

## Class 11

- Ethics & Social Responsibility
  - Allen Ch 11 – Incorporating Ethics & Soc Resp.
  - Allen Ch 12 – Designing and Entre Organization
  - Allen Ch 13 – Planning Startup Operations
  - Angel Readings
- Operations Management

## How are we doing?

Content sufficient?

- Presentation okay?
  - Lecture / interactive?
  - New material / text book?
  - Preparation?
- Ideas for improvement?
- What to add in?
- What to leave out?

## Disclaimer

- I am not a lawyer; nor do I play one on TV!



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## Ethics Introduction

- **Ethics**, also known as **moral philosophy**, is a branch of philosophy that involves systematizing, defending and recommending concepts of right and wrong conduct, often addressing disputes of moral diversity
- The term comes from the Greek word *ethos*, which means "character"
- Ethics is a complement to *Aesthetics* in the philosophy field of *Axiology*
- In philosophy, ethics studies the moral behavior in humans and how one should act

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- Ethics may be divided into four major areas of study:
  1. **Meta-ethics**, about the *theoretical* meaning and reference of moral propositions and how their truth values (if any) may be determined;
  2. **Normative** ethics, about the *practical* means of determining a moral course of action;
  3. **Applied** ethics, about how *moral outcomes* can be achieved in specific situations;
  4. **Descriptive** ethics, also known as comparative ethics, is the study of people's *beliefs* about morality

- Ethics seeks to resolve questions dealing with human morality—concepts such as good and evil, right and wrong, virtue and vice, justice and crime

## Aristotelian Ethics

- Socrates taught Plato
  - He did not leave any writings
  - The first Greek to explore ethics, though he didn't name it (how people should best live)
- Plato taught Aristotle (382 BC – 324 BC)
  - He wrote *dialogues*, though he himself was never a major character in the dialogues
  - His four "cardinal virtues" were courage, temperance, justice, & prudence
- Aristotle wrote extensively
  - He wrote *treatises*, exploring *politics* and *ethics*

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## Aristotelian Ethics

- Aristotle's starting point is that everything humans do is aimed at some good, with some good higher than others
- The highest human good that people aim at, is generally referred to as happiness, translated from Greek as "living well"
  - Aristotle believed that ethical knowledge is not only a theoretical knowledge, but rather that a person must have "*experience of the actions in life*" and have been "*brought up in fine habits*" to become good
  - For a person to become virtuous, he can't simply study what virtue *is*, but must actually *do* virtuous things

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## Ethics

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- The moral code by which we live and conduct business
- Derives from the cultural, social, political, and ethnic norms with which we were raised as children
- Ethical decision making, 4 categories:
  1. Individual values
  2. Organizational values
  3. Customer satisfaction
  4. External accountability

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## Categories of perspectives about ethical dilemma:



- Ideals
  - Looking at the dilemma from an Aristotelian perspective about one's virtues, integrity, and values
- Obligations
  - One's duty, rights, or what is lawful or just
- Utility
  - Analyzes costs and benefits of potential alternative consequences of action or inaction

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- Approaches to avoiding ethical issues:
  1. Dogmatism: *“I simply will never lie or cheat or steal.”*
  2. Egoism: *“Everyone needs to look out for himself.”*
  3. Relativism or Situational: *“When in Rome, do what the Romans do.”*
  4. Subjectivism: *“Ethics is a point of view.”*

## Four most common types of ethical dilemmas:

1. *Conflicts of interest:*
  - Occurs when a person’s private or personal interests clash with professional obligations
2. *Survival tactics:*
  - What an entrepreneur does today out of desperation will follow him for the rest of his business career
3. *Stakeholder pressure:*
  - All stakeholders want what is owed them when it is owed them
4. *Pushing the legal limit:*
  - Entrepreneurs who regularly play too close to the edge of legality eventually get caught and the price is often their businesses and their reputations

## Ethics

- Ethical decisions entrepreneurs face daily:
  1. Individual values, such as integrity & honesty
  2. Organization values concerning employee well-being
  3. Customer satisfaction, as reflected in the value provided to the customer
  4. External accountability, or how the firm relates to the community and environment
- Conflict of interest is one of the most universal problems in business

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## Class Exercise

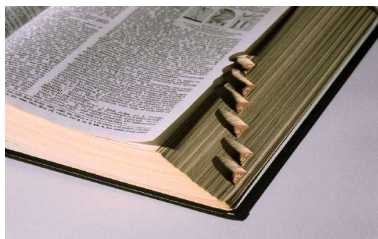
- Form x teams of 2-4 people:
  - Choose one of the prior slide's ethical decisions
  - 5 minutes: discuss & create (hypothetical) issue
  - 5 minutes: what should be done & why?; what are the ramifications?
  - Discuss with the class

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## Conflicts of Interest (COI)

- What is a conflict of interest?
- “a real or seemingly incompatibility between a person’s private interests and his or her public or fiduciary duties”



Black’s Law

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## Corruption vs COI

Corruption

Conflict of Interest

An employee misuses his or her influence in a business transaction in a way that violates his or her duty to the employer in order to gain direct or indirect benefit

a real or seemingly incompatibility between a person’s private interests and his or her public or fiduciary duties

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## Corruption and COI Violations

The diagram features two large blue arrows pointing towards each other. The left arrow is labeled "Loss of financial assets" and the right arrow is labeled "Loss of goodwill". Below the left arrow is an illustration of a person in a yellow suit standing next to a large yellow dollar sign. Below the right arrow is an illustration of a computer monitor displaying a target icon.

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## Corruption Overview

A Venn diagram with three overlapping light blue circles. The top-left circle contains the text "Accounts for 25% of all fraud cases (in US)". The top-right circle contains the text "Median loss for non-profit is \$100K". The bottom circle contains the text "Median loss for government entity is \$84K".

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## Social Responsibility

- Social responsibility is operating a business in a way that exceeds the ethical, legal, commercial and public expectations that society has of the business
- Socially responsible businesses start with a social mission, which must be achievable
- Majority of social ventures are nonprofits that must seek their funding from philanthropists or grants

## Effective Ways to Be Socially Responsible

- First, company must set a goal
- Second, company must get employees and customers (if appropriate) involved
- Ways to establish positive relationships in the community:
  - Donate products, services, or revenues
  - Donate expertise
  - Contribute to the community

Taken from class 1 slides...

## What is Social Entrepreneurship?

See J. Gregory Dees, “The Meaning of Social Entrepreneurship”,  
Fuqua School of Business, Duke University, 2006.

{The Dees article is located in the Class 11 folder}

Dees says: Social entrepreneurs play the role of  
change agents in the social sector by:

- Adopting a mission to create and sustain social value (not just private value)
- Recognizing and relentlessly pursuing new opportunities to serve that mission
- Engaging in a process of continuous innovation, adaptation, and learning
- Acting boldly without being limited by resources currently in hand
- Exhibiting heightened accountability to the constituencies served and for the outcomes created

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## Case Study Clip 3

15:44 duration, Hatten DVD clip Ch 3

- “Social Responsibility at Stonyfield Farms”
  - Taken from Hatten’s ‘Small Business Management’, Houghton Mifflin Company
  - Stonyfield Farms: from a farm with 3 cows to the 3<sup>rd</sup> largest yogurt producer in the US
  - Success based on social responsibility: 5-point mission: support family farms; profitability; quality; environmental stewardship; & great place to work
  - Q: How do they prevent waste?
  - Q: What is their competitive advantage?

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## Drucker's five questions

1. What is our mission?
2. Who is our customer?
3. What does the customer value?
4. What are our results?
5. What is our plan?

- 
- The underlying challenge of organizational assessment:
    - Why does the organization exist?
    - What, in the end, do we want to be remembered for?

From HBR's "The Coming of the New Organization", Peter F. Drucker, 1988

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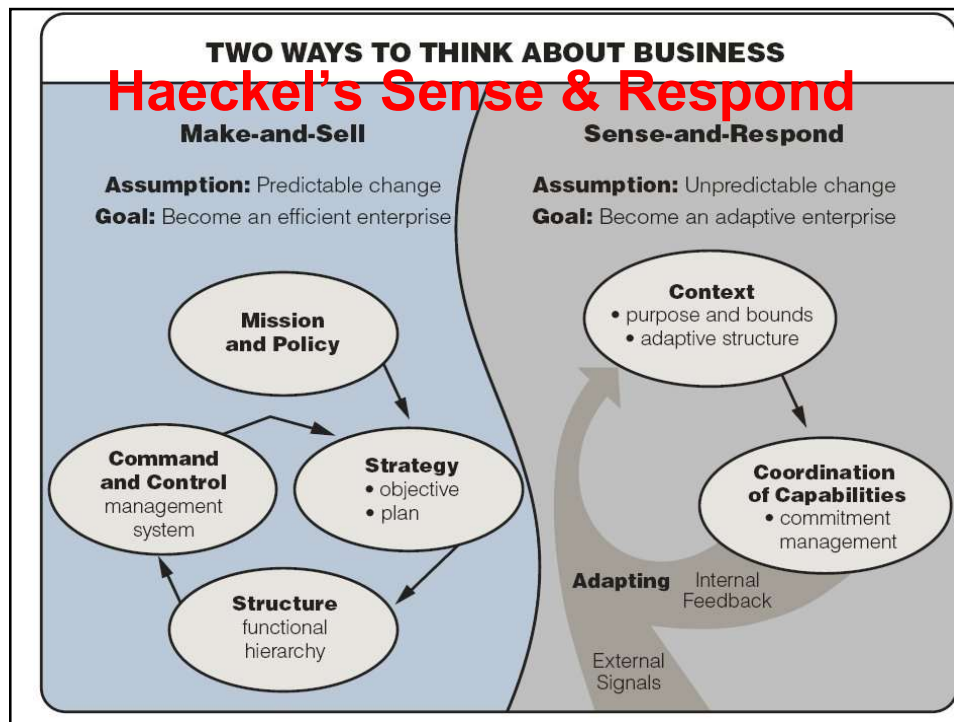
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## Drucker said...

- "Information transforms a budget into an analysis of policy"
- "Traditional departments won't be where the work gets done...
  - That will happen largely in task-focused teams"
- Cites British administration of India as...
  - "The best example of a large and successful information-based organization with no middle management at all"
- "Who depends on my info... and upon whom do I depend?"

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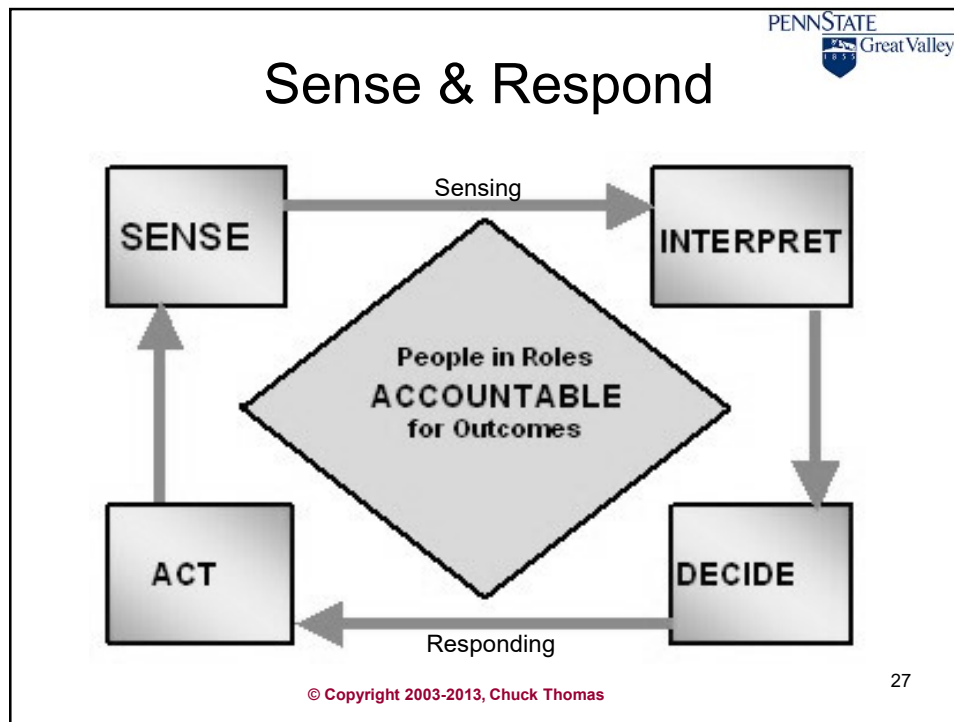
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## Haeckel's Sense & Respond

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- “Listen & Respond” is Responsive
  - But “Anticipate & Preempt” is Decisive
- Interpret – Applying Context to Data
  - Giving it Meaning
- Decide – Transform Knowledge into Action
- Act – Communicate
  
- Integrity: Compliance vs Integrity



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## Organizational environment

- You are the **leader**: what does that mean?
- “You are responsible for allocating your life?”
  - Peter Drucker
  - True for organizations as it is for individuals
- What about your time skills?

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## What is leadership? A leader?

- Growth & individual development
- **Empower Subordinates**
- Listen – two way communication - Inform
- Develop opportunities
- Set goals & measure performance
- Trustworthy / dependable
- Sees ahead – “draws larger circles”
- Motivates positive behavior
- Rejects negative behavior
- Understands stakeholder’s needs

What is the relationship between Leadership & Ethics?

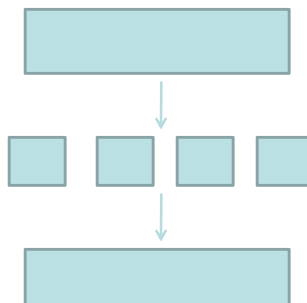
What is the relationship between Leadership & Social Responsibility?

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## Decomposition of Processes

- Decompose complex processes into small tasks
  - but lose focus on the larger objectives?



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## Human Resources

- Roper survey: Business's biggest problem is finding competent workers and motivating them to perform
- "Job Analysis" is the process of gathering all the information about a particular job including a job description and the job specifications
- A job description is a written description of a non-management position that covers the title, duties, and responsibilities involved for the job
- Job specifications are the identification of knowledge, skills, abilities, and other characteristics an employee would need to perform the job

## But is Allen correct?

- Your instructor's experience shows that:
  1. Job descriptions are limiting
  2. Job descriptions kill incentive to:
    - Explore innovative solutions
    - Solve problems not defined within the descriptions
    - Provide excuses for inaction
  3. The more growth and leadership that you expect, the less you want to define the job
    - EG, a "Director" or "Senior Manager" position



## Five Major Sources of Employee Recruitment



1. Employment Agencies
2. Internet job sites
3. Executive recruiters (headhunters)
4. Employee referrals
5. Relatives and friends

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## Common Tools for Selecting Employees



- Application Form and Resume
- Interviewing / Questioning
- Background Verification
- Testing

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## HBR “Hiring for Smarts” article:

By Justin Menkes, Executive Intelligence Group, 2005

- Main ingredient: Critical Thinking
- All managerial work falls into three subjects:
  1. Accomplishing tasks
  2. Working with and through others
  3. Judging oneself and adjusting one’s behavior accordingly
- Interviewing for Intelligence: the PBI
  - “Past Behavioral Interview”, such as managing deadlines or resolving conflicts
  - Measures knowledge, not Intelligence



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- Being likable doesn’t mean you have the intellectual horsepower to be a stellar leader
- Interview with questions that require candidates to demonstrate their skills, with Q’s that the candidate has never confronted
  - Not does the candidate have the skill, but:
  - How does the candidate demonstrate the skill in the course of answering the question

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## Intelligent Leaders...

- Regarding tasks:
  - Appropriately define a problem and differentiate essential objectives from less relevant concerns
  - Anticipate obstacles to achieving their objectives and identify sensible means to circumvent them
  - Critically examine the accuracy of underlying assumptions
  - Articulate the strengths & weaknesses of the suggestions or arguments posed
  - Recognize what is known about an issue, what more needs to be known, and how to obtain it
  - Use multiple perspectives to view various actions

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## Intelligent Leaders...

- Regarding people:
  - Recognize the conclusions that can be drawn from a particular exchange
  - Recognize the underlying agenda of individuals
  - Anticipate the probable reactions of people
  - Accurately identify the core issues & perspectives that are central to a conflict
  - Appropriately consider the probable effects & possible unintended consequences of an action
  - Acknowledge & balance differing needs of all relevant stakeholders

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## Intelligent Leaders...

- Regarding themselves:
  - Pursue feedback that may reveal errors in their judgments & make appropriate adjustments
  - Recognize their personal biases or limitations in perspective and use this to improve their actions
  - Appropriately articulate the essential flaws in others' arguments and reiterate the strengths of their own positions
  - Recognize when it is appropriate to resist others' objections and remain committed to a course of action

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## Personal Hiring Experiences...

- ICON Solutions: The “Three I’s” method:
  - Intelligence, Industry, Integrity
- Concept Systems: The Mike Hoskins story:
  - Hired while undergrad; forced him to finish
  - Hand-corrected his memo; explained
  - Now VP, Burlington Coat: letter of gratitude
- Concept Systems: First jobs to CIOs
  - Hired bright; trained; gave responsibility; rewarded; sense of team

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## Seven Most Common Ways to Train



1. On the job training
2. Lecture
3. Conferences
4. Programmed Learning
5. Role Playing
6. Job Rotation
7. Correspondence Courses

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## Compensating Employees



- Two ways to do that are wages and benefits
- **Exempt** employees are **not** covered by the major provisions of the **FLSA\***, which specifies minimum wage, overtime pay, child labor laws and equal-work-for-pay regulations. Most are paid a straight salary
- **Non-exempt** employees **must** be paid a **minimum wage** set by Congress or by your state

**\*FLSA: Fair Labor Standards Act**

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- Bonus: a one- time reward provided an employee for exceeding a performance standard
- Profit sharing plans are additional compensation given to employees based on the profitability of the entire business
- Benefits are part of employee compensation in addition to wages and salaries

## Types of Benefits

- Flexible benefit plan
- Health insurance
- Retirement plans
- Child Care and Elder Care
- Miscellaneous Benefits
  - e.g., Tuition reimbursement

## When Problems Arise

- Employee handbook: written rules informing employees of their rights and responsibilities
- A performance appraisal: evaluating an employee's job related achievements
- Use a progressive approach in which employees are looked at over a period of time with increasingly forceful measures
  - They include an oral reprimand followed by a written warning, then suspension followed by termination

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- Appeal process: formal procedure allowing the employee to seek review of a disciplinary measure at a higher level of management.
- At-Will Doctrine says an employee hired for an indefinite period of time may be discharged for any reason, cause or no cause, unless prohibited by law

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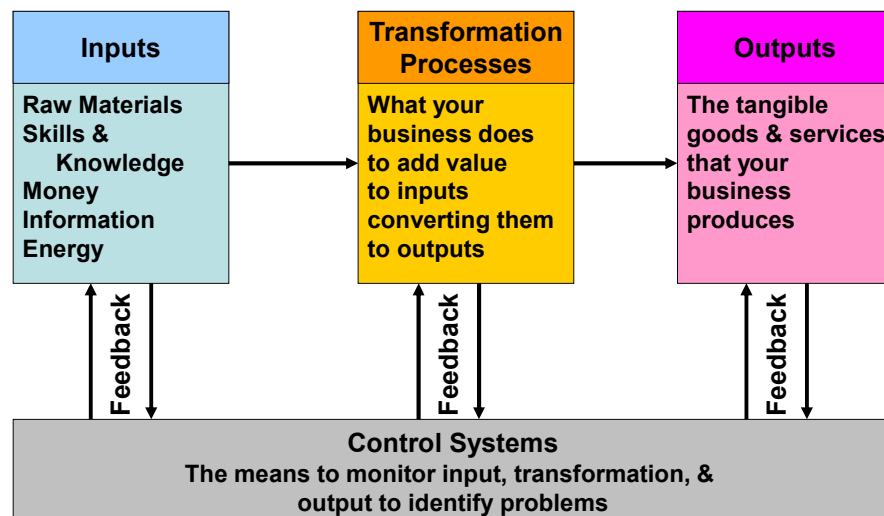
## Now: Operations Management

- Control Systems
- Producing Products and Services
- Supply Chain Management
- Purchasing
- Inventory
- Production
- Manufacturing
- Distribution
- Logistics

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## Control systems



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## Measurement of productivity

- Productivity can be measured for the entire business or a specific portion of it
- You choose what inputs to measure

$$\text{Total Productivity} = \text{Outputs} \div (\text{Labor} + \text{Capital} + \text{Raw Materials} + \text{All Other Inputs})$$

Or, to measure just Materials Productivity:

$$\text{Materials Productivity} = \text{Outputs} \div \text{Materials}$$

Eg, you produce tables; you create a Productivity Ratio:

$$\text{Number of Tables} \div \text{Hour} = 100 \text{ tables} \div 100 \text{ hours} = 1$$

You invent a process improvement to reduce labor per table:

$$100 \text{ tables} \div 80 \text{ hours} = 1.25$$

Unfortunately, the quality is decreased & you spend effort to fix defects:

$$100 \text{ tables} \div 120 \text{ hours} = 0.833$$

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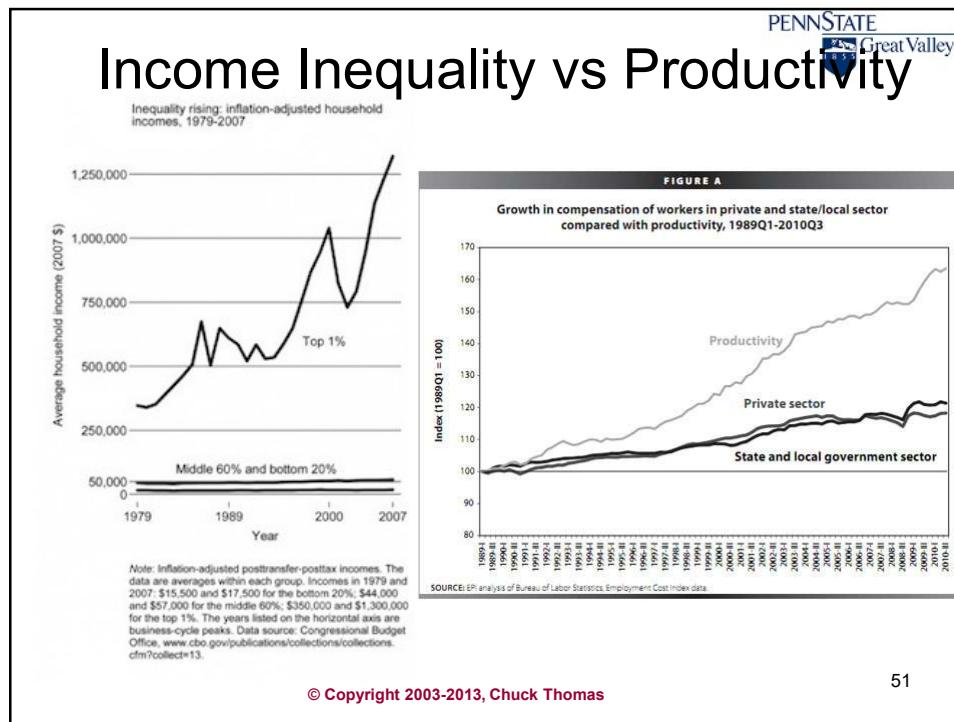
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## What about service productivity?

- Flat over the past decade: US growth rate averaging just 0.2 %
- Problematic because about 70% of the US work force is employed in the services sector
- One reason: service is labor-intensive
  - Factories can substitute machines for labor and increase output
  - Can service businesses do the same? How?

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## Producing Products and Services

- Production is managing the flow of material and information from raw materials to finished goods
- Each link along the supply chain needs to do what it does best
- Follow an order through the process and identify where the order flow gets bogged down, is duplicated, or is hindered in some manner, resulting in higher production costs and slower customer response

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## Supply Chain Management

- Goal of SCM is to provide the exact service the company wants at minimal cost.
  - Quality
    - Find vendors that consistently supply the precise level of quality
  - Quantity
    1. Demand by the customer
    2. Manufacturing capability
    3. Company's storage capability
  - Timing of purchases
    - Purchases planned so that capital and warehouse space are not tied up longer than necessary



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## Purchasing

- Issues to consider:
  - Effective vendor relationships
  - Connectivity of the buyer-vendor relationship
  - Importance of the vendor-customer relationship
- Questions to ask:
  - Can the vendor deliver enough of what is needed when it is needed?
  - What are the transportation costs?
  - What services is the vendor offering?
  - Is the vendor knowledgeable about the product line?
  - What are the vendor's maintenance and return policies?

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## Inventory Management

- Today's businesses need to reduce the inventories held to remain competitive
- Inventory management companies oversee storage, track inventory numbers, and fill and ship orders
  - Saves entrepreneur time and cost of hiring employees
  - Saves space
  - May manage inventory remotely

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## The Production Process



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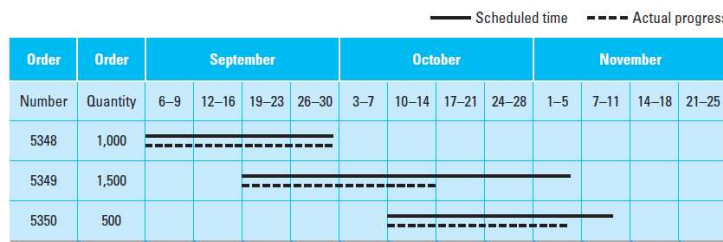
## Production Scheduling

- Decisions made about production directly affect output level, product quality, and costs.
- Scheduling
  - Identify and describe each activity that must be completed to produce the product
  - Indicate the amount of time it takes to complete each activity
- Charting (see examples on next slide)
  - GANTT Charts: simple, independent projects
  - PERT Diagrams: complex, interdependent projects

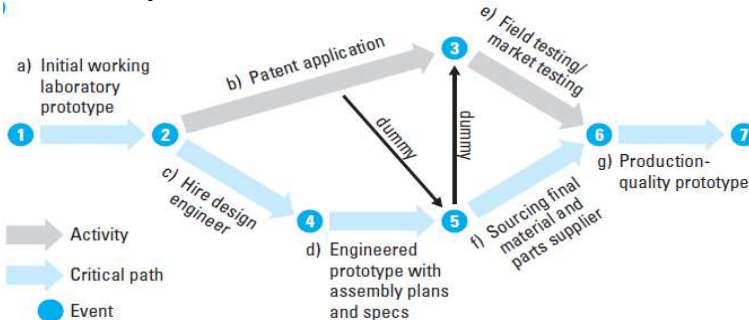
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### • Example Gantt Chart:



### • Example PERT Chart:



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## Scheduling operations

- Basic operations management function
  - Purpose: to put plans into motion by describing what each worker has to do
  - Methods:
    - Forward scheduling: resources allocated when the order comes in
    - Backward scheduling: arranging production activities around the due date for the product
- 
- Routing: detailed breakdown of production steps required
  - Sequencing: the order in which steps need to occur
  - Dispatching: allocating resources & beginning the steps to produce a product/service

## Quality

- *“The best for certain customer requirements”*
- Three major processes must be aligned:
  1. Management processes: source of strategic direction and organizational governance
  2. Business processes: “mission critical” processes and relate to the core competencies of the company
  3. Support processes: those typically viewed by the customer including marketing, fulfillment, and service

- Quality improvement & programs
  - Lean manufacturing
  - Six Sigma
  - Inspection processes
  - Benchmarking
  - Continuous Improvement
  - Failure Mode and Effects Analysis
  - ISO 9000
  - Total Quality Improvement

## Quality-centered management

- Six Sigma in small business
  - Defect rate: goods produced that are outside of the company's acceptable quality
  - Tolerance range: the boundaries you set to determine the acceptable quality
  - In statistics: "The tolerance range in which only **3.4 defects per million** (eg., "**6 $\Sigma$** ") are allowed"
  - Not just applicable to products: consider customer service

## How good is good enough?

- If 99.9% accuracy were good enough:
  - The IRS would lose 2 million documents/year
  - Webster's Dictionary would have 315 misspelled words
  - 114,500 pairs of shoes would be mismatched every year
  - Phone companies would send 1,315 calls to the wrong number each minute
  - Two planes would crash at O'Hare each day

**Is this in conflict with the "good enough" concept to get initial product to market?**

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## Logistics

- Management and control of the flow of goods and resources from the source of production to the marketplace
- Fundamental part of supply chain management
- Third party logistics providers can move packages by air, land, and sea from the factory directly to the customer

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## Warranting the Product

- Demonstrates that company stands behind what they produce
- Individual product or product lines
- Who will handle warranty claims?
- Have you planned for warranty claims costs in your plan?

## Outsourcing / Offshoring

- Manufacturing overseas: manufacture in a country where labor costs are lower than they are “here”
  - Equipment vs. manual-labor-intensive business
  - Weight of the product

## Video Clip

Allen Case #8 - duration: 13:03

- “Finagle a Bagel Management Organization & Production Finesse”
  - Wholesale business is mechanized (200/min)
  - Inventory, delivery issues, POS, org structure
  - Direct customer contact as production process
  - Non-English employees & English contact
  - Q: Identify the inputs, outputs, transformation, feedback & control systems
  - Q: What is their measure of productivity?

**What happened next? (Since this clip)** →

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## More on Finagle A Bagel

- From 2008 to 2010 revenues plummeted from \$20 million to \$10 million
  - Closed 11 of their 21 stores
  - Started a new business in 2008, *SJB Bagel Makers of Boston Inc*
    - Sell Finagle a Bagel branded bagels in the frozen food aisles, bakeries, and bread sections at grocery stores
    - The goal? To dominate the wholesale bagel market in New England
    - \$3 million first full year revenue... what's next?
    - See - <http://www.youtube.com/watch?v=rH47RtB7gfs>

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## New Venture Action Plan

- ✓ Source suppliers from your materials and supply requirements
- ✓ Determine how inventory will be handled.
- ✓ Develop quality control metrics
- ✓ Itemize and calculate production costs and determine whether to outsource
- ✓ Determine warranty service requirements.
- ✓ Identify a third-party logistics provider

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## Your Strategic Plan - did you:

1. Select the right industry?
2. Identify **valuable** opportunities?
3. Manage technological transitions?
4. Identify and satisfy real market needs?
5. Understand customer adoption?
6. Exploit established company weaknesses?
7. Manage intellectual property?
8. Create barriers to imitation?
9. Choose the right organizational form?
10. Manage risk and uncertainty?

© Copyright 2003-2013, Chuck Thomas **Let's explore these...**

## 1. Selecting the right industry

- Look at the evidence
- Knowledge conditions underlying the industry

- Demand conditions: the nature of cust prefs
  - E.g., faster computer need vs. wall stud finder need
  - E.g., new biotech firms do better with major medical cures to major problems than orphan drugs
  - New firms also perform better in rapidly growing markets and in segmented markets (i.e., clothing)

- Industry life cycles: where is your industry?
  - The stage of the industry affects the perf of new firms
  - New firms perform better in early adoption through growth stages of the industry than in mature stages
  - Easier to attract customers when demand growth is highest; also face less severe competition

## 2. Identifying **valuable** opportunities

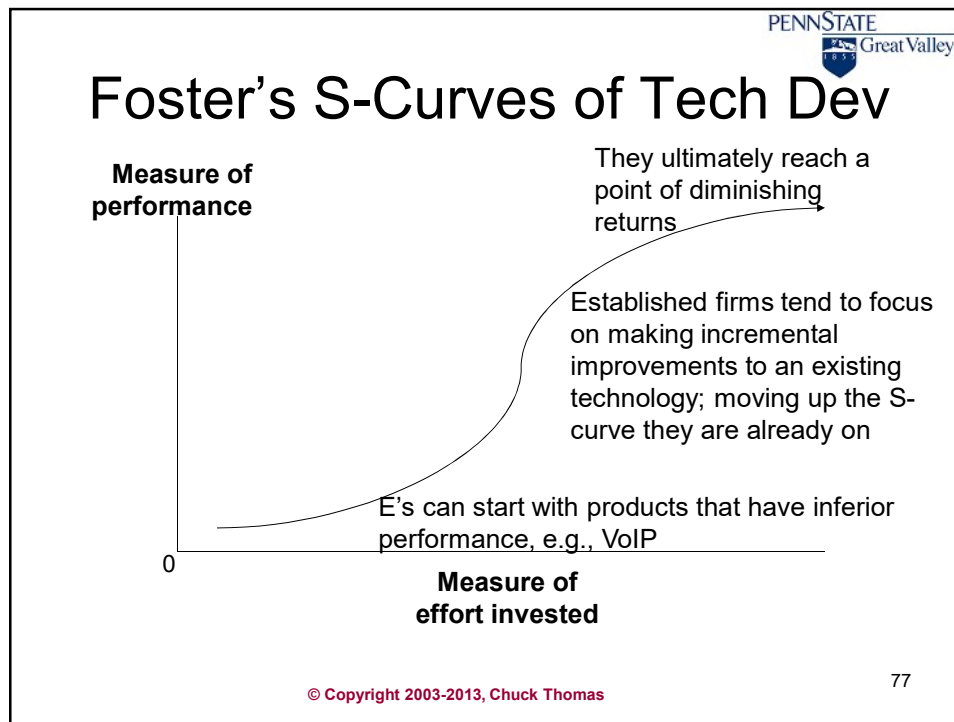
- Sources: changes in SET factors or:
  1. Changes in technology
  2. Changes in political & regulatory rules
  3. Changes in social and demographic factors
  4. Changes in industry structure

## Types of opportunity and their relationship to types of innovation

- Type of innovation:
  - Altering prod dimensions/physical properties
  - Shifting to continuous production process, improving yields, automation, or standardization
  - Changes in scale or form of production
  - **Designing for new market segments & customization to individual customers**
  - Improving inputs
  - What is the locus of innovation (where created)?
- **Opptys are recognized by those with info!**

## 3. Managing technology evolution

- Responding to the right type of tech change
  - Don't focus on **incremental** changes, where you compete with established firms
  - Tech **transitions** undermine the advantages of established firms
  - Don't ignore changes in **tech frameworks** that scientists, eng, S/W designers are using; they may signal new opportunity
  - Don't expect technology alone to determine the new dominant design; remember **social** and **political** factors



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## 4. Identifying and satisfying real market needs

- You need to intro a product/service that **satisfies customer needs in a better way than competitors at a price greater than its cost**
  - Sounds easy, but has to be **real** customer needs; satisfied in a way *previously unmet*, or in ways *significantly better than alternatives*
  - You need to *evaluate customer preferences* for the features
  - You need to understand how to price and sell
  - Don't try to meet customer needs that you can't solve with the products that you create!

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- Gathering information about cust preferences
  - Detailed understanding is needed
  - Not straightforward: don't use market research designed for known products to gather info about new products!
  - Rely on your own intuition, as appropriate
  - Communicating the idea of the product may be hard
- **You are just as good as established firms at gathering info about a product that no one has heard of before!**

- **Absolute necessities, nice to haves, and things that are unnecessary**
  - Think of a hand sanitizer that kills bacteria: nice to cost less than soap; who cares about how the chemicals get into the container?
    - Market segments matter: color of container might be of value to one but of no value to another; maybe segment the product
  - Don't develop a product until you have categorized customer preferences into things that are necessary, nice or unnecessary



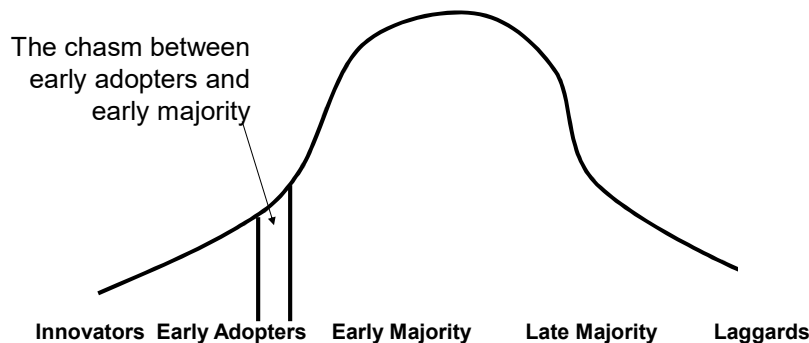
- Offer a **better alternative** than competitors
  - Harder than it sounds for 2 reasons:
    1. You convince yourself (optimism/drive)
    2. Optimism makes it difficult to be realistic in evaluation
- Understand the marketing & selling process
  - Importance of *personal selling*
  - Pricing new products (degree of radical change; range of alternative or substitute prices; ...)
  - Why would the customers need this product?
  - How do I get them to buy it?

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## 5. Understanding customer adoption

- Moore's Chasm
  - Don't expect a linear adoption (S-shaped)
  - Don't use static estimates of market size
  - Don't ignore factors that influence diffusion and substitution when determining market size



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## 6. Exploiting established company weaknesses



- You need to out-compete established companies
  - Most companies exist because they do a good job
  - Why do established companies win?
- What are the weaknesses?

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## Established firms' weaknesses



1. Established companies focus on efficiency in operations
2. Exploiting existing capabilities makes it difficult to introduce truly new products that create a transition from one paradigm to another
3. They need to satisfy existing customers
4. They are constrained by their organizational structure
5. They need to reward people for doing their jobs (to established job standards, salary-based)
6. The difficulty of product development in a bureaucracy

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- Opportunities that favor new firms
  1. Discreteness
  2. Human capital intensity
  3. General purpose technologies
  4. Uncertainty

## 7. Managing intellectual property

- Don't assume your competitors will have difficulty copying your new product/service
- Don't forget to create barriers to imitation
  - Secrecy
  - Trade secrets
  - Patenting

## 8. Appropriating the returns to innovation

- Controlling resources
- Establish a reputation
- First mover advantage
- Complementary assets

**i.e., Create barriers to entry**

## 9. Choosing the right organizational form

- Don't try to own the whole value chain when your business opportunity is short-lived or when there are first mover advantages in your industry
- Don't license the opportunity when the key skills to exploit the new product are tacit and reside only in your head
- Don't use contracting when the technology cannot be easily codified (described in contracts)
- Don't disclose the value of your product to a potential partner unless it is protected

## 10. Managing risk and uncertainty

- The start-up problem: uncertainty impacts financing; need to obtain resources from outside sources; need to convince stakeholders
- Risk reduction strategies
  - Search for information before taking action; prove the accuracy of your information; create a business plan; seek disconfirming information
  - Minimize investment magnitude to reduce risk; use generic equipment, lease rather than buy
  - Maintain flexibility to change directions rapidly

- Risk reallocation strategies
  - Don't bear risk if you can reallocate it or others are willing to bear it
- Risk perception strategies
  - Reduce stakeholders perception of risk
  - Don't necessarily use standard NPV calcs to make decisions; investigate different scenarios

## Next class

- Where Do You Find Resources?
  - What do you do and who will help?
  - Allen Ch 14 – Developing an Entre. Mktg Plan
  - Allen Ch 15 – Funding a Start-Up Venture
- Readings
- Preparation time for Business Plan paper & presentations
- Look at the resource links and be prepared to discuss a few of interest to you