Organizations & Incentives Review

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Big Picture: From Macro to Micro

- (1) How should we design the structure of the firm?
- (2) How should we design the jobs within the firm?
  - (3) Worker pipeline
  - (4, 5) Worker effort
- Structure -> Jobs -> Contracts -> Evaluations -> Pay

Key 1, Structure: Pair Decisions with Knowledge (Hayek)

- Benefit 1: Decisions are more efficient!
- Benefit 2: Bigger incentive to acquire knowledge!

How do we implement this pairing?

- Two methods
  - Centralization: Move Knowledge to Decisions
  - Decentralization: Move Decisions to Knowledge

Which method is better?

- Consideration 1: How costly is transmission?
  - General knowledge is cheap -> Centralize
  - Specific knowledge is expensive -> Decentralize
- Consideration 2: How good are the decision makers?

Consideration 1: General vs Specific Knowledge

- Characteristics
  - Perishable?
  - Complex?
  - Technical?
  - Unforseeable?
  - Subjective?
- No = General, Yes = Specific

Consideration 2: Decision Maker Quality

- Make sure the decision maker can use the knowledge!
- Centralization is better when...
  - More certain environments
  - Known best practices
  - Concentrated managerial skills
  - *Innovation is less important (next slide)
  - **Coordination is more important
- Vice versa for decentralization
- AirTex

Innovation Tradeoff

- Centralization leads to more control, less creativity
- Centralization is better when...
  - High cost to accept bad ideas (Type 1 error, false pos, downside risk)
  - Low cost to reject good ideas (Type 2 error, false neg, upside risk)
- Vice versa for decentralization
- Nuclear policy

Key 2, Jobs: The Right Tool

- Two job designs from three big ideas
- Classical
  - Idea 1: Specialization (Smith)
  - Idea 2: Best Practices (Taylor)
- Modern
  - Idea 3: Intrinsic Motivation (Hackman)

Classical Job Design

- Characteristics
  - Low decision making
  - Low skill
  - Narrow tasks
  - Small benefit of motivation
  - Often in centralized structures
- How do these relate to Ideas 1 and 2?
  - Specialized managers or engineers decide best practices
  - Workers specialize in narrow task, not broad decision making

Modern Job Design

- Characteristics
  - High decision making
  - High skill
  - Broad tasks
  - Big benefit of motivation
  - Often in decentralized structures
- How do these relate to Idea 3?
  - Dynamic jobs intrinsically motivate with learning
- Ritz-Carlton

Tech Tech Revolution

- How is automation changing job design? Polarization!
- Classical
  - Easier to find best practices
  - Low skill jobs will rise (complement manual tasks)
  - Mid skill jobs will fall (substitute routine tasks)
- Modern
  - More dynamic environments
  - High skill jobs will rise (complement abstract tasks)
- Call Centers

Key 3, Contracts: Eliciting Behavior, "Conditional On..."

- 4 concepts from information and financial economics
  - Real options
  - Adverse selection (screening, signaling)
  - Human capital investments
  - Implicit contracts
- Attract -> Develop -> Keep

Concept 1: Real Options

- Firms have the option of firing workers
  - Limits downside risk, keeps upside risk
  - Incentivizes risky oddball hires
- Useful when it's cheap to identify and fire bad workers
- Useful when it's easy to keep good workers
  - Long-term contracts
  - High labor switching costs
  - Firm-specific information or human capital

Concept 2: Adverse Selection

- Problem (Akerlof): Only applicants know if they're good or bad
- Solution 1 (Spence): Applicants can signal they're good
  - Acquire difficult credentials
- Solution 2 (Stiglitz): Firms offers to screen out bad applicants
  - Offer deferred compensation
- Amazon

Concept 3: Human Capital Investment (Becker)

- Pairing financing costs and return benefits
- Often isn't the case because of holdup problem
  - Firms invest in worker, but workers bargain for higher wage after
- Who should pay? Consider bargaining power
  - Firms pay for firm-specific human capital
  - Workers pay for general human capital
- Example: 100K + MBA
  - Market rate 100K implies firm pays (bad)
  - Market rate 150K implies worker pays (good)
- Amazon

Concept 4: Implicit Contracts

- Explicit contracts are often not feasible or too costly
  - Many contigencies
  - Hard to enforce
- Implicit contracts can solve selection and holdup problems
  - Repeated games
- Examples
  - Reciprocity
  - Reputation

Key 4, Evaluations: Measure Contribution

- Performance and effort
  - Controllable risk is performance because of effort
  - Uncontrollable risk performance not because of effort
- Contribution and performance mismatch
  - Distortion (following the rules)
  - Manipulation (breaking the rules)

Subjective Evaluations

- Subjective evaluation can improve numeric evaluation
- ... but can be difficult to implement in practice
  - Inflation
  - Compression
  - Fair?
  - Transparent?
- BBF

The Gibbs Trilemma

- Choose 2!
  - Target 1: High signal/noise ratio
  - Target 2: Low distortion+manipulation
  - Target 3: Good managerial incentives
- Evaluation Types
  - Narrow Numeric (1,3)
  - Broad Numeric (2,3)
  - Subjective (1,2)

Key 5, Pay: Compensate Good Evaluation

- Effort -> Performance -> Evaluation -> Pay
- Good pay design questions
  - Does it induce worker effort?
  - Can the worker influence firm value?
- Sara's Options

Pay Tradeoff

- Strong performance pay has two main effects
  - Benefit: Strong incentives for effort
  - Cost: Risk premium

Anything else?

- Consideration 1: Distortion+manipulation
- Consideration 2: Simplicity+fairness
- Consideration 3: Implicit pay (promotion, firing)

Exam Tips

- Tonight
  - Outline the course content as a group on your study room's whiteboard, discussing as you go (leave no one behind!)
  - Take the practice exam under exam conditions
  - Self-grade as a group and review what you missed
  - SLEEP!!!
- Tomorrow
  - Read slowly, answer quickly and concisely
  - Easiest points per minute first
  - Signal your human capital that you developed this week!