* In 2014-2015, retail e-commerce grows over 14%
* Types of E-Commerce:
  + B2C: amazon
  + B2B: microstrategy software company selling their services to another company
  + C2C: craigslist
  + (mobile) M-commerce:
  + Social e-commerce: facebook
  + Local e-commerce: group-on and craigslist
* B2C has doubled every 5 years since 1995
* B2B in general has been growing thousands times faster than B2C
* Internet was created in late 1960s (network of computers that are connected)
* Internet can measure growth by number of internet hosts with domain names
* The Web (an application that run on the internet), developed in early 1990s
* HTML: Hyper Text Markup Language
* Google reports over 60 trillion unique URLs
* Deep Web may be 1000 times greater
* Mobile platform is the most recent development in Internet infrastructure
* Eight Key Elements of a Business Model:
  1. Value proposition
  2. Revenue model
  3. Market opportunity
  4. Competitive environment
  5. Competitive advantage
  6. Market strategy
  7. Organizational development
  8. Management team
* Marketspace: Area of actual or potential commercial value in which company intends to operate
* Realistic market opportunity: Defined by revenue potential in each market niche in which company hopes to compete
* Competitive Advantage:
  + Asymmetries
  + First-mover advantage, complementary resources
  + Unfair competitive advantage
  + Leverage
  + Perfect markets
* Five generic strategies
  + Product/service differentiation
  + Cost competition
  + Scope
  + Focus/market niche
  + Customer intimacy
* Four major categories of issues:
  + Information rights
  + Property rights
  + Governance
  + Public safety and welfare
* **Basic Ethical Concepts:**
  + Ethics
    - Study of principles used to determine right and wrong courses of action
  + Responsibility
  + Accountability
  + Liability
    - Laws permitting individuals to recover damages
  + Due process
    - Laws are known, understood
    - Ability to appeal to higher authorities to ensure laws applied correctly
* **Candidate Ethical Principles**
  + Golden Rule
  + Universalism
  + Slippery Slope
  + Collective Utilitarian Principle
  + Risk Aversion
  + No Free Lunch
  + The **New York Times**Test
  + The Social Contract Rule
* Privacy
  + Moral right of individuals to be left alone, free from surveillance or interference from other individuals, organizations, or state
* Information privacy: Four premises
  + Right to control information collected about them “Right to be forgotten”
  + Right to know when information is collected and give consent “Informed consent”
  + Right to personal information due process
  + Right to have personal information stored in a secure manner
* **The FTC’s Fair Information Practice Principles:**
  + Notice/Awareness (core principle)
    - Sites must disclose their information practices before collecting data. Includes identification of collector, uses of data, other recipients of data, nature of collection (active/inactive), voluntary or required, consequences of refusal, and steps taken to protect confidentiality, integrity, and quality of the data.
  + Choice/Consent (core principle)
    - There must be a choice regime in place allowing consumers to choose how their information will be used for secondary purposes other than supporting the transaction, including internal use and transfer to third parties. Opt-in/opt-out must be available.
  + Access/Participation
    - Consumers should be able to review and contest the accuracy and completeness of data collected about them in a timely, inexpensive process.
  + Security
    - Data collectors must take reasonable steps to assure that consumer information is accurate and secure from unauthorized use.
  + Enforcement
    - There must be a mechanism to enforce F I P principles in place. This can involve self-regulation, legislation giving consumers legal remedies for violations, or federal statutes and regulation.
* **Key Issues in Online Privacy of Consumers**
  + Top concerns
    - Profiling and ad targeting
    - Social network privacy
    - Sharing of information by marketers
    - Mobile phone privacy
  + Of less concern
    - Monitoring employees
    - Sharing of health information
    - Surveillance to prevent terrorism
* Business perspective:
  + Increases effectiveness of advertising, subsidizes content
  + Enables sensing of demand for new products
* Critics' perspective:
  + Undermines expectation of anonymity and privacy
  + Enables price discrimination
* Three main types of protection:
  + Copyright
  + Patent
  + Trademark law
* Goal of intellectual property law:
  + Balance two competing interests—public and private
* Digital Millennium Copyright Act of 1998
  + First major effort to adjust copyright laws to Internet age
  + Implements W I P O treaty that makes it illegal to make, distribute, or use devices that circumvent technology-based protections of copyrighted materials
  + Safe-harbor provisions
* Trade secrets are
  + (a) secret
  + (b) have commercial value to owner
  + (c) owner has taken steps to protect
* **Net Neutrality: All Internet activities charged the same rate, regardless of bandwidth used**
* Interest-based social networks:
  + Offer focused discussion groups based on shared interest in some specific subject
  + Usually advertising supported
* Affinity communities:
  + Offer-focused discussion and interaction with other people who share same affinity (self or group identification)
  + Advertising and revenues from sales of products
* Sponsored communities:
  + Created by government, nonprofit, or for-profit organizations for purpose of pursuing organizational goals
* **Benefits of Auctions:**
  + Liquidity
  + Price discovery
  + Price transparency
  + Market efficiency
  + Lower transaction costs
  + Consumer aggregation
  + Network effects
* **Risks and Costs of Auctions:**
  + Delayed consumption costs
  + Monitoring costs
    - Possible solutions include fixed pricing
  + Equipment costs
  + Trust risks
    - Possible solution—rating systems
  + Fulfillment costs
  + Merchants also face risks; e.g. nonpayment, false bidding, bid rigging, and so on
* **Types of Auctions:**
  + English auction:
    - Single item up for sale to single seller
    - Highest bidder wins
  + Dutch Internet auction:
    - Public ascending price, multiple units
    - Final price is lowest successful bid, which sets price for all higher bidders
  + Penny (bidding fee) auction
    - Must purchase bids ahead of time
    - Items owned by the site
    - Timed auction; last and highest bidder wins
  + Name Your Own Price Auction
    - Users specify what they are willing to pay for goods or services and multiple providers bid for their business
    - Prices do not descend and are fixed
    - Consumer offer is commitment to buy at that price
    - Enables sellers to unload unsold excess capacity
    - Example: Priceline