Lecture 2
Job Design & Teams
Introduction

➢ In this lecture we will cover:
  1. What are the three main economic goals in designing a job?
  2. What are the key features of a job design?
  3. How should we begin to think about decision authority?
The Ritz-Carlton
The Ritz-Carlton
The Ritz-Carlton

1. What is the essence of the Ritz Carlton experience? What is RC selling?

2. How does RC create “Ladies and Gentlemen Serving Ladies and Gentlemen”?
   a. How do they hire workers?
   b. What type of training do they employ?
   c. What decision-making responsibilities are employees given?
   d. Do they have a clear path for career development?
   e. What are their leadership values?
The Ritz-Carlton

3. Courtyard and Ritz Carlton are divisions of Marriott. (Courtyard hotels are “no frills,” offering simple rooms, few services, and low prices. Their employees are usually unionized.) Compare and contrast the two hotel chains. What differences do you expect in job design? Why? What type of hotel would you prefer to work for? Why?

4. Would you change the 7 day countdown period?
   a. How would you experiment in this environment?
What is a job?

- Job: An aggregation of tasks that can be completed by an individual worker
  - Is a job a static concept? What might affect what a “job” is?

- Specialization and the division of labor is limited by the extent of the market – Adam Smith, 1776
  - What does this mean?
  - What does it tell us about job design?
PATTERNS OF JOB DESIGN
Job Design concepts

- **Idea #1: Specialization (Smith, 1776)**
  - best match of talent to task
  - lower investment in human capital
  - maximize on-the-job learning
  - the reason we have economies
  - why functional hierarchy is common

- **Idea #2: Taylorism (1920s)**
  - experts (industrial engineers) figure out & implement best practices
  - example: UPS

- **Effects: “Classical” job design**
  - centralization (low discretion worker)
  - narrow (few tasks)
  - low skill requirements
  - job may be poorly motivating
“Modern” Job Design

- Idea #3: Intrinsic Motivation (Hackman et al, 1960s)
  - design job so worker is *learning* → psychologically motivated
  - Skill (& Task) Variety
    - job is a “stretch” or challenge
  - Autonomy = decentralization
    - Feedback = effects of decisions
    - these facilitate learning
    - consider having worker collect data
- Effects: “Modern” job design
  - multitasking
  - high & multi-skilled
  - decentralize
  - job may be highly motivating

![Psychological Model of Intrinsic Motivation](Source: Hackman and Oldham (1976))
Juran (TQM expert) taught factory workers a 7-step thinking process
   - analyze symptoms + theorize causes + test theories + establish causes
   - simulate remedy + test under operating conditions + establish controls to hold gain

Taylor had a different view (1923)
   - “One of the first requirements for a man who is fit to handle pig iron as a regular occupation is that he shall be so stupid & phlegmatic that he more nearly resembles in mental make-up the ox than any other type.
   - The man who is mentally alert & intelligent is entirely unsuited to what would, for him, be the grinding monotony of work of this character.
   - Therefore the workman best suited to handling pig iron is unable to understand the real science of doing this class of work. He is so stupid that the word “percentage” has no meaning to him, & he must consequently be trained by a man more intelligent than himself into the habit of working in accordance with the laws of this science before he can be successful.”
Classical v. Modern Job Design

- The Classical & Modern approaches are diametric opposites
  - job enrichment is the opposite of specialization
  - continuous, decentralized improvement is the opposite of Taylorism

- Both work very well in some circumstances
  - your job: figure out how much of each approach works best in your case
  - more precisely: what blend of the two approaches you should use
Benefits of Modern & Classical Approaches

- The Classical approach emphasizes proficiency
  - employees can be efficient, though motivation may be a problem
  - is effective for optimization of specific tasks; control; uniformity
  - employees often can have lower skills

- The Modern approach emphasizes employee learning
  - provides better motivation
  - is effective for adaptation; implementing change; customization
  - it requires more engaged employees with problem-solving skills

- Organizations use both; the question is the blend/balance
  - e.g., Ritz-Carlton under Marriott
Optimal Job Design: What Tips the Balance?

These are opposite approaches. In practice, blend as at Ritz Carlton

<table>
<thead>
<tr>
<th>Classical</th>
<th>⇔</th>
<th>Modern</th>
</tr>
</thead>
<tbody>
<tr>
<td>simple</td>
<td>product / service</td>
<td>complex</td>
</tr>
<tr>
<td>homogeneous</td>
<td>customers</td>
<td>heterogeneous</td>
</tr>
<tr>
<td>closed</td>
<td>relationship w/ customers</td>
<td>open</td>
</tr>
<tr>
<td>standardized</td>
<td>strategic emphasis</td>
<td>customized</td>
</tr>
<tr>
<td>price</td>
<td>strategic emphasis</td>
<td>quality</td>
</tr>
<tr>
<td>downside risk</td>
<td>opportunities</td>
<td>upside potential</td>
</tr>
<tr>
<td>stable</td>
<td>environment</td>
<td>evolving</td>
</tr>
<tr>
<td>rigid</td>
<td>ability to change</td>
<td>adaptable</td>
</tr>
<tr>
<td>low skill</td>
<td>employees</td>
<td>high skill</td>
</tr>
<tr>
<td>want simple job</td>
<td>employees</td>
<td>want challenge</td>
</tr>
</tbody>
</table>
There is a very nice complementarity between the two effects of “Modern” job design:

- psychological: the worker is motivated to think & learn
- economic: the approach applies in cases where there is more specific knowledge for the worker to learn
WHEN TO USE DIFFERENT JOB DESIGNS
Concept – Taylorism/CI

➢ Taylorism
   – A highly specified job design that minimizes the need for worker discretion

➢ Continuous Improvement
   – A means of reaching Tayloristic job design using collaborative efforts of workers

➢ Factors Influencing Continuous Improvement
   – The firm’s: Size, Complexity, Predictability, Horizon

➢ Question: Have you encountered CI in your work?
Other Notes on Job Design

Never forget the value of specialization & standardization
- what can be standardized, probably should be
- not all jobs should be “enriched”
- not all workers want such jobs
- “Modern” structures can be costly to manage

History repeats itself
- industrial engineering → mass production & narrow jobs, then automation
- reengineering → computerization
- knowledge management → may lead to standardized procedures
Contrasting similar “jobs”

- Sometimes jobs that might appear similar at a cursory level have much different designs.

- Cooking at McDonalds: https://www.youtube.com/watch?v=Xedkk1xvgeo.

- Cooking in a Michelin-Starred Restaurant: https://www.youtube.com/watch?v=kW140spadx8.
What can go wrong with poor job design?

➢ https://www.youtube.com/watch?v=VrDWY6C1178.
Specific Knowledge

➢ First identify the knowledge that drives your strategy:
  – Who/ What/ Where/ When/ Why has important knowledge?
  – this is often the most important question

➢ Of that, identify what parts are specific knowledge
  – these push you toward decentralizing some decisions

➢ Identify the importance of centralization
  – coordination; control; economies of scale
  – these push you toward centralization, or coordination mechanisms

➢ Move decisions to specific knowledge; general kn. to decision makers

➢ Adopt a leadership style appropriate to (de)centralization
  – command & control, or facilitation & support
INTRINSIC MOVITATION
Specific Knowledge & Modern Job Design

The last two parts of the Intrinsic Motivation model are simply decentralization

- **Autonomy** = decentralization
- **Feedback** = providing information about effects of decisions

Does the intrinsic motivation approach have anything to do with making use of the worker’s *specific knowledge*?

- it turns out it has a lot to do with this concept
- to see why, let’s compare these two approaches …
You are implementing a large organizational change. How should this affect job design?

– you should almost certainly shift toward Modern design approach
  … why?
– here is some evidence from firms undergoing org. change in Britain:

<table>
<thead>
<tr>
<th>Effects of Org. Change</th>
<th>% of Employees With More</th>
<th>% of Employees With Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tasks</td>
<td>63%</td>
<td>6%</td>
</tr>
<tr>
<td>Responsibility</td>
<td>46%</td>
<td>3%</td>
</tr>
<tr>
<td>Required skills</td>
<td>50%</td>
<td>4%</td>
</tr>
</tbody>
</table>
The Right Person for the Job

- Recruiting & training should match job design
  - first, personality should fit a job with more “psychological involvement”
  - second, you need higher skills for Modern jobs
  - third, you need more of a certain kind of skill

- To get a feel for these issues, listen to the experts …
  - Juran & Taylor
  - notes
    - Modern job design may create job satisfaction, or stress (or both)
    - it is generally not true that you can pay less if the job is more intrinsically motivating
Creativity v. Control

- We have seen a theme in several ways, at four levels (economy, firm structure, decision making & job design)
  - decentralization v. centralization
  - creativity v. control
  - continuous improvement v. ex ante optimization
- How does this play out? Your situation determines your best approach
  - is risk management important?
  - are gains from centralization, such as economies of scale or need for coordination, important?
  - is your product simple or complex?
  - is your strategy one of standardization or customization?
  - is your industry & technology stable or unpredictable?
Choose the Right Mix

We tend to think about the ideas in this course as “either-or,” but don’t use one approach; use a *mix*

– specialization combined w/ teams
– decentralization of some stages of decisions; centralization of others
– ex ante optimization, standard operating procedures, automation & computerization where possible …
– … & continuous improvement, job enrichment, deep & broad skills
Rigor, Not Buzzwords

➢ Trendy is not always effective: don’t ignore classic ideas
  – functional hierarchy
  – specialization & narrow, low-skilled jobs
  – automation & computerization

➢ But trends do have reasons
  – greater complexity, instability & unpredictability in recent decades
Modern & Classical jobs 30-35x more prevalent than predicted
  – “mixed” job designs far less common

Modern jobs associated with
  – large scale organizational change
  – greater industry competition
  – investments in R&D, IT

How do employees value job attributes?
  – ↑ 1 std. dev. change
  – trust in your manager (worth 36% pay raise)
  – job with variety of tasks to perform (21%)
  – job requiring high levels of skills (19%)
  – having time to finish assigned work (11%)
  – better pay

Can Lean Manufacturing Put an End to Sweatshops?

Some Evidence
[Caroli & van Reenen 2001, Gibbs, Levenson & Zoghi 2010, Helliwell & Huang 2010]
Good job design uses the same ideas as in Lecture 1
- create & use knowledge effectively
- extent of (de)centralization is a key part of designing a job
- creativity v. control
- purpose of organizational design is to create & use knowledge effectively

We added an important new topic: motivation
- job design has important effects on the extent & type of motivation
- we discuss more later in the course;

Next: How teams and technology can impact job design