Roberts 2004 Summary Chapter 1

Strategy and Organisation

The Design Problem: Setting Strategy and Orgnisation

Performance (value creation, maximise firm value) depends on
- Strategy (under influence of manager)
- Organisation (")
- Environment no discretion

=> Finding fit among the three and maintaining that = Task of manager

The job of the general manager is to craft a strategy – objective, scope, competitive advantage and logic – and create an organisation – people, architecture, routines and culture – in light of the environment to maximise performance.

GOAL/ Aim of the book
Problem of organisational design (p.22)
- Selecting the long-run value-maximising strategy for particular environment and then creating organisation that will best realise it

Strategy can be changed relatively quickly, organisations cannot
Organisations are long-lived assets, subject to inertia (success traps)

Roberts 2004 Summary Chapter 2

Key concepts

Complementarity among choice variables
- rise to patterns of coherence in design

Non-convexity in the set of choice variables
- multiple patterns to design that are quite distinct

Non-concavity in the relationship between choice and performance (objective set)
- multiple patterns to design that are quite distinct

Tight and Loose Coupling
- the extent to which the organisations is finely tuned to maximise performance on a given strategy and environment or work well in the face of environmental change

Complementarity

- interaction among changes in different variables affecting performance

- two choice variables are complements when increasing one, increases the returns of increasing the other
- Example: Price and Product Quality
  - /quality, /returns to /p, because /quality makes demand less (price elastic) sensitive to price increases
- two choice variables are substitutes, if doing more of one reduces the attractiveness of doing the other
- Example: direct monitoring and incentive-based pay
  - If introducing perf. Pay = stronger incentives for good behaviour, most likely the value of monitoring to enforce the desired behaviour is probably lower at the margin (thus monitoring should be reduced)

Complementarity cont'd
- choice variable is complement with an element of the environment, if an increase in the environment variable, increases the returns to introducing/ increasing the choice variable
- Example: flexibility of firms' manufacturing system vs. variety of its product offerings
  - Flexibility: speed with which firm can change from producing one product line to producing another (in other words costs of changeovers)
  - Variety: breadth of product line
  - ⇨ having more variety increasees the returns to increased flexibility = complements
  - ⇨ more flexibility lowers costs of realizing demand advatanges of having broader product line = complements
- Underlying principle: Symmetry – if the returns to increasing one variable are non-decreasing in the level of the second variable, then the returns of the second are also non-decreasing in the level of the first
- Compl. Allows for SYSTEM EFFECTS = whole being more than sum of parts

- Complementarity means that increasing all the variables together exceeds the sums of the individual impacts, because if increase one, compl, means that the returns to increasing the others are also higher
- DRASTIC expl.: changing just one might worsen performance, but all of them together has pos. impact
- Little effect of /A or /B, but if /A+/B => big effect (e.g. introduction of IT and org. changes)

- **Coherence** among choice variables => either all low, or all high**,**
  - Flexibility+varietey high OR F+V low, because bearing the costs of high flexibility is only worthwhile when variety is high
  - E.g. Ford T: strategy=one model at high output org.desgin=one plant optimised to production of this car environment= stable (here strategy and org. design where complements to optimise performance in stable environment), internal logic of this system
  - Toyota very different: flexible automation, many models
  - ⇨ What doesn't work: Mix and Match among different elements of different patterns, cf. example of GM that invested a lot into flexible production systems but did not make use of them in terms of variety

Flexibility	**High**	GM	Toyota
	Low	Ford (Model T)	?
		Low	**High**
		Variety	

p. 40

CASE STUDY (Lincoln Electric Co.)
Example of Complementarity
- product: arc-welding equipment and consumables, such as flux used in welding
- unbeaten record of product performance, always profitable, no lay-offs

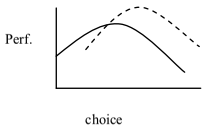
centrepiece = piece-rate compensation
Advantages
+ strong, straightforward incentives, easy to administer
Problems/ Disadvantages
- if the amount or work cannot vary between individuals (as on a paced production line), people cannot respond to piece rates, not very useful
  - Lincoln's solution: allow for inventory, so work can be individually paced
- other desirable activities that cannot be paid by piece rate may be neglected, e.g. ensure quality, helping others, deal with problems (MULTI-TASKING problem of quality and cooperation)
  - Lincoln's solution: individual bonus system, determined by supervisor, individual output, perceived cooperativeness (or quality, mark each part with worker's name, if quality low, rework outside working time (similar at Safelite Glass, Lazear 2000)
- workers might distrust managers to decrease "beta", i.e. lower piece rates if workers respond fully (ratchet effect), thus workers might not try best (TRUST PROBLEM)
  - Solution (to make piece rate credible): Lincoln promises not change piece rate (why credible?)
    - Firm is employee-owned
    - Two-way communication between mgmt and workers
    - Company is run by founders and career Lincoln employees, committed to the system
    - Policies that reduce relative position of management, i.e. "us vs. them mentality"
- Each element on its own might not work, but altogether have very positive effects, because complement each other, e.g. (absent offsetting incentives for quality and cooperation, piece rates can be disastrous but bonus schemes balances these), in addition: Screening effect. Employees who like to work that way (hard, etc…) self-select to work for that firm.
  - ⇨ high levels of productivity = core of low-cost strategy
    - employees fear lay-offs? Company promises not to lay-off, which they never did, which /trust that makes promise of piece rates credible

Broadest set of complementarities
Mass production vs. lean manufacturing
"Mass production and lean manufacturing represent the tow coherent patterns of choices over a very large set of policy variables, where a move of any one element from the mass production model practice to the lean model is complementary with the corresponding move on each of the other variables." (p. 47)

Mathematics of Complementarity (p.50-51)
Environment changes
-> makes change in X worthwhile
X,Y,Z are complements
-> also change Y and Z now, (because they are complements, increased return)
("When choices are complementary, the direction of the desired change is clear." p51)

Non-convexity
Convexity of the choice set
- convexity
  - if two options are available, all intermediate choices are also available
  - choices are infinitely divisable

Non-Concavity
Concavity of the objective set (Here: relationship of choice and performance for given environment)
- impact of performance of successive increments to choice is deacreasing, maybe ultimately becoming negative



with concavity task, of finding best choice is easy = local experimentation, increasing the choice variable as long as perf. Increases, if it falls in next step, optimum has been found, also true if choice is multidimensional (p.53)
Environmental change may shift relationship of perf. And choice, but again through local exp. new optimum can be found

Problem: These assumptions don't work to think about strategic and organisational choice.

Convexity of choice doesn't hold:	Firms' plants are not infinitely divisible
Concavity of objective doesn't hold:	economies to scale, increasing returns to scale, learning effects, indivisibilities

e. g. profits with increasing returns: zero profits with not producing at all or at some break-even level of output, yet losses at some intermediate level => concavity doesn't hold

Insights from the fact that concavity and convexity do not hold:

1. Why do firms constantly change their organisations?
   -> Organisation can be either centralised of decentralised but not really anything in between, if it is optimal to be in the middle though, keep changing back and forth between the models (p. 56, to me this seems to be a far-fetched argument)

2. **multiple choice patterns** that are **coherent**
   - no small adjustment in choice can increase performance – choice is locally "best", local optimality

   - if choice multi-dimensional, change in X doesn't yield improvement if not Y,Z are changed as well. Have to change all elements of strategy and organisational design in coordinated way.
   - e.g. organisational performance is minimum of units' performance e.g. workers on assembly line (actions are complements, one person working harder more valuable if others do the same – but they have to do it together at the same time) output = min {2,3,4}
   in other words: No change, however large, in any subset of the activity levels can increase performance.
   TO INCREASE PERF. All have to increase at same time

Implication (of complementarities and non-concavity)
Decentralised local experimentation is not enough.
=> Search and Change have to be coordinated (central designer or parties involved have to communicate intensively)

How can firm end up in wrong position?
B/c continuous change in the environment can, in presence of non-concave performance functions result in discrete substantial changes in the optimum configuration of strategy and organisation.

What is needed, in terms of leadership, in order to jump from one peak (cf. contour map.59 and p. 61) to another (i.e. organisational, strategic change)?
- Strategic recognition
   Recognize need for opportunity
- Vision
   See other, better pattern at least in broad outset, new way need not be understood in all its complexity at outset (this seems contradictory to Roberts' stress on complementarities, his following evolutionary descriptions do not add much value, either (p.64))
- Communication = Persuasion
   Explain new way, what it is and how to get there and convince need for change
- Courage
   To try something new, there will be decline in performance for some while (go through the trough between the peaks)

Costs of change
- resources needed to figuring out what to do and how to do it

- resources needed to change established patterns of behaviour, learning new ways to communicate with new people about different things = costly process

- resources devoted to resistance because change is a threat to at least some in org.

- change creates opportunities for influence activities, to influence distribution of resources, power, rewards, etc.. (costs to influence are not used in productive activities, information may be twisted = costs of making bad decisions on this information, costs of the fact that resources are not distributed in the optimal way)

Thus, change might be easier in crisis, when the survival of firm is at stake, influence costs\.

Tight Loose Coupling
(addition to concept of complementarities)

Performance implications
All aspects of design are closely matched, changing one without changing the others will decrease performance. May yield great perf. But what happens if sth. Changes?

Tight coupling
- of choice regarding internal organisation (e.g. assembly line)
- of org. choice regarding fit with environment

Loose coupling (Lincoln electric's inventory system)

Variegated Coupling
- some elements are standardized across the board (IT, financial controls)
- other vary (HR policies as response to cultural differences across geogr./ cultures)

Learning implications
Tightness of coupling also affects the ability of the organisation to learn and improve
- learning = 3 processes
   - variation = identification of new alternatives (e.g. through exeperimentation)
   - selection = determining whether new alternatives are better than current ones
   - transfer and retention = keeping the better practices

/Looseness /experimentation /variation

BUT /looseness might make retention and transfer harder (since it doesn't fit all parts of organisation)

Tight vs. Loose (2 trade-offs)
1. getting optimal performance in specific context (tight) vs. doing better in face of changes in environment or strategy
2. trade-off supporting learning (tight if always follow manuals hard to generate new best practices)

Bottom-Line:
Success involves strategy and organisation that are coherent, fitting with one another and with the environment. Choices are among coherent systems, not individual policies and features.

Roberts 2004 Summary Chapter 3

The Nature and Purpose of the Firm

MARKETS

- Specialisation leads to mutual dependence (p.74)

- Two main issues of organisation
  - **Coordination**
    - Needed tasks are completed without duplication
    - Tasks indicated by strategy are carried out in a cost-minimal way
  - **Motivation**
    - So needed tasks are done in the way set out above
    - At least costs to organisation
    - Become necessary because people are self-interested and try to minimise costs themselves

  ⇨ Motivate people so they behave helps achieving a coordinated solution

- MARKET = Benchmark of motivation/ coordination within an organisation
  - Market leads to interdependencies among people to be fully internalized
  - Coordinates actions and allocation of outcomes
  - Provide intense incentives for behaviour (Motivation function)

PROBLEMS of MARKETS?

- However, economic activity should occur within other forms, **if** it is a **better** way to coordinate and motivate than does the market.
  - (because of market failures, transaction costs, unclear property rights – quite a few explanations for the existence of firms, even if one takes the Coase theorem, with all property rights clearly defined, there are many reasons why the envisioned bargaining might not work,
    - cots of identifying the relevant parties,
    - bringing them together to negotiate,
    - establishing the terms and then enforcing the agreement.)
    - …

    => Many problems result from informational problems

Markets fail, because of **Information asymmetries** (p. 82)

- e. g. second cars, quality hard to determine
  - SELLERS of good cars will put resources into making sure that they have good cars – SIGNALLING quality
  - BUYERS will invest resources to make sure what car they are offered, SCREENING quality

  ⇨ no efficient allocation because, surplus lost by eating up these resources (Cf. Spence 1973)

1. Problem of informational asymmetry (**Adverse Selection**)

- Trade breaks down completely
  - If eliminating information asymmetry is not possible, then buyers will refuse to pay more than the expected value of the good, averaged across all different quality levels they expect to be offered.
  - Then best quality goods might not be offered at all anymore, because they would only reap a middling price below their true value. Thus they are not offered at all anymore. => offered quality ↓ (i.e. what is offered, is worse in quality what would be potentially available) THE selection of cars on offer is not representative of the underlying distribution of quality, it is an ADVERSE SELECTION
  - This is anticipated by rational buyers, they ↓ their WTP => sellers with relatively higher prices withdraw their cars as well => offered quality ↓
  - This again is anticipated by rational buyers….

  ⇨ only very low quality-cars will be on offer in the end (market for higher end products fail, although there are people would be willing to pay for these, they have the respective WTP)

2. Problem **MORAL HAZARD**

- Inability to observe others actions, and thus determine whether they adhere to agreements
  - Salespeople in field playing golf?
  - Is knowledge worker thinking about job or something else?
- problems, if information/ knowledge is not observable by those, in whose interests the actions are to be taken
  - is my broker's recommendation just based to get commissions
  - am I denied medical treatment because not needed or because insurance doesn't want to pay

3. Problem **HOLD-UP**

Result: cannot write contracts => no markets can exist

- only measuring performance indirectly and imprecisely, only contracting on proxies and signals rather than value-creating choices and actions

  ⇨ INEFFICIENCIES
  - Misdirected effort
  - Misallocation of risk
  - To low effort provision
  - Expenditures on monitoring
  - Expenditures on manipulating the performance measures

BUT: can be problems within firms as well

Also, even contracts that could be enforced, might not be enforceable by third parties. Can be solved by self-enforcing agreements (which work better within organisations) – parties find in their interest to adhere to the agreement, even in absence of incentives that through outside enforcement.

Commitment to agreements

- renegotiation (p.85/86)

FIRMS vs. MARKETS - FIRMS exists b/c of
- Informational asymmetry - Contractual incompleteness

Coase: firms exists because of the costs of organising economic activity, to achieve coordination and motivation, firms are more efficient than market, i.e. it is cheaper to organise transaction this way, Boundaries of the firm are efficient, create most value.

BUT notion of efficiency more subtle
- efficiency of actual arrangements is constrained by informational and observational limitations

LOCK-IN
- arises because of asset-specifity (assets which used in the next-best use would be of much less value)
  - ⇨ hold-up Attempts by trading partners to appropriate some of the returns that the asset's owners expected when originally investing in them, e.g. A makes investment to serve buyer
- once investment is made – costs are sunk, i.e. even if A only received variable costs from buyer, would not be worthwhile to withdraw
- don't play any role, when determining how much value is created by cooperation vs. to break off relationship
  - ⇨ to refuse to renegotiate and break off the deal leaves him with the nearly worthless asset

One solution:
- To have the buyer pay part of the investment upfront, in effect, pay partly for amount to be (mis)appropriated later (only if agreement enforcable)
- Bring both actions under one roof, vertical integration

COSTS INSIDE the FIRM

Transaction costs INSIDE the firm? (p.93)
- communication up-and-down
- information overload center/top

Selective Intervention? Covered in course? (p. 94 et sqq.)

Property Rights (p. 95)

Why does intervention of higher levels not work? I.e. can high-level employees limit themselves to only efficiency-enhancing activities?

COSTS of intervention
- destroys opportunity and incentives for lower levels to learn
- undercuts their autonomy and the performance incentives that come with that (Aghion/Tirole 1997)
- creates opportunity for lower levels to influence the interventions, i.e. influence the decisions of higher levels (basically, creates room for politicising) in their interest (maybe through manipulation of information, because executives rely on their information)
- COSTs of INFLUENCE activities
  - Resources wasted on non-productive (only distributional) activities
  - Bad decisions might be the result
  - (have to change org. design in order to control influence activities)

Solution
1. limit communication between lower levels ↔Mang. (cf. 3 strikes and you're out policy at ABB
2. structure dec. process – (adherence to bureaucratic rules)
3. limit the gains that can be earned from influence activities, i.e. pay everybody the same
4. outsource activity, use outside suppliers

There costs of organising internally (inside the firm), and there are costs of organising in the market place. If costs in the market are higher, organise inside the firm.

NATURE OF the FIRM
- hierarchic (Coase/ Simon)
- contractual network (Alchian/ Demsetz)

- firms exist because market incentives might be too strong, firms can provide weaker incentives, e.g. in multi-tasking context (here: incentives are too strong if they cause diversion of effort from other valued activities, for which cannot be given equally strong incentives)
- e.g. sales agent IN-HOUSE – OUTSIDE

  OUTSIDE
  - sells many products
  - ⇨ have to give strong incentive (high commission rate) to sell yours
  - ⇨ also incentive to gather information

  IN-House (solution)
  - sell your products, gather info.
- Weak incentives, pay fixed salary, equally balanced incentives and ask to sell product, gather info, advise customers well

Trade-Off
Cooperation
- Helping others, developing overall brand, customer reputation of the firm
  and
  Initiative (fundamental multi-tasking problem in an organisation)
  - increase unit's sales, self-interest

=> the underlying trade-off of organisational design, task if management to push the organisation to the cooperation/ initiative-frontier, depends on

HOW the pieces fit together
"People, architecture, processes, routines, culture affect behaviour that is induced. Where an orgnisation wants to position itself, depends on the activities, it is undertaking, what it is trying to accomplish, i.e. its strategy. A shift in strategy might lead to a change in the organisation. The strategy will also determine, how much the firm spends on organisation, and thus where the frontier will lie."

Examples
ABB = 1300operating companies and about 5000 profit centers with about 35 employees each

Vey strong incentives for initiative
- Responsibility assigned
- People could see impact of their actions on results, ↑motivation

Johnson&Johnson
- High levels of initiative
- was divided into 150 separate, individually responsible units

BP Exploration
- Dissaggregation of business into separate units with clear responsibilities => ↑ initiative
- But also created need to cooperate in sharing information and best practices

Solution: organised businesses into peer groups, established norms of sharing and information and helping each other, e.g. practice of peer asssits

Novo Nordisk
- great crisis
- changes org. design. Leaving large discretion to individual business units but instituting systems of adhering more strongly to company policies

Problem:
Measuring cooperation, thus hard to provide formal incentives for it. Thus in order to induce cooperation, rely on social networks and norms

Roberts 2004 Summary Chapter 4

Motivation in the Modern Firm

From a design perspective the motivation problems is to bring about a closer alignment of the organisation members' interests with those of the organisation and thus increasing the efficiency of the organisation and the choices it makes.

The Source and Nature of Motivation Problems

Motivation of incentive problems occur when there are externalities, i.e. a disparity between the costs and benefits that an individual bears versus those that accrue to the organisation as a whole. In other words: Someone else has to bear some of the costs of one's actions (negative), or enjoys the fruits of one's actions (positive externalities)

1. members in an organisation only receive small fraction of the outcomes of their actions but bear a disproportionate part of the costs involved

=> too little of desired activity for organisational efficiency

   a. e.g. worker who works harder has to bear all the costs but does not get anything in exchange for that
   b. shareholder who exhibits diligence in monitoring management, bears all the costs of this activity, however the benefits of this activity accrue to all shareholders => most likely less monitoring than would be optimal

2. fraction of benefits exceeds the costs that they bear

=> choose too much of that activity

Why are there systematic differences between costs and benefits that accrue to the organisation and those that the decision maker faces? (Benchmark: contracts in the free market, there everything imaginable can be devised)

1. Decisions and actions affect other parties,
2. interests are typically not fully aligned
3. contracting possibilities are limited
4. reputations are only partially effective

Most pervasive difficulties **AGENCY PROBLEMS**
Limited observability of behaviour => moral hazard. (Context for agency theory)
- If behaviour is not observable and measurable in timely fashion, contracts cannot be written on that behaviour, also makes reputation concerns to guide behaviour impossible

⇨ formal incentives have to be based on noisy, imprecise indicators of what the agent has done

Free-Riding:
- several individuals contribute to some outcome but all share the outcome.
- Expl.: Teamwork, everybody has incentive to shirk, since one incurs all costs of additional effort but only a part of the incremental gain
  ⇨ Solution: (Mutual) Monitoring of each others contributions (yet, this depends on how much the other like dislike the lazy ones to free-ride on their effort, if they don't care, this might lead to the situation that they don't work hard either, infiltration of laziness, might call for establishing a group norm for working hard), Peer Pressure

Behaviour might be observable by parties involved but it is not possible to establish the facts to an outside party. Thus contracts on this behaviour cannot be enforced by outside party and can thus not act as motivation => this type of behaviour is not contractible.

Parties might fail to specify what should be done in different circumstances (125)

Information on which actions are based is only available to person taking the action, what interests differ between those who take actions and those in whose interest they should be taken? (Cf. Aghion/ Tirole 1997 model)
Expl. Empire-building CEOs

Simple Agency Theory (p. 126)

If effort could be contracted, i.e. was observable and verifiable to the courts, and desired action could be determined and described before the fact (perfect information model), principal would buy specific amount of effort that would be optimal for him. = No Motivation Problem

Motivation problem in the simplest Principal-agent model:
- P can**not** observe A's behaviour
- Some noisy signal is observed and can be contracted upon (need signal otherwise cannot provide incentives)
- Signal varies with A's effort but also includes some random variability that cannot be removed (i.e. $s = e + \varepsilon$)
- E.g. S can be linked to output, volume, sales, costs, revenue
- Random variability can be:
  ⇨ measurement error (e.g. because monitoring is not continual)
  ⇨ other factors (actions of other parties, state of demand (oil price), random performance of a machine)
  ⇨ not under the influence of the agent, i.e. randomness beyond agent's control

- however, if agent bore full benefits and costs of his actions he would take efficient effort choice (sell-the-shop)

- 2 reasons why this does not work
  ⇨ Benefits might be uncertain but agent is risk-averse
    - Then having bear the full but uncertain impact (i.e. the full marginal return of his effort choice) of his actions is inefficient because it means that he shoulders all he risk arising from uncertainty, while risk-absorbing capability of P is not used (depends on how strongly risk-averse the two are)
    - If P is risk-neutral, she should shoulder all risk, because it is costless for her
    - (COUNTER: Problem in this case, she might not only bear risk from randomness, variability might also be due to shirking of agent. This variability then would be borne by P. Thus A doesn't face all benefits and costs of her choices.)
    - Desirability of risk-sharing
  ⇨ he might financially constrained and thus cannot cover any negative returns that might arise
    - cannot cover any negative returns of his actions
    - thus, selling firm to agent is not possible, or if he has option of bankruptcy, doesn't bear full costs either

Underlying logic of incentive pay:
- Making the incentives more intense increases the expected return to the agent from exerting more effort => will work harder
- choice of the incentive scheme must be made in light that the level of effort actually chosen will be what motivates the agent to provide

TRADE-OFF Risk vs. Incentives
(the nature of the trade-off depends on the reason the agent does not bear all the marginal costs and benefits)
- limited liability case (agent is risk neutral and alpha cannot be negative?) ?p.130-131? Not sure here, seems confusing
  ⇨ providing more intense incentives involves increasing the payment for the good state without any off-setting decrease in payments when the performance appears bed (assuming the payment in the bad state is already as low as feasible)
  ⇨ costs of getting more effort is that expected returns must be passed on to the agent, even though his pay is already enough to attract him to the job
- risk aversion (more widely studied)
  ⇨ giving more intense incentives (i.e. increasing beta, commission rate paid to salesperson) increases the effort provided because the benefits of extra effort accrue to agent "more directly"
  ⇨ more intense incentives also make pay more risky (since a given amount of random variation in the performance measure (e.g. sales) is also translated more directly, i.e. results in a greater variance in pay

  Having the agent bear risk is costly
  ⇨ if P = risk-neutral and A = risk-averse (even when P not risk-neutral), increasing the intensity of incentives means shifting more risk onto the agent than would be desirable, principal has to compensate agent for bearing risk

  P's problem
  ⇨ Determining desired level of intensity = TRADE-OFF
  Costs of having to compensate agent for BOTH exerting extra effort and bearing risks against **benefits** generated by extra effort through more intense/ stronger incentives

  Generally, the solution is to have the agent face less intense incentives than are needed to induce the full observability, first-best level of effort, where the risks and costs it

would bring are irrelevant. Also agent bears more risk than would be efficient absent the need for incentives.

Implications:
- stronger incentives when (all follow some cost-benefit-logic)
    a. Agent less risk-averse
        i. Incentive intensity is determined by trading off costs of bearing more risk vs. benefits from inducing more effort. Thus, reduced marginal costs of risk-bearing (risk aversion) (logic: costs of A's bearing extra risk decrease when A is less risk-averse) (Since risk aversion may depend on wealth, might expect to see wealthier ones to be better able to bear risk)
    b. Performance measurement more accurate
        i. Stronger incentives translate less strongly into variance in pay (less uncontrolled risk in the agent's reward = less additional risk-bearing costs) Thus, enduce more effort through stronger incentives because costs of doing so are lower.
            1. action = observed performance give strong incentives
            2. action <> observed performance weaker incentives
    c. Higher effort more valuable to principal
        i. The greater he benefit of extra effort, the higher the optimal amount of effort to induce and thus the more intense should be the incentives
    d. The better/ more easily A can respond to stronger incentives (responsiveness of A's effort choice to stronger incentives)
        i. The more effort responds to incentives, i.e. creates extra value, the more intense should be the incentives (cost-benefit-logic)
    ⇨ (c+d might explain why incentive intensity increases with hierarchy in most firms, top executives dec. have great impact on perf., can pull many levers)

Insights
Complementarity between stronger incentives and improving performance measures
-> with stronger incentives the benefits of increasing accuracy of perf. Measurement increase

If incentives at all, give substantial ones, because of discrete fixed costs of performance pay. Thus better to give no explicit incentives at all rather than weak ones.
If incentive pay is used, worker faces risk in pay. The risk has a cost to the worker that is increasing in the personal cost of increasing the provision of effort. If the marginal cost of extra effort is not zero, this term does not disappear as the amount of extra effort that the firm seeks to induce (and, correspondingly, the intensity of incentives) becomes small. Thus, a little in incentive pay, although, it may induce a little more effort, brings a discrete jump in costs. ??? I DON't GET THIS. CAN SOMEONE EXPLAIN????

Choice of Performance Measures (p.135)

Possible measures are sales, etc. (see above) stock price, accounting returns..

Pay should depend on freely (so not to incur further costs) available measure that is informative about agent's effort provision

Informative = taking proper account allows more precise inference about agent's choice ("Informativeness Principle" – only include those measure that tell you something about agents' effort choices)
e.g.
success of exploration but also crude oil price plays a role for success of oil companies
Solution at BP "self-help" in performance pay (=change in performance not attributable to change in oil price) => Result: 2 measures: actual earnings and oil price
Variable that is correlated with noise in performance measurement is usefully employed in performance evaluation in order to filter out some of extraneous randomness.

e.g.
Executive compensation
Bonuses based on publicly available accounting returns and some bonus tied to stock price
Strange, since all info. Should be part of stock price (in efficient capital markets)
BUT acct. info gives information about effort of division heads (thus should be used, even if they get stock options, too)

Multiple measures increase accuracy but this need not be expansive, e.g. measuring sales organisation by profitability, i.e. revenue and costs rather than just costs alone. Even if sales managers don't have influence over costs, this will help focus on profitable accounts. (p. 138)

Comparative Performance Evaluation
- good measure of how much effort person puts in, because those factors affecting the results of all (market conditions, etc.) are filtered out

Rationale
- reduces noise in measured performance => reduces randomness in rewards => stronger incentives can be provided => more effort can be induced
- e.g. CEOs are paid both in terms of how well they did and in comparison to firms in the same industry

TOURNAMENTS = more extreme form of comparative performance evaluation
- Rewards only based on relative **ranking** among peers
- (Rewards not based on any absolute performance measure)
    Very useful, when it is hard to specify and measure results in any quantitative way, on which pay could be based BUT still it is clear who has done the best job
    Winner can be identified and rewarded (often used in promotions: prize = better job, pay, opportunity to compete for next promotion)

Benefits of these examples: performance measures are freely available, meaning that they are simple and easy to administer. If measures have to be devised and collected, it will involve large fixed costs to do so. Also if too many measure, system might become too complicated in order to motivate effectively (as in case of "Balance Scorecard").

Designer has to decide between measuring inputs (effort, time, etc…) and outputs (sales, pieces, etc.). Choice depends on what is observable and what designer (general manger) knows.

If designer doesn't' know what should be done, will specify results and leave to A to deliver results.

!! If uncertainty /likelihood that designer does not know what behaviour is desirable, negative association between uncertainty and incentives may be reversed!!

Multi-Tasking in Agency Relationships (p.140)

P needs to motivate
- overall effort and
- allocation among tasks

Problematic in context of
1. desired activities compete for agent's time and attention
    - doing more of one increases the costs/ difficulty of doing the other while the precision or timeliness of measures is not comparable across the tasks, i.e. it is expensive to design incentives that lead the agent to devote enough time to both activities
    - e.g. delivering current performance and developing new business
        - current performance can measured
        - hard to measure the second, unless agent can be directly observed drawing up business plans (but: might try hard to find new biz opportunities and then in the end doesn't have anything to show for it, because all investigated projects, although interesting and promising in the beginning, were, after close investigation, found not to be worthwhile)
    - e.g. providing initiative and cooperation
        - initiative is easily measured (e.g. sales)
        - cooperation is much harder to measure, because
            - harder to observe
            - results of cooperation are tied up in other units' performance
2. no separate measures for the performance on the two tasks (i.e. available measures confound the results of 2 activities.)

How A spends time depends on incentives
BENCHMARK CASE
- activities are non-rivalrous, i.e. do not compete for time and attention, i.e. costs of one act1 are independent of the level of act2
- separate, independent (but imperfect, i.e. not perfectly precise) performance measures
    - ⇨ choice of one level of activity will not affect the cost-reward trade-offs faced in choosing the level of the other
    - ⇨ incentives of each activity can be set independently to induce e1 and e2 at desired levels

ad 1.
1st PROBLEM: A1 and A2 compete at the margin
- working harder in activity increases the costs of providing the other activity
- Result: Increasing rewards for A1 will lead to over-proportionally less A2, since the marginal costs of A2 have risen, yet the rewards remain unchanged
    - ⇨ incentives for A1 and A2 have to designed coordinatedly
- intensities of different activities = complements
    - ⇨ strengthening the intensity of one activity makes it more attractive to strengthen incentives for the other activity as well
    - ⇨ Thus intensity should be intense for all, or relatively muted for all

Unless incentives are balanced, agent will tend to overemphasize better-compensated activity and under-supply the other. E.g. incentives system at Lincoln Electric. Provides strong, balanced incentives.

2nd PROBLEM: accuracy and timeliness, measures for two tasks differ in precision
- more precise measure, less costly to provide strong incentives
- e.g. cost control vs. developing new business ideas
=> cheap to provide incentives for cost control, costly for new biz ideas
Intense incentives for desirable activities might be bad idea, because it becomes negative incentive for other activities that are also desirable. ("You get what you pay for.")
- e. g. merit pay for teachers (cf. MR pp.230-1 also)
- pay teachers based on pupils' test success, teachers will mainly teach testing abilities and teach less creativity, citizenship, values, i.e. things that are not tested
=> Merit pay on test performance is likely to drive these out, although they are provided in the absence of explicit incentives
- If weak incentives for both, agent won't exert much effort to both. Thus, might be better to leave teachers' pay to students' test results, e.g. same in business. CEOs are frustrated that their employees generate now new ideas, which might be due to strong incentives for current performance

SOLUTION: separate the two tasks between the two agents, provide optimal incentive for each (YET, sometimes impossible)
COSTS of this solution: synergies lost
e.g. sales representative: should to both – sell product and bring ideas "back home" for product development (INHOUSE) if new ideas don't play role (OUSURCE)

ad 2.
No adequate measures for the two different tasks
e.g. managers M1 and M2 for two business units B1 and B2
e1 and e2 = effort choices affecting unit's performance
d1 and d2 = decisions that **both** own unit's performance but **ALSO** affect the other unit's performance
Problem: can't distinguish the effects of e1, d1 and d2 on B1, i.e. it's not possible to offer incentives separately for effort and decisions

For good d1 and d2 (i.e. activities with spillover effects), incentives should be based on both units' performance (e.g. overall profitability, other unit's performance enters positively into is rewards)
To induce efficient e1 and e2, only narrow measures of performance of B1 and B2 alone would be used.
BUT, if common factors affect profits of B1 and B2, comparative evaluation should be used (Informativeness principle), i.e. compensation of B1 is less positive if B2 does well (pay is negatively related to other division's returns). Thus, there is a trade-off of e1 and d1, because good d1 will also lead to higher B1.

Getting better decisions means making managers concerned with own performance as well as other unit's performance = loading avoidable risk from B2 => increase cost (b/c more risk) => less intense incentives

Optimal scheme balances gains and losses, depends on relative importance of effort and decisions.

Extension: it's possible, B1 can make decisions for B2, e.g.
Rule = projects (that affect other unit) only implemented if both units agree to it

- Managers accept projects that lead to higher pay (increase their utility),

Q: Pay depends on incentive scheme used
In general

- for well-designed scheme, pay increases in own unit's performance
  1. pay only on own unit's performance
  2. pay only on both units' performance
     - extension: comparative evaluation

ad 1. M only cares about own units, accept these projects
might reject those that hurt them but would increase overall value
ad 2. accept those that are good for both
extension: only few will be accepted, since good for B2 means bad for B1,i.e. projects will only accepted if they are good for both, meaning that those, which are good for just one unit might not be accepted (although these would increase overall value)
SOLUTION: rule: if both agree = implemented, if disagree = referred to third party (this party should be incentivised to make good decisions, e.g. because cares about overall value)
Referral process = costly, therefore first see, whether parties agree.
e.g. IBM concurrence system = projects that affected other units had to get sign-off from these units, o/w referred upwards and so on (as far as executive committee)

Multi-Tasking = very complex, solution to this problem can involve multiple aspects of organisational design.

DESCRIPTION from Ch. 3
Model of **multi-tasking** (Holmström and Milgrom 1991)
GOAL (when various activities compete for time and attention of agent)

- offering incentives that are strong AND
- balanced

- firms exist because market incentives might be too strong, firms can provide weaker incentives (here: incentives are too strong if they cause diversion of effort from other valued activities, for which cannot be given equally strong incentives)
  - e.g. sales agent IN-HOUSE – OUTSIDE

  OUTSIDE
  - sells many products

  ⇨ have to give strong incentive (high commission rate) to sell yours
  ⇨ also incentivise to gather information

  IN-House (solution)
  - sell your products, gather info.

- Weak incentives, pay fixed salary, equally balanced incentives and ask to sell product, gather info, advise customers well

Rests on 2 observations

multiple ways person can spend time, many of which might be of value to employer

1. compete for time and attention => incentives must be comparable, otherwise person will focus disproportionately on things that are well compensated and not on the others
2. providing strong financial incentives is costly if person is risk-averse,
   a. it loads extra risk into pay because, the principal then would have to compensate the agent for bearing risk as well,
   b. c↑ if measuring performance is hard

Two activities

- O output = easily measured, i.e. c(providing strong incentives)↓
- I investment in activities affecting long-term value of division, hard to measure c(strong incentives)↑, have to be compensated for bearing risk, costly for principal
- If only incentives for O, manager tempted to mortgage the future and focus on these (undesirable to principal)

Solution

- sell company to managers (MBO)
- treat manager as employee, pay salary, give weak incentives for both activities

Group Performance Pay

Performance pay problem: destroys cooperation and teamwork
Solution: collective evaluation, incentivise groups as individuals, see above
Problem: free-riding (cf. team production model MN416)
Solution: mutual monitoring, peer pressue (cf. MN 416), small groups
Establishing norm for working hard

Underlying problem: employee only undertakes action if costs < rewards of actions
In group, profits of extra effort are shared, costs borne by agent
e.g. stock based pay = costs of extra effort borne only by agent, who just gets friction of rewards, shared with 1000s of other shareholders
=> bad motivational tool
Why so common though?
- supports norms of "working hard"
- workers think like "owners"

Manipulation of Performance Measures

Measures are manipulable = other ways to increase SIGNAL, than providing effort (costly for organisation, destroys value, first: effort is directed at other activities, outcome is lost (sales aren't increased), firm pays out on something that wasn't generated, thus it lives off its "substance")
e.g. at Heinz managers were expected to post steadily increasing results
=> account manipulation to achieve targets

Reason for Problem

- poorly designed incentives (e.g. only get bonus if target is met => agent will only do things needed to meet target, no more)

Solution

- closer monitoring

- making measures less manipulable
- subjective evaluations

Subjective Evaluations

Agency theory assumes, contracts can be written on observed performance measures
Problem: Often measures are available, but information provided too complex, too rich, to be described in contract OR to be used in verification by third parties.
=> use subjective evaluations

Problems:

If Principal's promise not credible (b/c see below) not induce effort in first place (anticipated by agent)

- Principal might just not pay rewards because says jobs has not been done properly
- Perceived arbitrariness and ambiguity can undermine incentives
- Bias and favouritism
- Principal might be too forgiving in paying rewards (e.g. board of directors -> CEO compensation)

Subject to influence activities, becoming politicised

- To work, measure must be unambiguous, mutually understood

=> If not, agent has incentive to influence decisions of principal

Solution

Reputation of principal
Agent will extrapolate past behaviour into the future

Reputations

Each time parties interact, P must perceive/ anticipate future, additional opportunities to gain from reputation

To work, it is needed to have

- long-term horizon
- frequent and many interactions between P and A
- cheating by P must be observable by A, even if A is not affected, (i.e. is not working for P this time)

Value of reputation and importance of reputation-bearer being long-lived
=> advantage for organising permanent firm rather than leaving transaction to market dealings (cf. Kreps 1990)

PARC and Motivation (p.164)

People, architecture, routines, culture

- formal agency emphasizes contractual responses to motivation
- BUT all aspects of organisation have to be employed (e.g. also managerial vision and strategy)

Managerial vision

- can be very motivating for employees, b/c people like their work (reduces divergence of interests that underlie motivation problem) and they know what they are working for, i.e. what will be rewarded
- good fit between people and organisation
- e.g.
  - Formal incentive system can lead people to self-select (Cf. Safelite Glass (Lazear 2000))

Organisational architecture can affect motivation
ABB 1300 business units, 5000 profits centers

- Small focus, better measures, stronger incentives
- People see impact of action
- small units \free-riding

Basis on which organisational units are defined, defines what is important

External boundaries can induce motivation as well, (esp. in multi-tasking context)
- e.g. in context of delivering current performance and new ideas
=> if new ideas created, let them spin-off (people expect that new ideas are really valued, give those manager large stake in spin-off) in other words: opportunity for spin-off can give balanced incentives
Another exmple:
Should someone be employee using assets (tools) of the firm OR
Outside conractor owning and using own tools?

Allocation of decision authority can affect incentives as well,
Empowering managers/ employees may induce them to do a better job of gathering info. and making choices (cf. Aghion/ Tirole model 1997)
COST of empowerment
M makes decisions best for him not best for firm (cf. Aghion/ Tirole, there this is ensured through alignment of incentives).

Financial/ ownership structure can affect motivation
Corp. = limited liability company
+ Shareholder-owners diversify their risk
give management to professional managers
- reduces incentives to monitor (CONTRAST: member of partnerships have very strong incentive to monitor decision-making in their firms)

Routines can affect motivation

- measures used to track performance
  - make less manpulable
  - more accurate

Culture

- norms about working hard
- norms about risk-taking
- what sort of behaviour is appropriate

Foster culture that encourages performance, if possible

Expl.
BP: after diasggregation
- instituted peer groups => networks evolved, etc.. cross-unit cooperation
- exchange best practices

Example for PARC
High Commitment Human Resource Management Systems

- guaranteed employment
- Egalitarian values
- Self-managed teams
- Premium compensation (perf. Pay, team, unit, firm-based)
- Rigorous Pre-employement screening
- Extensive socialisation and training of employees
- Transparency of information within firm
- Open communication
- Emphasis on employees symbolic and real "ownership" of firm

=> Logic: interests of firm and employees are closely aligned, screening, socialisation and identification ensure norms that ensure enforcement works (mutual monitoring and social pressure)

PRO

Works well if hard to measure perf. Accurately and formal incentives hard to provide

COSTS (CONTRA)

High fixed (and sunk) costs – investment to ensure norms (socialisation, training, recruitment) maintain atmosphere of trust

Pay above average levels

Essential:

Standards can **not** degrade, otherwise high costs but low effort

Interaction among elements important:

Explicit incentives and high commitment system may be substitutes because

Logic of reciprocity

If trust is high, people exhibit high effort

Incentive pay may be seen as signal of distrust, thus people lower effort provision.

Roberts 2004 Summary Chapter 5

Organizing for Performance

How the parts fit together.

Idea: Design incentives to provide intense incentives

s. t. constraints of the corporate form and the interdependencies that this corporate form both creates and is meant to control

=> From Tightly coupled, dense corporate form to the Loosely coupled disaggregated organisational form

Elements

- Redrawing horizontal and vertical boundaries of the firm
  - to increase strategic focus
- Creating small subunits
  - With decision rights
- \ layers of management
- Hold units accountable for performance
  - Linking them to manage their interdependencies (i.e. horizontally so info flows directly, rather than up and down)
- Cultural norms that facilitate performance

Recently, many firms have adopted this design model in response to increased needs to improve performance.

- Globalisation

  falling barriers to
  - international trade
    - easier long-distance communication and transportation = enter foreign markets = more competition in product and service

    => efficiency needed for profitability and survival
  - international investment
    - more pressure from investors, esp. acceptance of shareholder value model

Expl.: BP from politicised top-heavy bureaucrativ oil conglomerate to one of the most profitable firms in the world

1. divesting all non-core businesses, FOCUS on
   a. upstream oil and gas exploration and production
   b. downstream petroleum refining and marketing
   c. petrochemicals
2. organisational changes (lay-offs, divesting, etc.)
   a. e.g. "asset federation" in BPX (upstream exploration business) = prime example of disaggregated design,
      i. BPX divided into some 40 business units = "assets" = 1 major field and co-located fields
      ii. performance evaluation discussion were pushed down to individual fields, with managers of # of fields being given decision authority (and as it worked well, this was adopted for all fields)
      iii. targets were negotiated with top management of BPX directly
      iv. "charters" were given to managers = bounds on their activities

=> within charters and overall corp. policy managers were responsible to figure out how to deliver promised performance
Individuals within "asset" were given incentive contracts as well, based on negotiated target for that asset, i.e. unit's performance and the stream's performance => /intensity of incentives and variance

- assets were aligned into four peer groups, according to lifestage in product cycle, because then members of group (although geographically dispersed) would face similar problems
- peer group colleagues = support, sharing best practices, mutual assistance in case of problem
- complemeted by "federal groups" linking people with similar interests and expertise and challenges across assets
- "Peer challenge" = group members were expected to challenge each other on the targets they negotiated with headquarters (all available knowledge was used then)

Overall: - more outsourcing (was done – complementary)
- change organisational model led to success
- later: model applied to whole organisation, although definition of assets less clear in other parts of organisation

=> changes led to change in corporate culture as well

BP(X) in general
Discrete business units, peer groups, peer assists, small Executive Commitees for each stream, performance contracts, peer challenges

Elements are
- Focusing activities of firm to a select set
- BUs with clear responsibility and accountability
- Strong incentives for unit performance
- Linking units horizontally rather than communication up and down
- Flattening hierarchy, /span of control,
- Outsourcing
- Improved information measurement and communication systems
- Culture geared at delivering performance

Elements are complementary

Vertical Scope

Vertical disintegration
e. g. Nike, Benetton = "value chain orgniser" OR "vertical architect"
just managing value chain, not owning many of assets and only carrying few of activities needed to create value (BUT, maybe the most important one – branding, i.e. marketing)
also prevalent in electronics industry (electronic manufacturing services - EMS)

Theories mainly based on ONE-SHOT interactions with discrete parties
Reasons to buy-in
- others might do job more cheaply (because of econ. Of scale, as they supply to many, learning economies)
- greater focus (both at buyer and supplier)
  - \measurement and attribution problems = stronger incentives
- competition, better price setting (than internal transfer prices)
  - easier to induce competition between suppliers
  - esp. replacing external supplier

Reasons to make (pro vertical integration)
- Transaction costs, property rights
  - Protection of specific assets against hold-up (different view by deMeza, cf. his lecture notes)
- Protect intellectual property

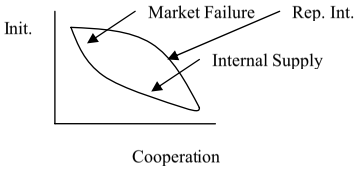
Vertical Firm boundaries can be driven by

Need for balanced incentives can,
Cf. expl. Sales agent (2 tasks: sales and information collection important)
- Own do in-house, pay salary and ask him to do both
- If external, hard to measure, hard to reward, would be too costly to so (cf. ch. 4)

Outsourcing Trade-off between
- Lower cost of production
- Increased transaction costs (from hold-up, information leakage, …)

Globalisation, better IT, communication, more flexible production systems (lowering threat of hold-up) etc. shifted the production-possibility frontier more towards outsourcing.

REPEATED INTERACTIONs in OUTSOURCING (Ongoing relationship, partnership, alliance.)



- Changes incentives,
- Allow more cooperation, while having higher initiative (Rep. inter. Shifts feasible combinations outward) cf. graph)
- Each party looks at creating value (instead of appropriating value)
- Relational Contract = shared understanding that they will cooperate and divide the resulting gains
  - Self-enforcing, because by looking into the future and weighing the discounted future gains vs. gains from defection now (appropriating value) it is in the self-interest of the party/ies to stay in the relationship, in other words: at each point in time PV of cooperation > PV defection

- REQUIREMENTS for successful partnership
  - Opportunity to create value through cooperation (partnership is better than supplying in-house or through market transactions)
  - This created value (gain) must be shared
  - For threat of punishment to be effective, injured party must be able to retaliate (e.g. ending relationship)
  - Cooperation is sustained more easily with
    - The larger the gains
    - The stronger/ worse the punishment threats

- Transgression must be observable

=> parties might gain by worsening their outside options (limiting choice = commitment) = more dependent on each other

- The more weight on future dealings
  - Low discount rate for future
    - Costs of capital: If low (e.g. interest rates are low), easier to maintain cooperation, because lower discount rate of future returns. Future matters much, i.e. money in the future is worth a lot.
    - Costs of capital also depend on firms' overall financial strength: E.g. strong firms are able to borrow at lower rates, thus they discount future less, more willing to sustain cooperation
    - In other words: 2 weak firms = hard to sustain cooperation. Even if strong firm in the partnership, if some reason future counts less, more likely to defect (e.g. cash crisis) (see below **)
  - Frequent interaction

How do principles flesh out in reality (mainly Toyota)?

1. not all product are acquired through long-term relations (might be better trough market e.g. commodities OR in-house, e.g. financial resource or human resource mgmt. or prod. development)
2. Selection of partners = Crucial (many resources devoted to)
   a. Establish basic understanding what the relationship is about

   => then contracts might be short and simple (Toyota)
3. Punishments
   a. Most severe form = ending relationship
   b. Make punishment credible, e.g. Toyota's "2-supplier policy", can always retreat on 2nd supplier, (or have that capability in-house, so, in case of defection of other party one could retreat to that capability)
      i. Benefits
         1. this allows for more nuanced incentives (than threat of termination), e. g. competition between suppliers can be induced, sharing information
      ii. Costs
         1. 2 relationships must be managed
         2. possibly, loss of econ. of scale
         3. subtly, in any of 2 supplier-relationships, there is (most likely) a little less value created than if Toyota had only one relationship

   Trade-Off
   - One supplier = more value created
   - 2 suppliers = less value created in each, BUT /threat of punishment => more cooperation
4. Transgression (most difficult part to observe, whether partner adhered to terms), because often behaviour is not directly observable, so in case of bad products delivered (other party cannot clearly say whether it is due to external circumstances or intended misbehaviour) = asymmetry of information + resulting problems
   a. Solution (at Toyota): Extensive information sharing, engineers visit plants, facilities, etc…

Weakness in Toyota's system

- Toyota might be too strong relative to suppliers
  - (Why doesn't it use this power to squeeze profits out of their suppliers?)
- Toyota too concerned about its reputation
  - (suppliers are organised within formal association => would know about any misbehaviour immediately)
  - Toyota borrows at low interest rates => future returns are not discounted much => future means a lot => reputation (for future) is important "looms large"

**Importance of weight of future returns (e.g. discount rate) "When immediate survival is at stake, longer term considerations are not very salient." Two examples from auto industry.

1. GM

   Put into place, extensive info. sharing system with suppliers.
   THEN. GM got into trouble (cash crisis) near bankruptcy, used info. to squeeze suppliers out = harmed their reputation YET behaviour was rational from GM point of view
2. UPF-Thompson – FORD (Land Rover)

   UPF = sole supplier of chassis for Rover's "Discovery"-model
   UPF, went into "receivership" run by KPMG
   Ford offered help, offering one-time payment to UPF and higher price per chassis (Ford was dependent on supplier)
   KPMG-run UPF asked for much more attempting to appropriate value through hold-up

5. Long-term relationships need to adjust over time
   - because of changing circumstance

   AFFECT
   - extent of cooperation that is possible
   - division of returns
   - appropriate mix of activities, parties undertake

   => For long-term to work = parties must be willing to adjust agreements "on the go"

   Xerox and Fuji Photo Film (formed Joint Venture) => Fuji Xerox (one of longest-lasting) roles, partners, activities, etc… all changed throughout
6. Each party must be concerned about their own actions, and what consequences it might have on the partnership, e.g. by changing returns of partnership (and thus affect possibility for continued cooperation)
7. Making parties more dependent on each other (AT&T)

Horizontal Scope

Reasoning for conglomerates (putting two different under common roof)
- what affect should this have on corporate value? OR
- Why should they have different value if separate?

OLD reasoning: Risk Diversification (like diversified portfolio) BUT doesn't make sense because shareholders can diversify themselves. (Actually diversified firm would restrict their choice because now cannot do it themselves).

COUNTER-ARGUMENT:

- maybe shareholders cannot diversify themselves easily
  - (e.g. in family-owned firms, firms cannot easily diversify through capital markets)
- stockholders cannot diversify their employment, through diversification (if cross-subsidization is possible) lowers risk of lay-offs, pay cuts
  - (value to shareholders might be that average total compensation is also lowered)
- Capital allocation within one company might be easier because informatonal asymmetries might be lessened within one firm (than through market transactions)
- Human capital allocation might be easier, since information flows more freely, because of culture (shared understanding, experience, language)
  - Might also allow development of human capital more easily, since more experiences can be offered
- Firm has under-utilized capabilities/ resources but cannot extend within current business (because not attractive)
- Externalities between businesses might favour integrating businesses because externalities require cooperation
  - Inducing cooperation within firm might be easier because can offer more muted or more balanced incentives
- Complementarities can be basis for interdependence between potentially separate businesses => integration
  - Expl. Sony (hardware – consumer electronics) buying Columbia Pictures and CBS Records (software – content)

Drawbacks of integration

- No leadership experience concerning business of new firm, little experience or understanding the new business
- Top executives' attention might be diverted from the core businesses
- Tension between businesses
- Capital Allocation = source of inefficiency
  - Risk-reduction for managers and employees might mean capital is not invested where it has highest-value use
  - Cross-subsidization might mean that incentives within businesses are muted (compared to stand-alone)
  - Single firm might mean more influence activities, or resources wasted to limit these
  - Methods to compete for capital (are different from market) more extensive opportunities to deprecate or sabotage others' projects
  - Empirically some of these points seem to have been shown in reality
    - Markets valued diversified firms less than sum of its constituents ("diversification discount")
    - Method: compare conglomerate with sum of individual companies in the same lines of business in terms of stock performance and investment choices
    - Result: conglomerate invests less into strong divisions (than focused companies in same business) and more into weaker ones
      - Explanation: influence activities – cross-subsidisation from winners to losers (2 interpretation)
        - Influence activities twisting actual choices
        - Firm adopted mechanisms that limit these influence activities (maybe by distributing capital more evenly than would be desirable for efficiency. Equality instead of efficiency)
      - Also empirical results questioning "diversification discount" based on potential cross-subsidisation
        - E.g. one study shows that business did not adopt too different capital allocation (i.e. the lines of business they invested in) before and after merger
        - In 1990s diversifying firms met with positive stock market reactions, in line with observation that often positive stock market returns to acquired firm and zero to acquiring firm = in aggregate value is created in mergers
        - Conundrum of GE, the most diversified and most profitable firm in the world
      - What to make of these seemingly disagreeing facts?
        - Sometimes value is created by diversification = managers choose these option, esp. if underutilised capabilities or resources
        - Sometimes by having focused companies

- Empire-Building?
  - Occurs sometimes
  - TODAY, CEOs have significant stock options that would decrease in value, or at least make them very sensitive to firm value

- Organisational design
  - Companies on their own might adopt different organisational designs (all dimension of P A R C) working optimally in the specific environment
  - Either – or – choice (both costly)
    - Managing various designs forms under one roof = complexity => /influence activities and loss of control
    - Making designs more common, similar (but then design might not be optimal anymore in the specific environments and individual business needs)

Summary: The logic of diversification

- diversification, if business focused on growth
- focus, if firm tuned in on delivering performance in current business (then one should also see other organisational changes targeted at increasing current performance (because of complementarities)
- if environmental changes allow business to grow even in existing lines than one would expect to see less diversification (less scope) (Roberts see one such change in globalisation, allows to enter new markets (grow geographically, not in scope) more easily, costs of transport\, communication\)

Internal Organisation and Peformance

How does internal organisation affect performance?

Changes of disaggregated, loosely coupled firms

- clarity about strategy and corporate policies
- dsicrete organisational units (often smaller than before) -> focus

1. give leaders decision authority over operational and strategic options
2. hold accountable for results

- delayering = fewer layers
- less central staff
- strengthen incentives at individual and unit level,
  1. desirably tied to overall performance as well
- more resources to management training and development
- /horizontal communication
- Improve information systems that allow more communication and better performance measurement

Elements linked by web of complementary relationships. One might see all being done altogether (cf. case of "Sealed Air Corporation" Wruck MN404). Look at effects of each move and see at its links with other elements

- Discrete units and decision-rights to unit leaders
  1. Improves incentives at unit level
     - Having responsibility is motivating in itself (also, you will invest more into your decision, if you have the rights to so (cf.Aghion/Tirole 1997)
     - If you have responsibility for dec., don't need to influence their decisions anymore (less resources wasted and more time for better decisions)
     - Delayering and less central statff augments these affects, /span of control, less resources to intervene at lower levels (credible commitment not to intervene, as you don't have resources to so anymore)= more responsibility at bottom-level
     - Delayering, small units decisions rights = complements
     - Clearer relationship between decisions/ choices and outcomes
       - Facilitates learning
       - /motivation
         - Higher intrinsic motivation because you see what you've done
         - Can provide better formal incentives because measurement is more accurate, i.e. easier, less costly

       => small units and more intense incentives are complements
         - Small units make formal incentives more valuable because free-rider problem is reduced and (stronger) norms can be implemented better
     - Incentive intensity AND measurement accuracy (MA) complements

       MA is increased with
       - Small units/
       - Better Info. Systems
       - Clarity about strategy -> clarity about what needs to be measured
       - (/MA allows broader span of control)
  2. /speed adoption of new information
     - Information is most available to frontline personnel, if they can make decisions => better decisions (if they know corp. strategy, etc..) and if measure directly linked to goals of corp. strategy
     - Most valuable if environment changing fast (because info. changes often)
     - Complementary to \vertical communication, \span of control, \clarity about strategy (if only through /MA)

- COSTs of empowering frontline
  1. quality of decision-making may worsen (b/c)
     - b/c middle managers are gone
       - lower levels might not have info about spillover effects
       - might not have incentives to account for these effects
     - BUT now top management closer to frontline, most likely there info. now is better (also through /info. systems), thus, if problem is passed up can base decision on good info.
  2. executive overload (middle managers gone)
     - dec. must move down => measures to increase dec.making by fronline managers and delayering = complements (COOPERATION needs to be induced)
     - frontline managers make better decisions if they can get the info about spillover etc. which was further in the head of the middle manager, overseeing two units, through /information systems, /horizontal communication, clear corp. strategy
     - link pay to measures in such way that people are incentivised to make decision taking account of effects on other units, i.e. link pay also to overall performance
  3. limited capabilities of unit/ frontline
     - ASK: Would middle-management or center of organisation do any better?
     - If not increase capability by training and development
  4. Some issues might be better addressed by center
     - Such as regulatory and environmental and governmental issues

     => matrix forms

Whole System

Logic of complementarities applies also to vertical and horizontal scope of the firm.
Some researchers have tested companies on their performance and to which extent the firms had adopted elements of this model:

- found statistically significant correlations between the elements of the model (e.g. adopting horizontal linkages and investments into IT and communication systems
- Those firms that had adopted all of the elements did considerably better (had best performance)
- worst-performing firms in sample were those that had only adopted a few of the elements (suggesting complementarity of elements)

=> do it all or nothing mix-and-match doesn't work

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