - previous purchase patterns
 - marketing research
 - inferences

Behavioral Targeting

- Use of information collected about individual's web browsing behavior
 - pages they have visited, searches they made
- in order to select advertisement to display to that individual

Collaborative Filtering

- Predict what products or services a customer may enjoy
- Use other customers data to infer interest in other products or services
- Based on formulas from behavioral science
- Predictions can be extended to customers with similar profiles
- Growing in importance due to social networks!
 - ppl share willingly their preferences with third parties

Example Amazon.co.uk

- Many of these techniques can be seen in action in amazon
- cookies (Hello Maurizio Marek. We have recommendations for you. (Not Maurizio?))
- collaborative filtering (Customers Who Bought This Item Also Bought, What Do Customers Ultimately Buy After Viewing This Item?, Customers Also Bought Items By)
- behavioral targeting (Your Recent History, Customers who bought items in your Recent History also bought)

Cookies

- A cookie, also known as a web cookie, browser cookie, and HTTP cookie, is a piece of text stored on a user's computer by their web browser. A cookie can be used for authentication, storing site preferences, shopping cart contents, the identifier for a server-based session, or anything else that can be accomplished through storing text data.
- Session management, personalization, tracking

Click-stream behavior

- What did the consumers looked at?
- What products do they look at before buying?
- How long did they look at them?

Data Mining

- Extract knowledge from click-stream behavior

Other Behavioral Marketing Methods

- Rule-based filtering: a company ask consumers a series of questions, behavioral patterns are predicted using the collected information
- Content-based filtering: identify some product attributes, propose other similar products

Legal and Ethical Considerations

- Information is often collected from users without consent, or knowledge, or permission
- Several ethical, legal, and privacy issues
- I can do this, but should i?
 - In-app tracking, facebook reads your messages, app steals your address book, etc.
- Privacy policy is important

http://www.huffingtonpost.com/2012/02/15/iphone-privacy-app-path-facebook-twitter-apple_n_1279497.html

Customer Loyalty and Satisfaction

Customer Loyalty

- One of the major objective of 1-to-1 marketing is to increase customer loyalty
- Loyalty brings a deep commitment to buy again or to patronize preferred products with friends
- Customer loyalty is the degree to which a customer will stay with a specific vendor or brand for repeat purchasing
- Customer loyalty is expected to produce more sales and increased profits over time
- e-loyalty: customer loyalty to an e-tailer

Why is Loyalty Important?

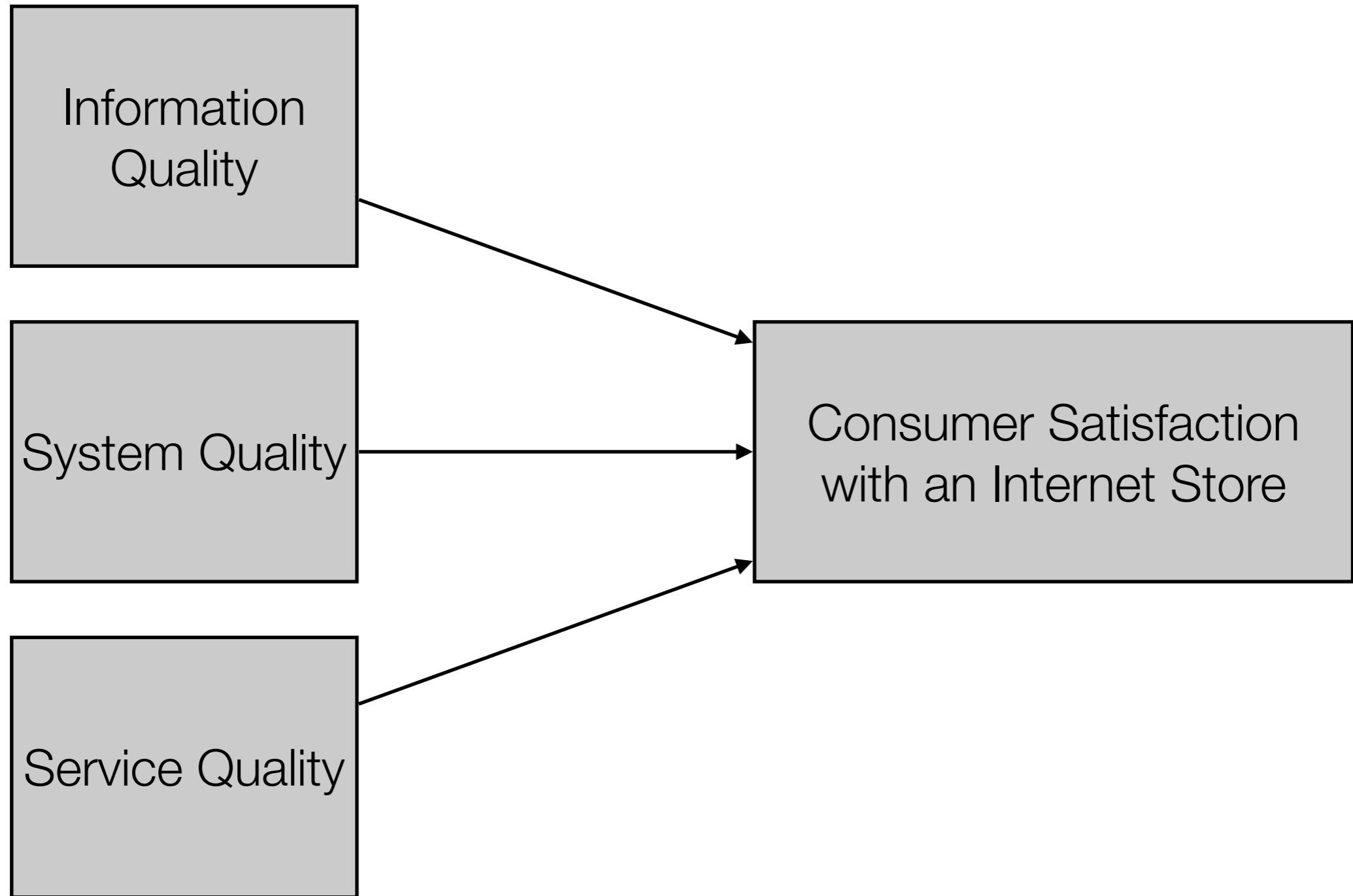
- The cost of acquiring a new customer can be as much as 100\$
- Amazon.com is reported to be \$15
- The cost of maintain a customer is lower (2-4\$ for amazon.com)
- Loyalty programs were introduced more than 100 years ago and are widely used among airlines, retailers, hotel chains, car rentals, restaurants, and credit card companies
- Point programs

However...

- The introduction of Internet technologies can also hinder loyalty
- quick comparing, social networks, more market awareness can discourage loyalty

Satisfaction

- Satisfaction is one of the most important consumer reactions in the B2C online environment
- Recent statistics show:
 - 80% of highly satisfied online consumers would shop again within 2 months
 - 90% would recommend the Internet retailers to others
 - However, 87% of dissatisfied consumers would permanently leave their Internet retailers without any complaints



Research framework of
consumer satisfaction

Exhibit 4.5

Trust

Trust

- The psychological status of depending on another person or organization to achieve a planned goal
- Confidence that the transaction partners will keep their promises
- Both parties assume some risk
- Trust is of particular importance in global e-commerce
 - difficult to take legal action in case of dispute or fraud

How to Increase Trust in EC

- Affiliate with an objective third party
 - links to trusted agents

The screenshot shows the TRUSTe website homepage. At the top left is the TRUSTe logo. To the right are links for 'Client Login' and 'Contact Us'. Below these are links for 'Privacy Library | Blog | Events'. A navigation bar contains 'Home', 'Services', 'Why TRUSTe', 'Resources', and 'About TRUSTe', with a search bar and a 'Find' button on the right. The main banner features the headline 'Customers Who Trust You Buy More' and 'Increase Sales with a TRUSTe Privacy Seal', accompanied by an image of a man in a suit being supported by another man. A 'DISCOVER HOW' button is positioned below the headline. Below the banner is a 'Be in Good Company' section with logos for Microsoft, wine.com, CISCO, LinkedIn, audible.com, GoDaddy, and Taleo. A 'Latest News' section includes a link to 'Read the blog: OBA Privacy Notes from the FTC'. The bottom of the page is divided into four columns: 'For Consumer' (with links to 'Personal Privacy Tips', 'File a Watchdog Complaint', and 'IE9 Tracking Protection'), 'For Small Business' (with links to 'Products & Services', 'Return on Investment', 'Case Studies', and 'Select a Plan'), 'For Medium & Enterprise' (with links to 'Products & Services', 'Programs Comparison', '24/7 Privacy Management', and 'Customer Success Stories'), and 'TRUSTe Seals & Services' (with buttons for 'LEARN About TRUSTe Seals', 'TRY Free ROI Test', 'BUY TRUSTe Seal', and 'SIGN IN My Account').

How to Increase Trust in EC

- Establish Trustworthiness
 - integrity: build an image of justice, fulfill promises
 - competence: professional website, correct grammar, accurate information
 - security: secure shopping, return policies

Market Research

Market Research for EC: Goals

- find information and knowledge that describes the relationships among consumers and products
- discover marketing opportunities and issues
- establish marketing plans
- better understand the purchasing process
- evaluate marketing performance
- turn browsers into buyers

Concepts of Market Research Online

- Investigating EC markets *can* be conducted in traditional ways
 - telephone surveys
 - shopping mall surveys
- Interest in Internet research methods is on the rise
 - faster and more efficient
 - very large studies are conducted
 - cheap (phone = 50\$ per respondent)

What are we looking for?

- Predict the online buying behavior
- Major factors used are:
 - product information requested
 - number of related emails
 - number of orders made
 - products ordered
 - gender

What can we learn?

- What are the purchase patterns for individuals of groups?
- What factors encourage online purchasing?
- How can we identify real buyers?
- How does an individual navigate the website?
- What is the optimal web page design?

- Help the vendor advertise the right products, price items, design the web site, provide customer service, etc.

Online Research Methods

- Large interest in Internet research methods
- Cheap to acquire very large quantities of data (social networks, website users, etc.)
- The larger the sample, the more accurate is the prediction

« *Le leggi della storia sono assolute come quelle della fisica, e se in essa le probabilità di errore sono maggiori, è solo perché la storia ha a che fare con gli esseri umani che sono assai meno numerosi degli atomi, ed è per questa ragione che le variazioni individuali hanno un maggior valore.* »

(Bayta Darell, *Fondazione e Impero*, cap. 11)

Psychohistory is a fictional science in [Isaac Asimov's Foundation](#) universe which combines [history](#), [sociology](#), and mathematical [statistics](#) to make general predictions about the future behavior of very large groups of people, such as the [Galactic Empire](#). It was first introduced in the five short stories (1942–1944) which would later be collected as the 1951 novel [Foundation](#).

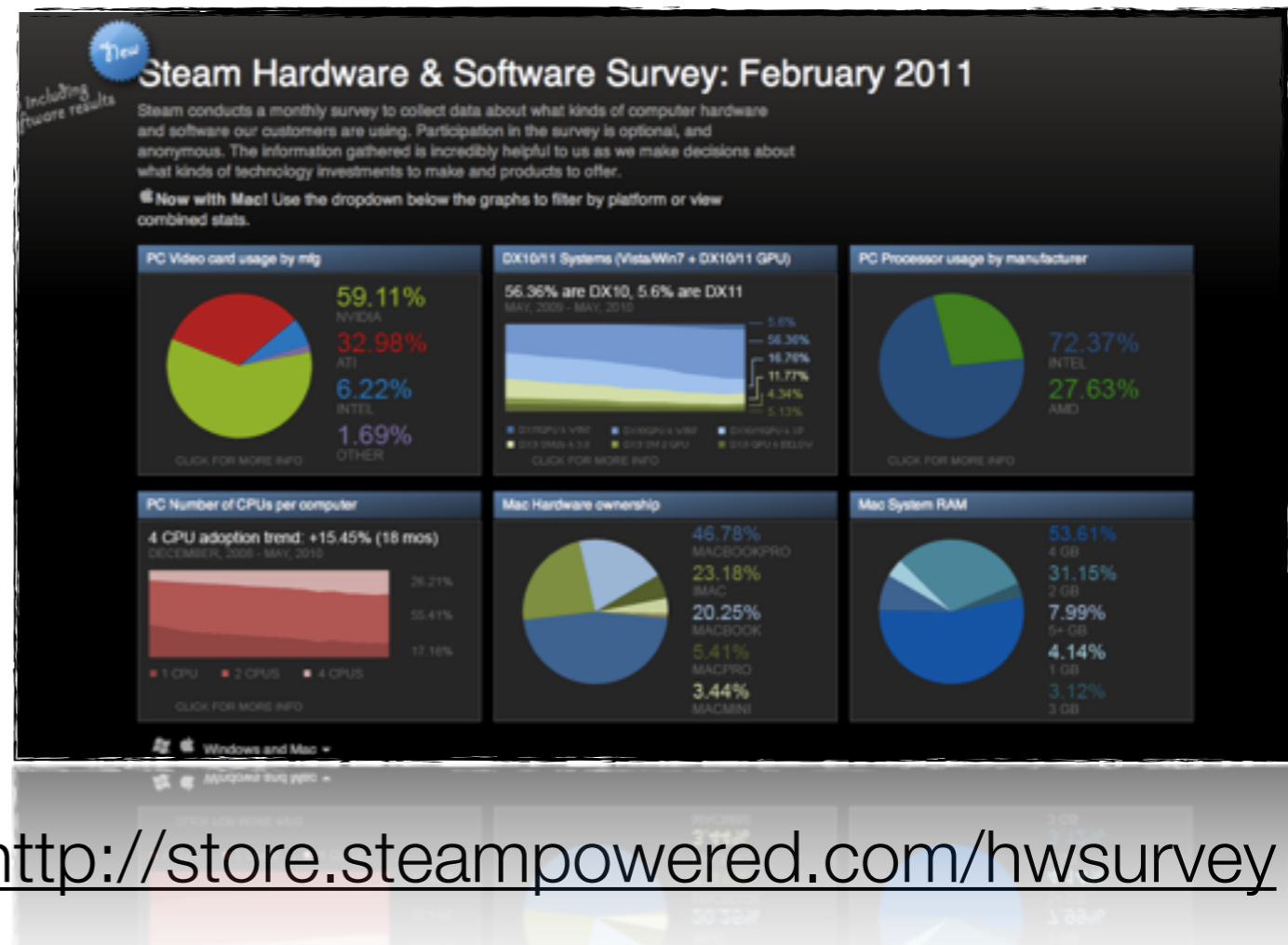
Psychohistory depends on the idea that, while one cannot foresee the actions of a particular individual, the [laws of statistics](#) as applied to large groups of people could predict the general flow of future events. Asimov used the analogy of a [gas](#): an observer has great difficulty in predicting the motion of a single molecule in a gas, but can predict the [mass action](#) of the gas to a high level of accuracy.

Online Research Methods

- Soliciting information from customers
- Observing behavior
- Using data mining

Soliciting Behavior Example: Surveys

- Placing questions on the web
- Inviting potential customers to reply
- Several tools to build surveys



Hearing Directly from Customers

- Forums, bulletin boards, social networks
- Million of people share opinions and comments
- Collecting data from web 2.0 environments provide new opportunities

All | Movies | TV | Shorts | Free Online

Squeeze your search

Titles I haven't seen

Zero in on what you want with real-time suggestions.

Mood

Plot

Genres

Time/Period

Place

Audience

Praise

Based on

like: v for vendetta

Go

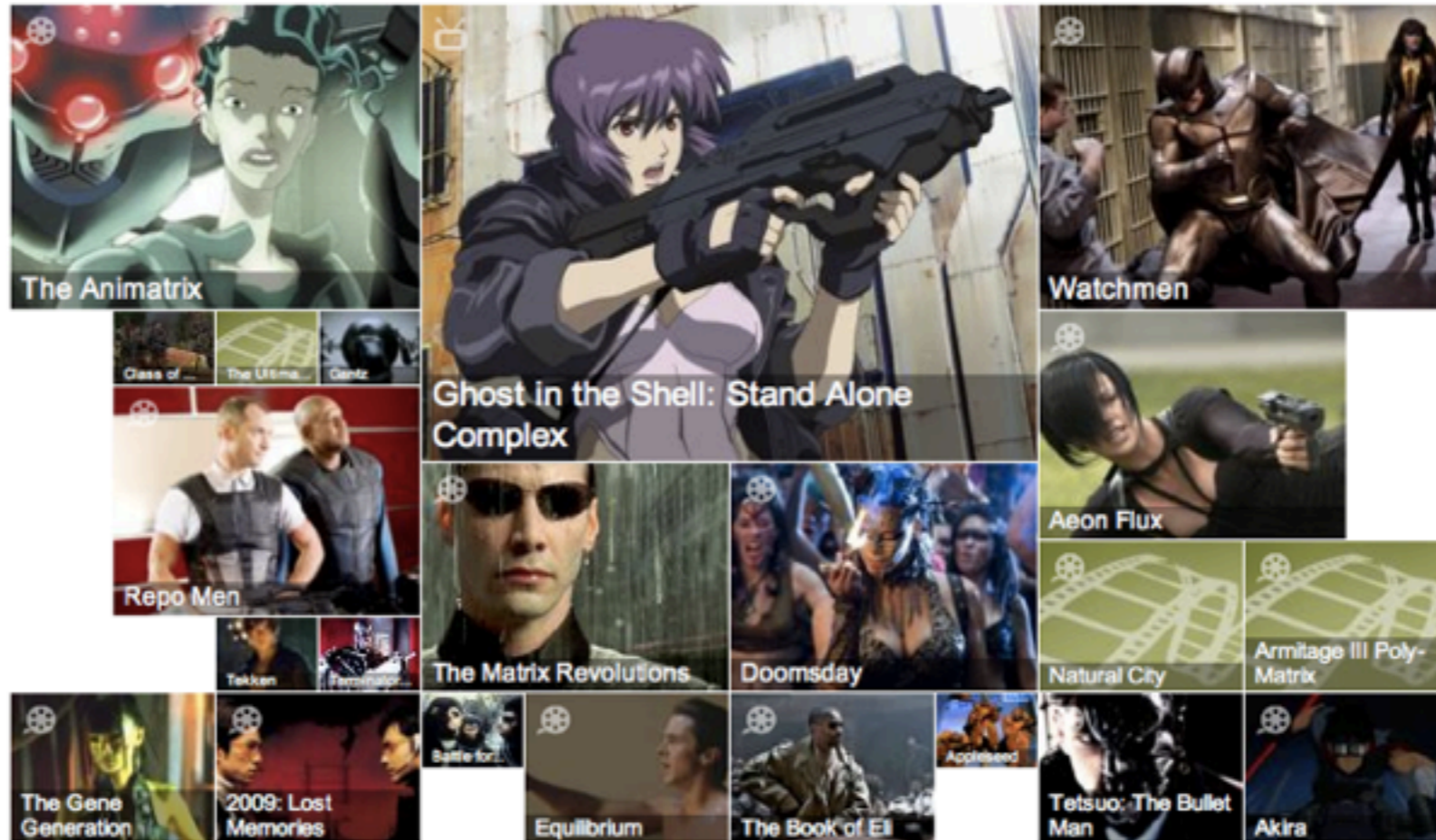
300 Results for: Titles: like V For Vendetta

<< Prev | Next >>

History | Size By: Relevancy

Share search: [Email] [Link]

Story Tuners



Showing 1 - 22 of 300

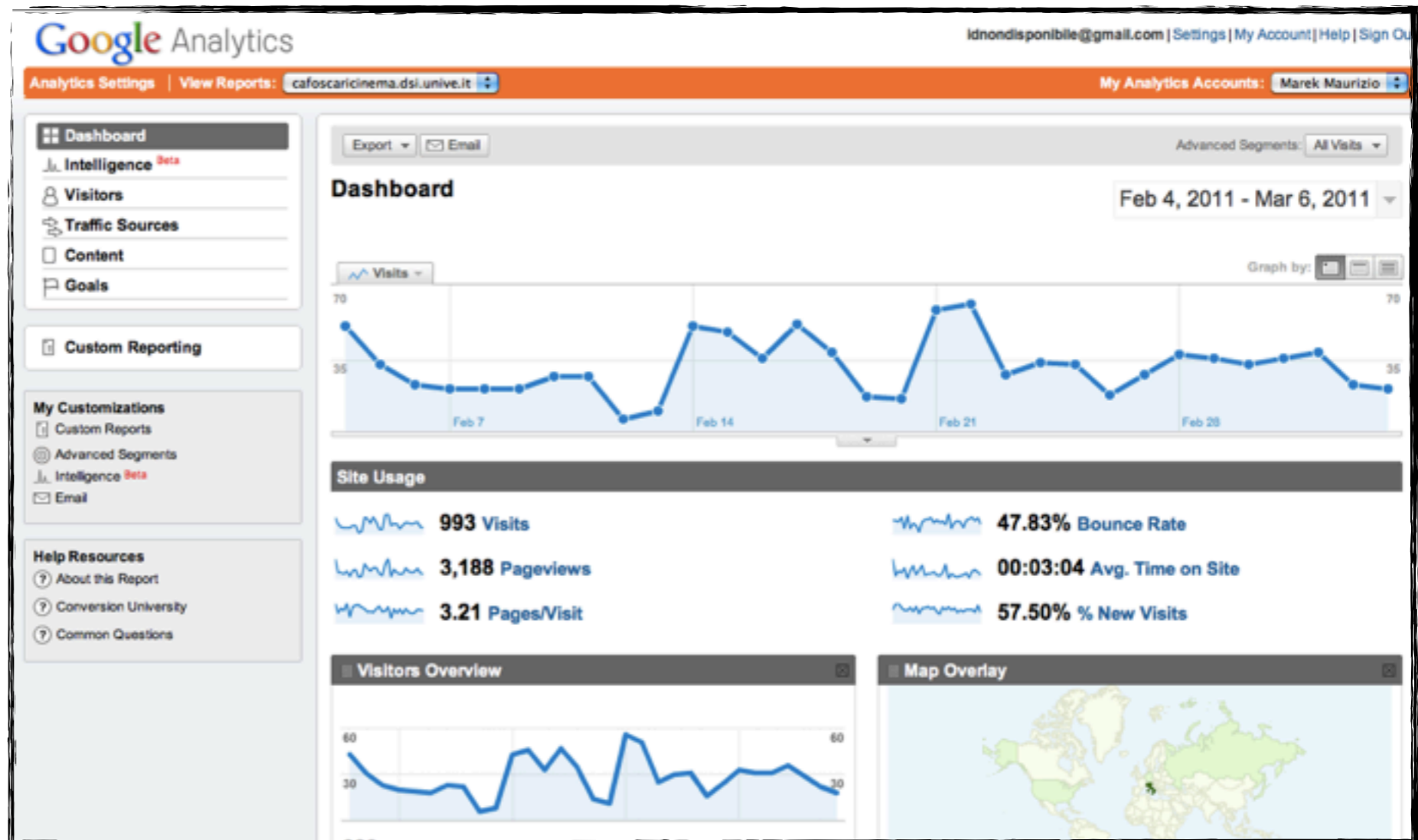
1 | 2 | 3 | 4 | 5 | Next >>

Using people likes and dislikes

<http://www.jinni.com/>

Observing Customer's Behavior Online

- Analysis of log files
- Cookies, Spyware
- Web Analytics



Web Analytics

- Enable retailers to make site adjustments on the fly, manage online marketing campaigns and EC initiatives, and track customer satisfaction
- If a company redesigns its Web site, it can gain almost-instant feedback on how the new site is performing
- Web analytics help marketers decide which products to promote and merchandisers achieve a better understanding of the nature of demand

Limitation of Online Market Research

- Too much data!!
 - use of data mining and data warehouses (business intelligence)
- Difficult to maintain privacy of users
- Difficult to obtain a representative sample
 - although web demographic is rapidly diversifying
 - online shoppers tend to be educated, wealthy, employed

Summary

- Essentials of online consumer behavior.
- The online consumer decision-making process.
- Building one-to-one and segmented relationships with customers.
- Online personalization.
- Increasing loyalty and trust.
- EC customer market research.



RITCHEY'S WET WHITE COCKPIT



WCS ZETA REVIEW BY PELOTON MAG



NEWS AND BLOG

- 1/25/11 [Daryl Impey To Ride For Ritchey-Sponsored, Team MTN Qhubeka](#)
- 1/24/11 [Tom Ritchey, In His Own Words](#)
- 10/27/10 [Philippe Gilbert Wins Giro di Lombardia and Piemonte](#)
- 8/20/10 [NINO SCHURTER WORLD CUP CHAMPION 2010](#)

Ritcheylogic.com

Case of Study