# From E-Business ... ... to ME-Business

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People & Data http://www.weigend.com

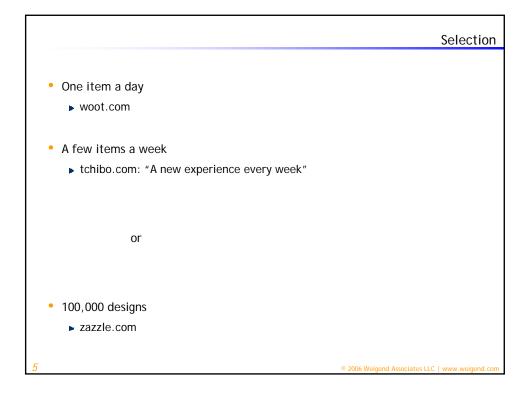
### Fall 2006

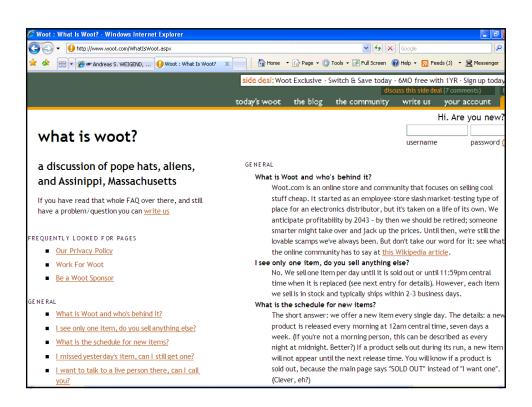
### Some trends

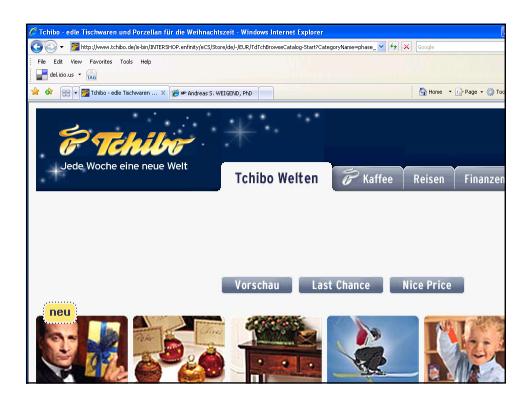
- ▶ How has the behavior and the attitude of customers shifted in response to new technologies and new incentive structures on the web?
- From algorithmic search to social search/ Leverage technology and people to have your toughest questions answered
- From global and local irrelevance to glocal relevance/ When does location matter?
- From the money economy via the intention economy to the attention economy/ Why an economy? Because it can be measured!
- From traditional market research to observing the behavior of all individuals/ Why sample if you can have all?
- Specifically, the effect of the long tail
  - ▶ Production: From controlled production for the masses to uncontrolled production by the masses/ *Why?*
  - ▶ Consumption: From traditional marketing push to individual discovery/ *How* can you help serendipity along?

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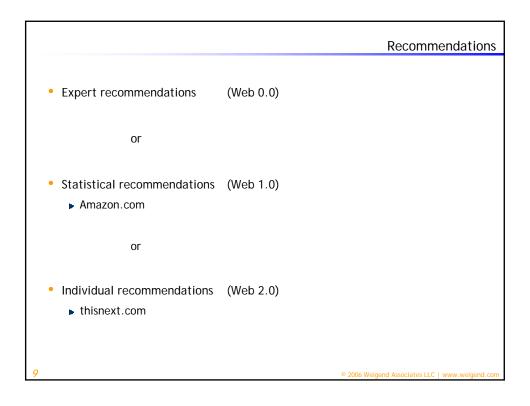
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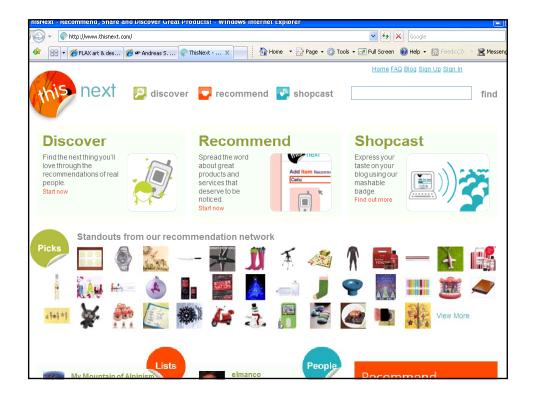












1986	1996	2006
	Read-only web "Consumer", "User" (Increase barrier of <i>exit</i> )	Read-write web "Producer" (Lower barrier of <i>entry</i> )
	Static	Temporal
	Taxonomy (controlled)	"Tagsonomy" (uncontrolled)
	Pretest and validate	Launch and learn
Broadcast email, newsletters <u>Target</u>	Discovery based on hyperlinks (expression of author's attention and control).  Search	Discovery based on social relations (trust, reputation), and metadata by other humans. RSS. <u>Discover</u>
Push advertising: Supply driven.		Pull discovery: Demand driven
Pay for space	Pay for presentment	Pay for click assaction www.weigend.com

### **Examples**

- Money economy → Intention economy
   → Attention economy
  - ▶ Information economy → Recommendation economy; Platform economy
  - ▶ Use attention stream: Attensa
  - Use context: Cleverset
- Paying a few experts to create content
   → User generated content
  - ► Implicit data + explicit data; Metadata
  - Examples: Music, Tags
  - Use socio-, psycho-, demographics: Nugg.ad
  - Currencies (itunes vs Spiralfrog)

- Algorithmic search → Social search
  - People answer questions: Google Answers, MSN, Yahoo
  - ▶ Use info in files on your computer to determine relevance: Illumio
- Discovery → Social discovery
  - Head → Long tail
  - URLs: Del.icio.us
  - Photos: Flickr
- Global → Local
  - Use mobile: Socialight
  - Use WLAN: Jambo.net

1:

### Increase of communication

- 0. Business metrics and data collection
  - ▶ An iterative process
- 1. Data Analysis
  - ▶ Data mining: Description, prediction
- 2. Architectures of Experimentation
  - ▶ A/B test, active learning, survey design...
- 3. Architectures of Participation
  - ▶ Remember, share, discover
  - ▶ Empower and incentivize people to contribute
  - Self-expression
- 4. Architectures of Interaction

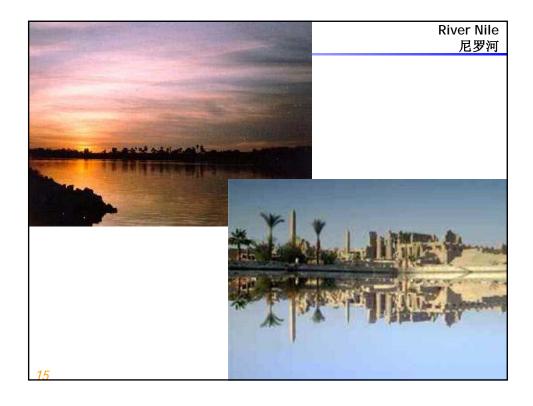
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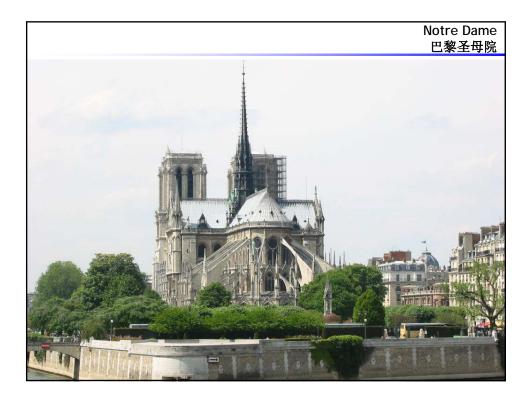
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1. Data

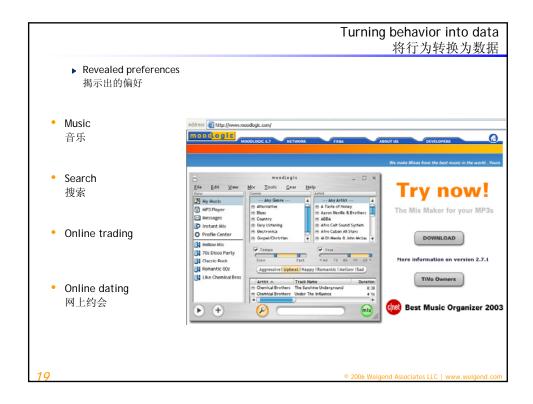
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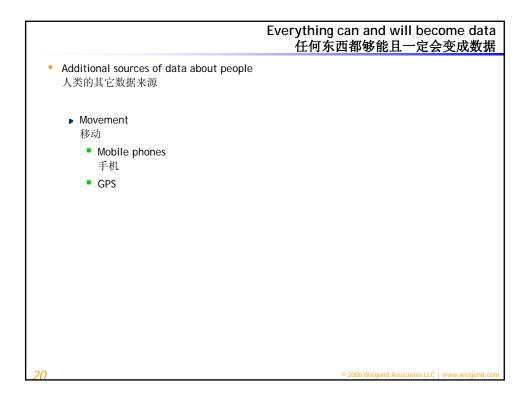
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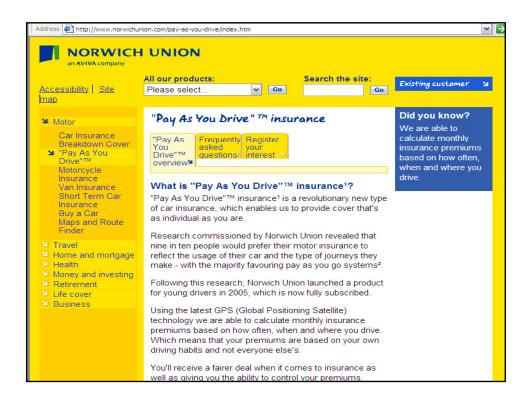




### From Faith to Data 从盲从到数据 The Era of Faith 盲从时代 Massive investments into cathedrals etc. 巨额投资建设大教堂 Unclear ROI (Return on Investment) 投资收益 (ROI) 不明确 No feedback, or l\_o\_n\_g feedback cycle 反馈周期相当漫长 The Era of Data 数据时代 ▶ Massive investments into measuring, networking, storing 大量投资于传感、网络、存储 ROI measurable 投资收益率可测 Short feedback cycle 反馈周期很短 Experiments 试验







# Everything can and will become data 任何东西都够能且一定会变成数据

- Additional sources of data about people 人类的其它数据来源
  - Movement 移动
    - Mobile phones 手机
    - GPS
  - ▶ Brain activity 大脑活动
    - Neuromarketing 神经市场营销
    - fMRI analysis of response to stimuli 大脑皮层对刺激反映的fMRI分析

- Identity of person 个人身份识别
  - DNA analysis DNA分析
  - Available data: 现有数据:
    30,000 genes
    30,000个基因
    1 billion base pairs
    10亿碱基对
- ► RFIDs (Radio frequency identifiers) RFIDs (射频标识器,即电子标签)

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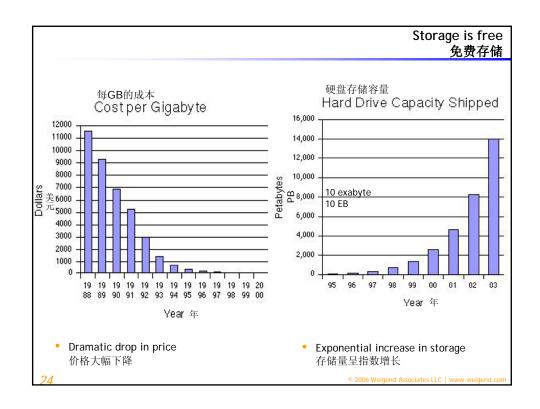
### RFIDs and e-business 电子标签技术和电子商务

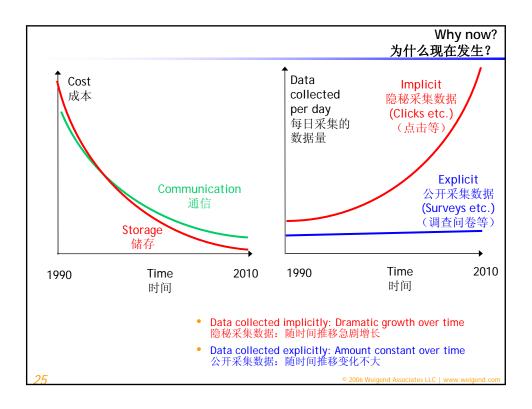
- UNIQUE IDENTIFIERS FOR PHYSICAL OBJECTS 任何物体的身份识别
- Facts 基本数字
  - ► Price: 2 cent 价格: 2美分
  - ▶ Size: 2mm 大小: 2毫米
- Opportunities 机会
  - ► Supply chain 供应链
    - Wal-Mart: \$ 8 billion savings expected per year by using RFIDs 沃尔玛: 初步估算每年节省80亿美元
    - Know where stuff is 知道货物放在何处
    - Shipping screw-ups: 1 in 20 运输途中差错; 概率1/20
  - ► Market research 市场研究
  - ▶ Dynamic pricing 动态定价

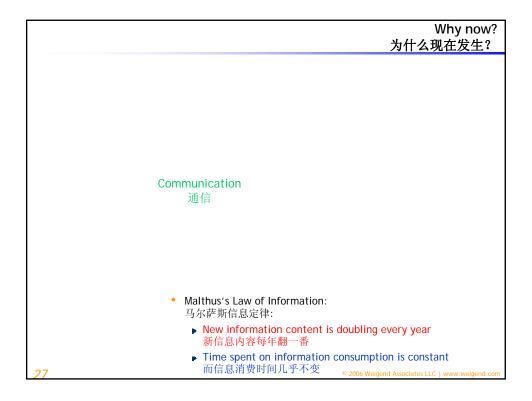
- Fears 担心
  - ► Loss of privacy 隐私泄露
  - ▶ Dictatorship 独裁专政
- Reality 现实
  - ► It will happen: Big business 总会发生: 大公司
  - Need: Understand pros and cons and make conscious decisions 需要: 了解并采取主动决策
- Compare to web sites 比较网站

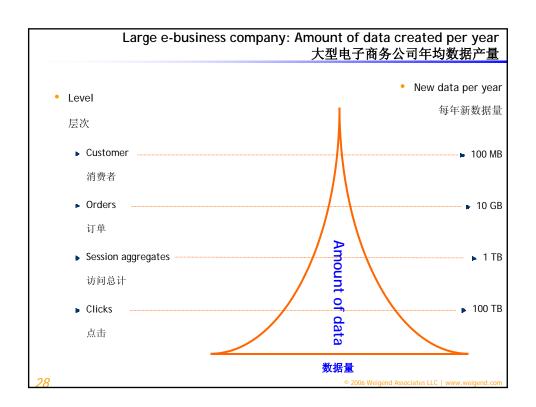
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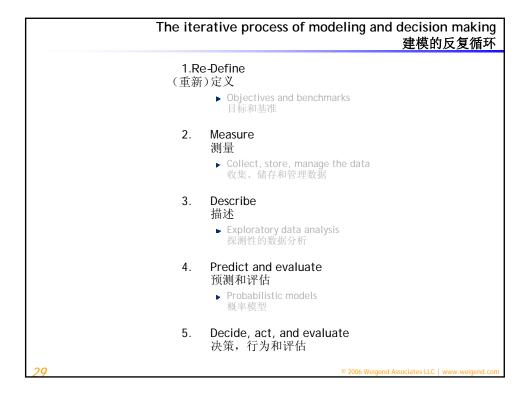
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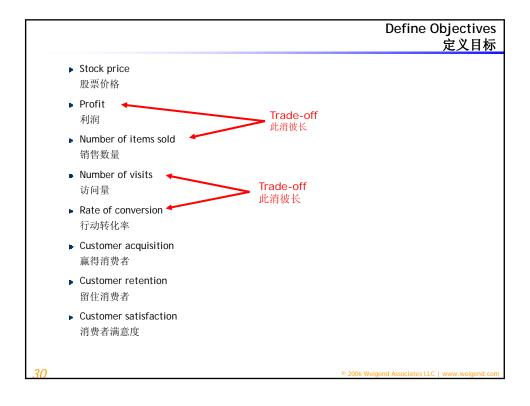


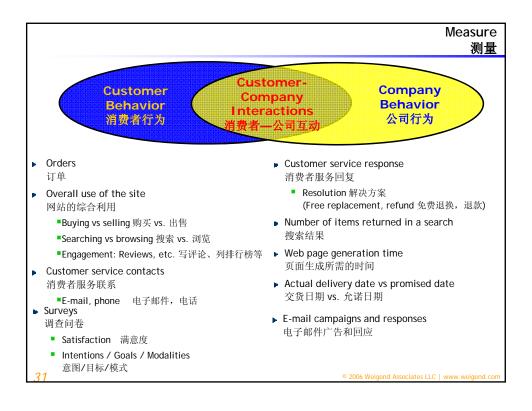


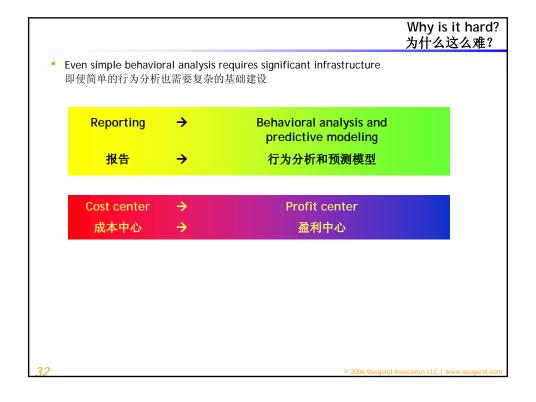










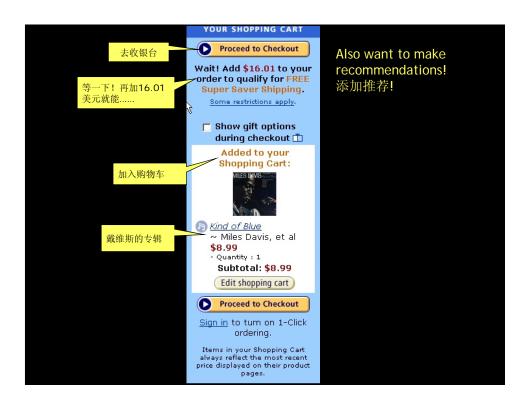


### 2. Experimentation

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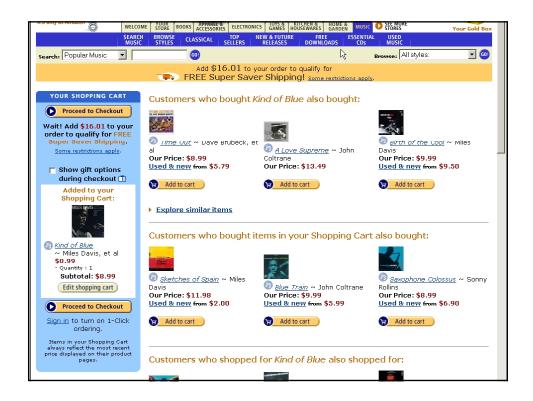
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Result: Right vs Left 对比结果: 左还是右

Metrics

衡量标准

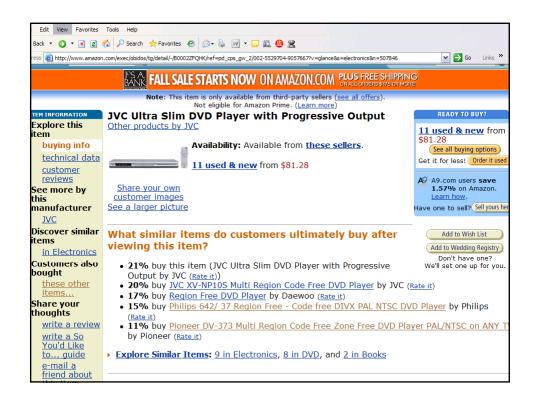
- ► Conversion rate: Percentage of visits placing an order 转化率: 百分之几的人访问页面并购买
- ▶ Order size: Number of additional (from the second page) items put in cart 订单大小: (从第二页起)新购多少商品
- Result

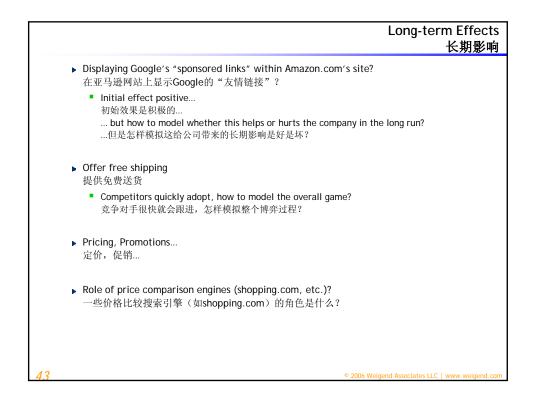
结果

- ▶ "Your Shopping Cart" on right is about 1% better than on left "Your Shopping Cart" 置于右侧比置于左侧的效果提高1%
- Some details

细节	All customers 所有消费者		Existing customers 现有消费者	
	Cart-adds from 2 <sup>nd</sup> page: 从第二页起新购商品数量:	+0.6%	Cart-adds from 2 <sup>nd</sup> page: 从第二页起新购商品数量: +0.8	1%
	Wishlist-adds: 选择礼物清单:	+1.4%	DVD Cart-adds: 新购DVD: +0.8	1%
)	DVD (\$):	+1.1%	DVD (\$): +1.0	

	Guiding the customer to the ultimate purchase 引导客户最终购买
	What similar items do customers ultimately buy after viewing this item?
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	Why do People Visit?
35%	Research: Response indicates having a target or topic for which customer wants to gather information in depth ("looking for books about Chile")
31%	Browse: Looks at items casually at a more general level than Research ("looking at music/books", without further specification)
16%	Buy: Response indicates intent to buy in this visit ("buy a book")
10%	Complain: Complains about some feature of the site
9%	Post-buy: Mentions checking order status, other account activities
7%	Community: Mentions usage of some feature of community, like reviews
7%	Price: Mentions getting information about price for specific items
2.9%	Goldbox: Mentions Goldbox activity
2.2%	Gift: Indicates looking for a gift for someone else
2.0%	Sell: Mentions a selling activity
1.4%	Personalization: Mentions personalization feature (e.g., recommendations)
4 <mark>9</mark> .8%	Used: Mentions finding or transacting a used item

# Stated vs Revealed Preferences 自认的偏好与实际的偏好 ● Obtain insights by combining individual survey response with click analysis: 结合个人调查问卷的回复与点击情况分析,得出一些结论 Look at those who ended up buying something: 最终购物的网民中 ② Only about one-half of those making a purchase indicated that they wanted to buy something in this visit 只有1/2事先称计划购物 Look at those who said they wanted to buy something: 最初想来购物的网民中 ② Only about one-third of those indicating intent to buy ended up making a purchase in that visit 只有1/3最终完成购物



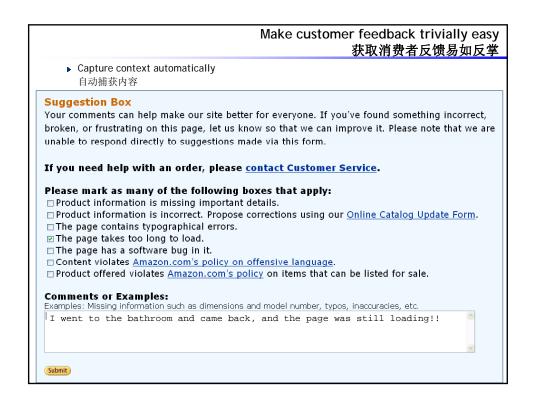
### 3. Participation

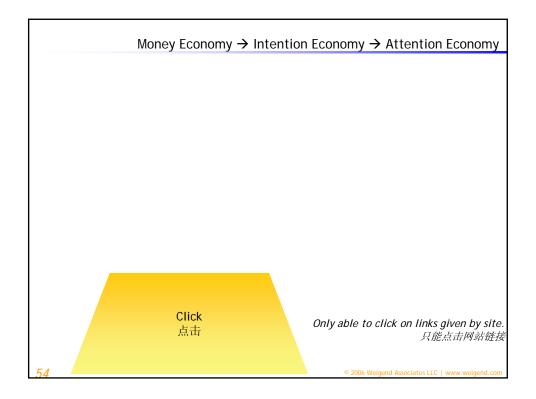
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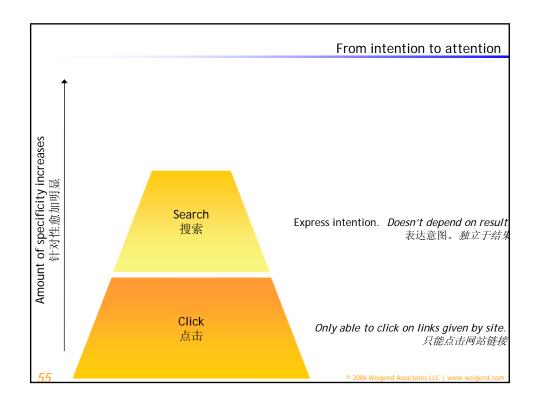
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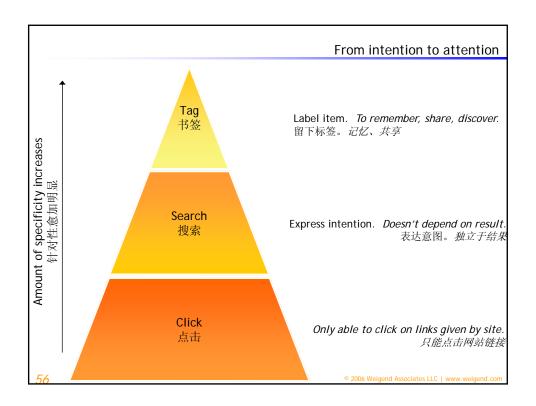


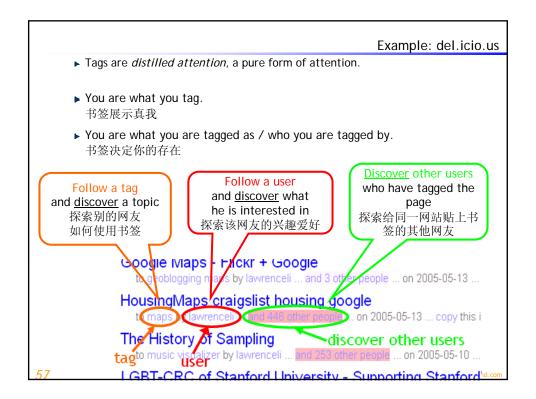




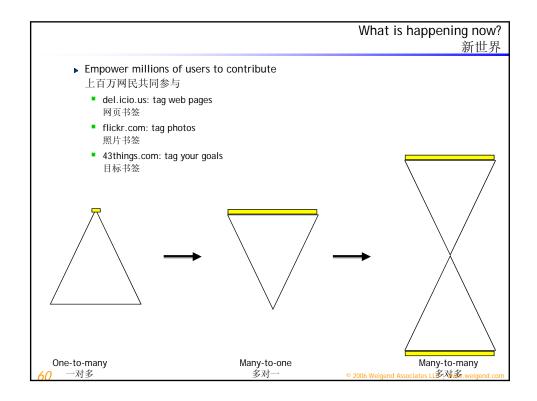


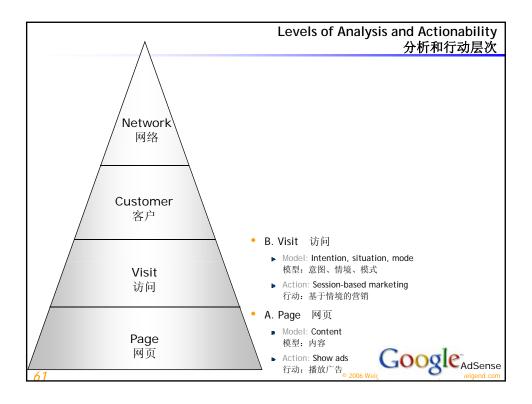




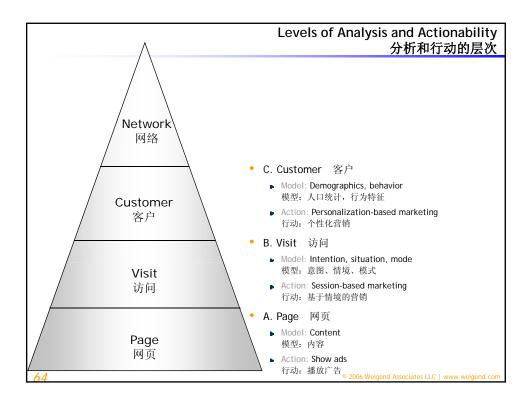




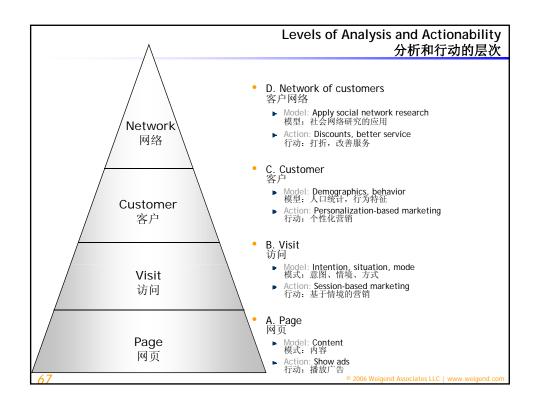




### B. Visit 访问 B. Visit 访问 ▶ Model: Intention, situation, mode 模型: 意图、情境、模式 ▶ Action: Session-based marketing, occasionalization 行动:基于情境的营销,偶然性 Examples of modalities of a visit 不同类型访问者举例 Planned vs impulse visit 计划型 vs 冲动型 Personal vs job-related visit 私事 vs 公事 At home vs at work 在家上网 vs 在办公室上网 Is-in-a-hurry vs has-time-to-kill 匆忙查询 vs 消磨时光 Ready to make a decision 准备立即作出决定



### C. Customer 客户 · C. Customer 客户 ▶ Model: Demographics, behavior 模型:人口统计,行为特征 Action: Personalization (implicit), customization (explicit) 行动: 个性化(隐性), 自定义(显性) Attributes of an individual customer Attitude to technology (vs human) 个体消费者的特征 对技术的态度(vs 对人的态度) Influencability Activity across stores 可塑性 对各个店的喜好 Navigational style Degree of price sensitivity 浏览习惯 对价格的敏感性 Early adopter Degree of time sensitivity 迅速接受新事物 对时间的敏感性 Leader vs follower Median time between clicks 引领潮流 vs 跟风 点击的间隔时间 Attitude to complexity Level of interest in exploring 对复杂性的态度 对探索的兴趣程度



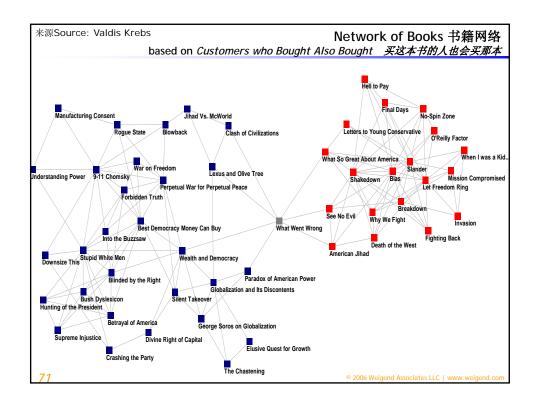
# D. Network of Customers 客户网络

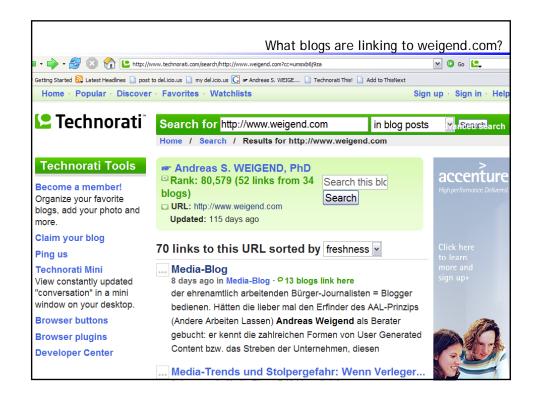
- D. Network of Customers
  - 客户网络
  - Model: Apply social network research 模型: 社会网络研究
  - Action: Discounts, better service for opinion leaders 行动: 打折, 为高影响力人士提供更好服务
- "Customer Lifetime Value" has two components
  - "客户生命价值"有两个组成部分
  - ▶ Intrinsic value 内在价值
  - ► Network value 网络价值
    - Characterizes amount of influence 显示该客户的影响力
- Application

应用

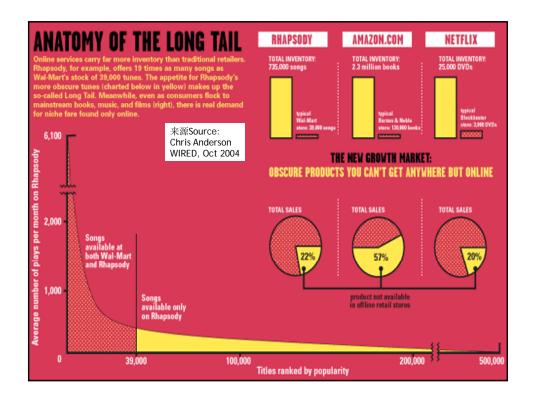
- ► Amazon.com's *Share the love* 亚马逊网站"分享美妙"
- ▶ Send discount to others of item just purchased, and obtain credit towards future purchase if at least one of the recipients also buys that item (within a week) 鼓励网友向朋友推荐刚购买的产品,如朋友在推荐后(一周内)也买了该产品,则享受折扣,而原推荐者则可得到一定积分,可凭此在下次购买时享受优惠

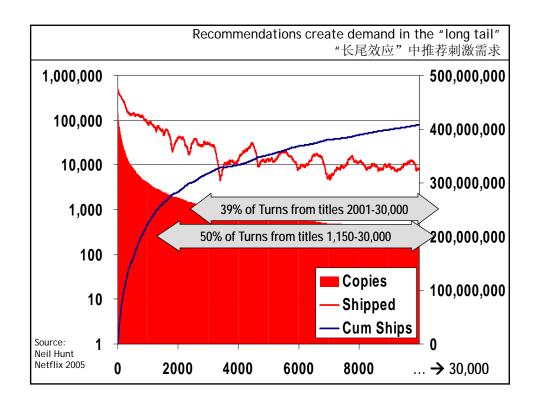
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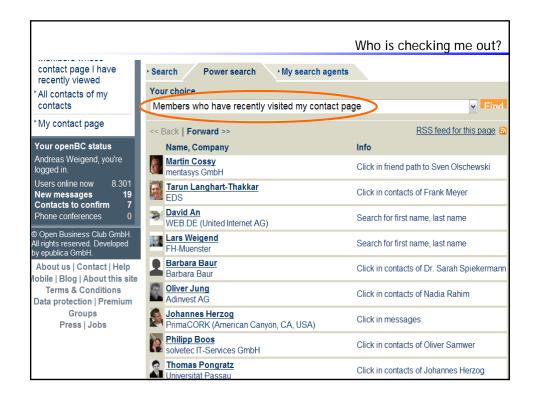


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