Managing through incentives

The economics of dynamic employment relationships

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October 24, 2016

What is incentive contracting?

2016 Nobel Prize in Economics

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2. Adverse selection
   - "Asymmetric information" - employee knows something their employer doesn't
   - Low-quality workers may pass themselves off as high-quality to get hired
   - Employees with conflicts of interest may misrepresent the viability of a project

Tools for incentive contracting

- Performance pay
- Promotion and firing
- Menus of contracts
- Procedural rules
- Costly monitoring

Managing temporary projects

A hypothetical case study

- Consultancy MBB is engaged by firm PG to make proposals for cutting costs and adopting industry best practices
- Both MBB and PG are uncertain about the scope for improvements
- MBB's team knows when the project has become uneconomical... but is paid by the hour

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Question

Can incentive contracting be used to encourage information sharing and increase project returns?

A toy model

- PG and MBB have IRR 5%/year
- MBB charges \$40k per month, with a profit margin of 50%
- Each major improvement is worth \$1m to PG
- Major improvements are found on average every six months until project lapses
- Average time until project lapses is 1.5 years

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Result

PG should operate the project until 17 months have passed with no improvements. The project's NPV for PG is $\$1.5m$.

Incentive contracting tools

1. Completion bonuses
2. Deadlines
3. Merit extensions

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The project's NPV for PG with this incentive contract is $-\$2.2m$.

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PG commits to a project horizon of 33 months. Further, PG promises that if the project is ended N months before the horizon, MBB will earn a completion bonus equal to the NPV of average billings minus expenses for N months.

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Result

The project's NPV for PG with this incentive contract is $\$1.8m$*.*
This is PG's most profitable incentive contract.

Results of incentive contracting

At-will employment	\$1.5m
Bonuses	-240%
Bonuses + deadlines	-2%
Bonuses + deadlines + extensions	+15%

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Result

An optimal incentive contract with info sharing always increases PG's profits over at-will employment.

Lessons for managers

How can you improve the outcome of temporary projects?

1. Commit to project horizons rather than open-ended engagements
2. "Pay for failure"
3. Be responsive to observable milestones (but not *too* responsive)

When should you consider incentive contracting?

1. Incentives are misaligned and direct oversight is hard
2. Employees believe you will honor contractual terms
3. You understand what motivates your employees
4. Employees understand how the contract works