
OUTSOURCING

(make-or-buy)

- the framework -

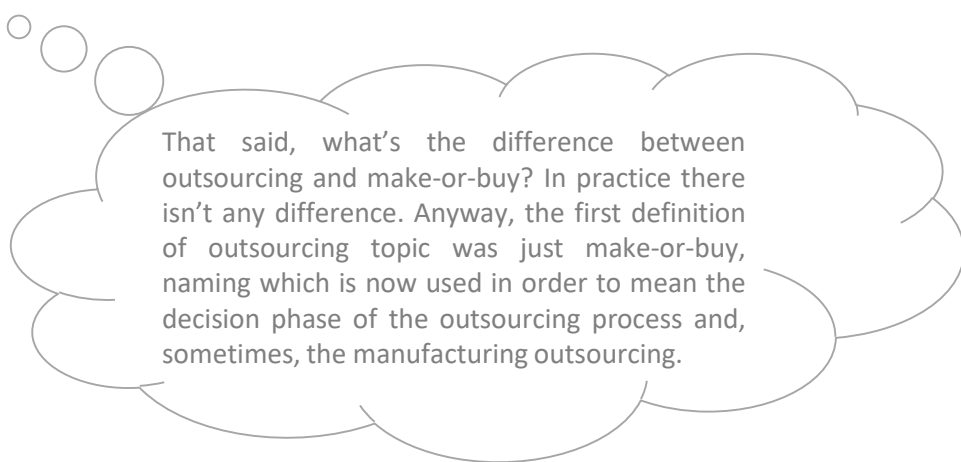
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Outsourcing – the framework - introduction

All businesses may be thought as a store. The choice is to get products from within (“make”) or from outside (“buy”). Balancing the pros and the cons allows an objective decision.

[P. Baily, D. Farmer, D. Jessop, D. Jones - Purchasing principles and management]

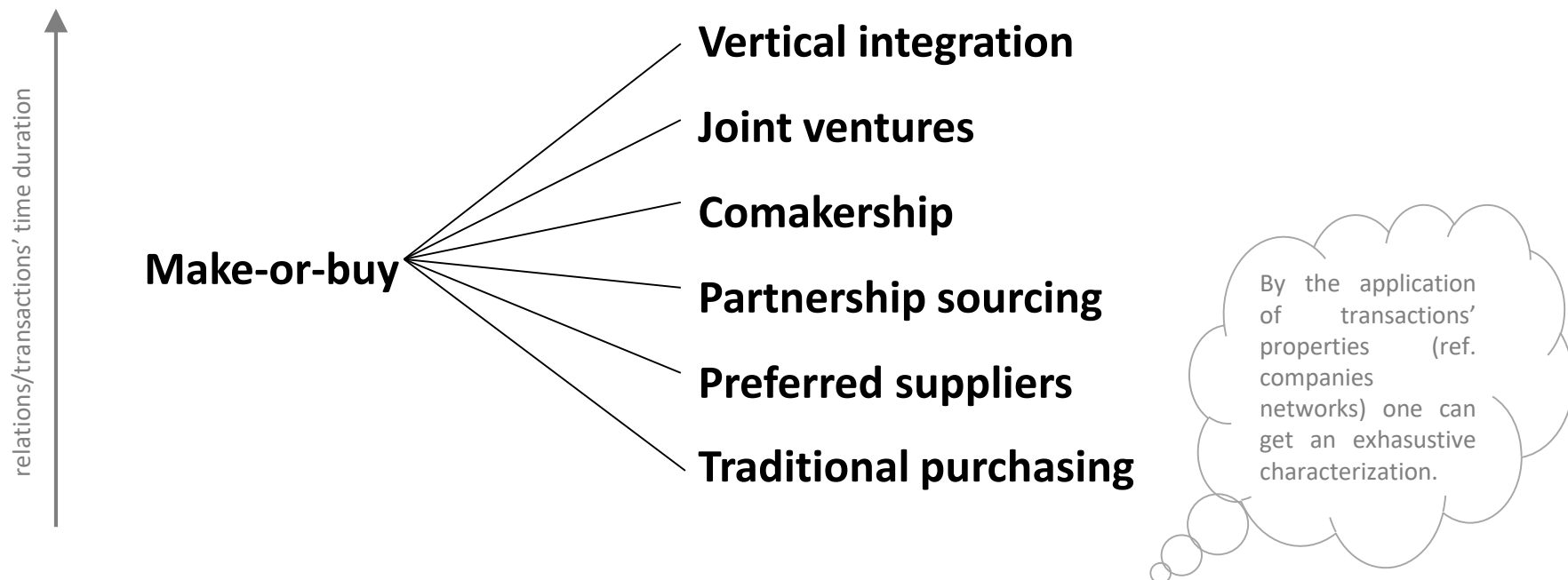


That said, what’s the difference between outsourcing and make-or-buy? In practice there isn’t any difference. Anyway, the first definition of outsourcing topic was just make-or-buy, naming which is now used in order to mean the decision phase of the outsourcing process and, sometimes, the manufacturing outsourcing.

Outsourcing – the framework - introduction

«Ok, so it would be an easy thing to manage outsourcing, it's just matter to tell your possible supplier what you want, that's both your quality and service expectations and to agree on prices ones, isn't it?»

«So and so. As a matter of fact it's mandatory to evidence your expectations, the matter is how much you must deepen them or, in other words, how much they're complexed. Coming to the previous slide sentence («... to get the product from within or from outside) and focusing the outside, there are several typologies related to the client-supplier interfacing.



By the way, one could say that the above typologies could be related with time duration of the client-supplier relation.

Outsourcing – the framework - introduction

As additional information, it's to consider that very few decades ago outsourcing methodologies lacked both about the outsourcing analysis and on their quantitative aspects as well (in the below table the «no» are more than the «yes»). **Anyway, why outsourcing became more and more important?**

Field	Terminology	Perspective	Factors considered	Comprehensive methodologies? Quantitative models?	Examples
Industrial Organization Theory	Vertical integration	Study of organizational phenomena	Behavior of economic agents, market dynamics, transactions costs, type of sourcing relationship, and sourcing risks	NO NO	Williamson (1981), Elram (1991), Walker (1988), Brynjolfsson <i>et al.</i> (1994)
Corporate/Business Strategy	Vertical integration	Strategic planning, competitive advantage	Phase of industry development, industry structure, corporate and business strategic objectives	NO NO	Harrigan (1985), Porter (1980), Buzzell (1983)
Purchasing/Supply management	Make-or-buy	Make-or-buy within overall supply management policies	Cost/operational based	NO	Cammish and Keough (1991), Dobler <i>et al.</i> (1984), Dale and Cunningham (1983)
	Sourcing			YES	
Strategic Operations Management	Initially, vertical integration. Now, strategic sourcing or strategic make-or-buy	Manufacturing or operations strategy, core competences, management of technology	Technology competitive position, technology maturity, importance of technology to competitive advantage, cost, and sourcing relationships and risks	YES	Ford and Farmer (1986), Venkatesan (1992), Probert <i>et al.</i> (1993), Welch and Nayak (1992), Grover and Teng (1993)
				NO	
Cost Accounting Managerial Economics	Make-or-buy	Economic analysis	Cost/operational based	NO	Gambino (1980), Tucker (1980), Yoon and Naadimuthu (1944)
				YES	
Operations Research	Make-or-buy or subcontracting	Capacity expansion, production planning, and cellular manufacturing design problems with make-or-buy options	Cost/operational based	NO	Roe (1972), Erlenkotter (1977), Uyar and Schoenfeld (1973), Lee and Zipkin (1989), Shafer <i>et al.</i> (1992)
				YES	

(Adapted from Padillo 1995).

Table 1. The make-or-buy problem in the academic and business literature.

Outsourcing – the framework –outsourcing basic targets

Outsourcing became more and more important mostly starting since the beginning of the 90's in relation with the importance of «focusing the company's core» in management patterns. A company's core can be roughly meant as the whole of a company's characteristics esteemed by the outside context and such to distinguish it by some other companies.

So, main target of outsourcing is

- **focusing on company's core**

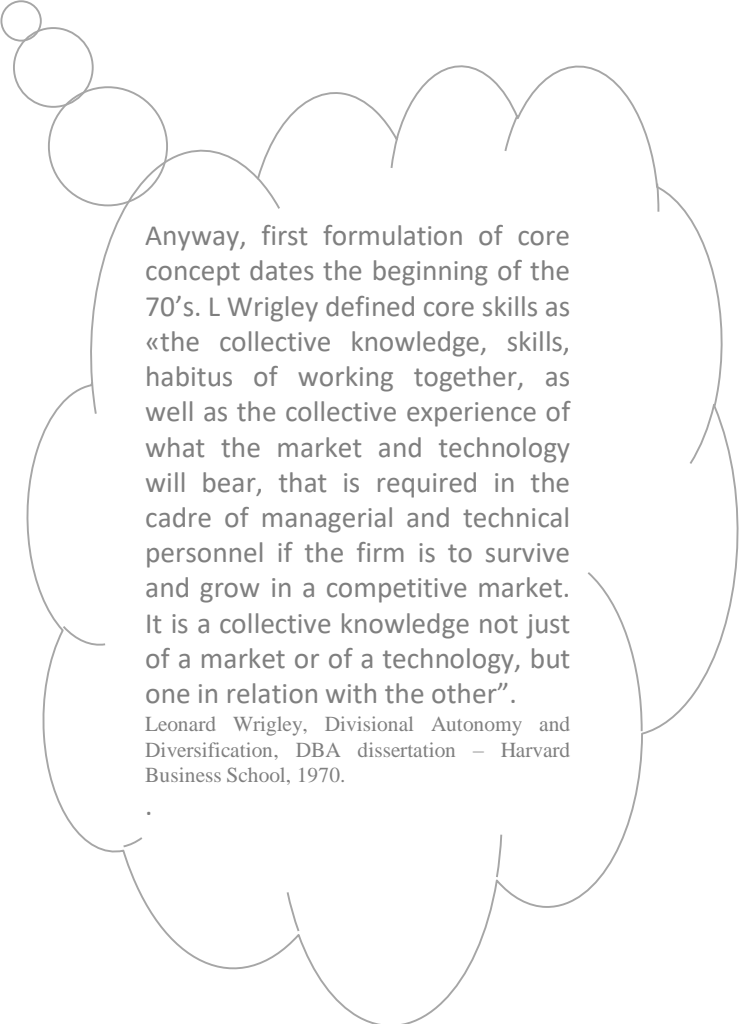
... and some other related ones are:

- **the ROI increase**

Indeed the finalization of investments just on core, that's just on the processes more able than others to improve the company's outcome, lets the ROI (Return On Investments) increase.

- **the supply chain as competitive advantage**

... which is just let by suitable outsourcing choices.



Anyway, first formulation of core concept dates the beginning of the 70's. L Wrigley defined core skills as «the collective knowledge, skills, habitus of working together, as well as the collective experience of what the market and technology will bear, that is required in the cadre of managerial and technical personnel if the firm is to survive and grow in a competitive market. It is a collective knowledge not just of a market or of a technology, but one in relation with the other”.

Leonard Wrigley, Divisional Autonomy and Diversification, DBA dissertation – Harvard Business School, 1970.

Outsourcing – the framework – outsourcing basic targets

In order to complete the relation between outsourcing and core's focusing: another reading of outsourcing is the implementation of a **lean organization**, which could be achieved following:

- the careful selection of activities and functions (that's the sharing between non core and core processes).
- the search of complementarity with external entities.

So, this means:

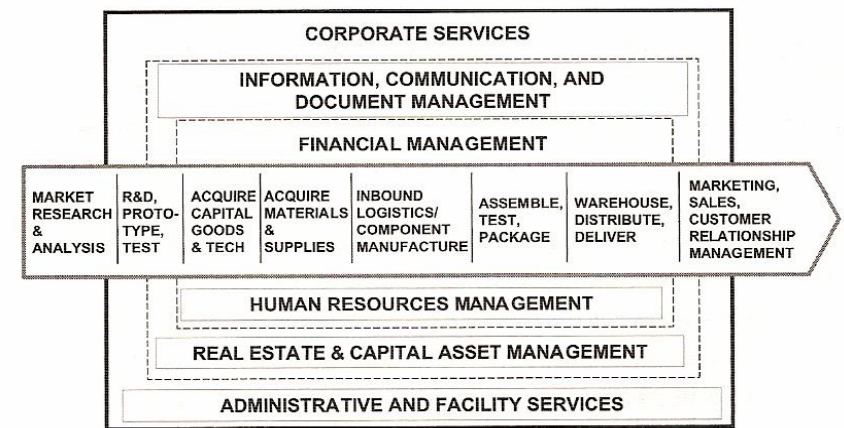
- to implement the «... vision of **extended enterprise** which builds its competitive advantage leveraging on resources located outside its boundaries»

[abstract from E. Bartezzaghi, M. Sassatelli – Migliorare le reti di fornitura]

- the achievement of **VO Virtual Organization** whose meaning can be better got looking at the definition of organization as «network of services which deliver value».

Complementary is defined as «two people or things are complementary when they're different but together form a useful or attractive combination of skills, qualities or physical features».
[Oxford Dictionary].

FIGURE 5.2 AN ORGANIZATION IS A NETWORK OF SERVICES DELIVERING VALUE TO CUSTOMERS



[M. F. Corbett – The outsourcing revolution]

Outsourcing – the framework – definitions

«But, what are the no core things which could be outsourced?»

«Some definitions can help, so ...»

- **outsourcing is the act of transferring some of a company's recurring internal activities and decisions rights to outside providers, as set forth in a contract.**

[M.F. Greaver II - Strategic Outsourcing]

- **specific modality of externalization whose subject is the extraction of complete activities' areas, both strategic and not strategic, and based on the partnership established between the company which outsources and another one which the market recognizes as specialist about he above areas management.**

[abstract from A. Ricciardi - L'outsourcing strategico]

- **... the transferring of an internal business function or functions, plus any associated assets, to an external supplier or service provider who offers a defined service for a specified period of time, at an agreed but probably qualified price.**

[J. B. Heywood - The outsourcing dilemma]

- **outsourcing is a process through which one or more processes linked to the production of a specific product manufactured by an organization A – such processes are decisive in order to enable product's features to match the expected requirements and so the above processes themselves are included in the organization A's quality system – are committed by a contractual base to an organization B which looks after their carrying out (about that all the processes related to a product could be outsourced).**

[abstract from Sincert - Linea guida ISO 9001- 2000]

- **... make-versus-buy can be a complex analytical tool. But it is simple in concept, “should our company make this item or buy it?”. Competitive advantage exists when you make products efficiently, and you buy what others can make more economically.**

[V. Pooler, D. Pooler - Purchasing and supply management]

- **... the process of determining the make versus buy policy ... as a key step in the process of determining capacity.**

[T. Hill - Operations Management]

Outsourcing – the framework – definitions

Several topics (the cyan typed ones) come from the definitions.

- ... make-versus-buy can be a complex analytical tool. —→ ... besides technical and economic analysis, it could include **financial and strategic** ones as well.
- ... the process of determining the make versus buy policy ... as a key step in the process of determining capacity. —→ ... outsourcing is **related to the operations' strategy**.
- ... internal activities and decisions rights to outside providers, as set forth in a contract. —→ ... a **contract** must stand and include any **rule/agreement about decisions**.
- ... complete activities' areas, both strategic and not strategic, and based on the partnership. —→ ... one outsources the **whole of specific areas**.
 - Issues related to such areas could include strategic (next to the core) ones. **Partnership must exist**, so outsourcing is characterized by the sharing of targets and processes' contents.
- ... internal business function or functions, plus any associated assets, to an external supplier or service provider who offers a defined service for a specified period of time, at an agreed but probably qualified price. —→ ... **processes' hardware are generally outsourced** as well (ref. to assets). In order to define the right ratio between quality and price, expectations must be detailed.
- ... are committed by a contractual base ... about that all the processes related to a product could be outsourced ... —→ ... every process could be outsourced, so it means to properly measure the distance from the core. ... outsourcing off all processes means **to outsource the whole operation's areas**.

outsourcing differs from purchasing because «you outsource a process not a product».

Outsourcing – the framework – typologies

One could sum up the upmentioned topics as in the following.

So, first it's to say that outsourcing is about processes not products: indeed one outsources processes related to specific products and doesn't buy products as it's in standard purchasing. This means that, looking at its-own expected results and time targets, one must suitably rule about decisions on the processes themselves, that for instance could be decisions about process organization (lay out, raw material and components' suppliers, workers' skills etc.) and also on improvements.

To define rules means to draft a contract, and/or suitable agreements, in which the expectations both on quality and on price must be defined and their linkage (ref to the quality/cost level) made clear, as well as the improvement actions system must be included. Anyway, partnership's will (whose main ingredient in rough words is trust between the parties) must exist.

That said and considering that outsourcing is based on no core processes, there will be a gradation of distance from the core: indeed some processes like operations ones can be nearer to the core than others as supports products and services are.



At the end, suitable models for outsourcing have to be based on:

- **the distance of the outsourced areas from the core**
- **the targets (including time)**
- **the relationship level one wants to establish with the outsourcing provider** (that's with the supplier of outsourcing services).

Outsourcing – the framework – typologies

The below table shows a thorough example of potential outsourcing things.

Anyway, it's to consider that what showed must be read in a relative way, indeed:

- **not all the items which could be potentially outsourced are showed.** In this case as well it depends by a specific company characteristics.
- **the location of the showed items is dependant by a specific company's characteristics.** For instance: may be that human resources shifts to the strategic area or to the operational one, design could shift to high complexity or to low complexity areas etc.

It's to say that one can understand the suitable positioning after an exhaustive organization analysis / investigation on the company's processes.

Activities grouped in relation of their complexity and proximity to the core bus

		High complexity area		Strategic area	
		Human resources, Adimistration, Performance audit, Education, Information systmes, Logistics etc.		Design, Development, Purchasing, Manufacturing, Sales.	
COMPLEXITY	high				
	low	Operational area		Low complexity area	
		Contability, Wages, Security, Complementary Services (canteen, guardianship, wastes removal, maintenance, company'fleet etc.).		Low complexity manufacturing (mature processes, internal logistics, packaging etc.)	
		low			high
PROXIMITY TO THE CORE BUSINESS					

[main source: Accabi-Lopez (1995, 46)

[abstract from G.L. Gregori - L'evoluzione del processo di outsourcing nelle strategie di sviluppo delle imprese]

Outsourcing – the framework – typologies

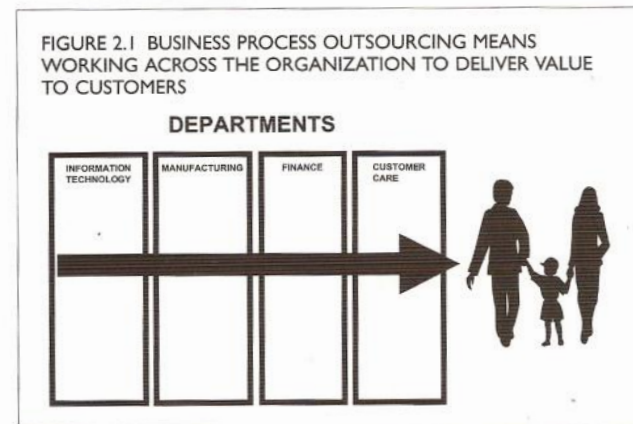
That said some current business' namings come just from the grouping of outsourced items. The most important ones are:

- **Business Process Outsourcing (BPO)**

In practice BPO is based on processes analysis, that's possible outsourcing subjects are investigated on their-own processes and on the related links. Such way should guarantee consistency on the selection of the potential outsourceable subjects.

... when process thinking is applied to outsourcing, it becomes business process outsourcing, or BPO. BPO shifts the focus of traditional outsourcing and the way that relationship with outside specialists are defined and implemented – within discrete departments - toward a process-centric, end-to-end view of the business activity.

[M. F. Corbett – The outsourcing revolution]



- **Facilities management**

Multidisciplinary method of designing, planning and management of the whole no core services which support primary processes and which are necessary for an effective and efficient working of an organization. Such service are particularly related to the real estate.

[abstract from De Toni - Open Facilities Management]

Facilities Management has had a quite important growth during last decade. In its extended form it realizes something not far from Virtual Organization concept.

Such form can be called Extended Global Service (EGS): «EGS can therefore be designed as an enlargement of the Global Service application on the two dimensions related to the variety of the no core items and to their processes control».

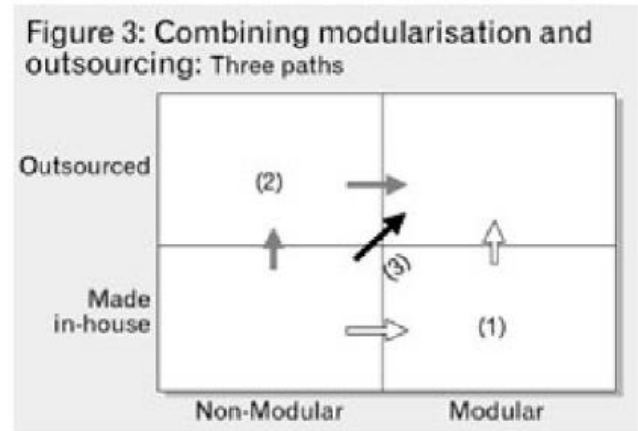
[D. Sorrenti, C. Noè – Extended Global service: a model for Facilities Management evolution – CNIM conference 2006]

Outsourcing – the framework – typologies

• Transformational outsourcing

Transformational outsourcing involves a re-engineering of the involved processes. Such activity is done both for improvement and in order to fit the outsourced process offers of the outsourcing's providers. In the end it's done in order to optimize both quality and costs.

About transformation outsourcing it's useful to lay down the process accordingly to modularity criteria, when a priori a module will be a process' phase standardized accordingly to the above offers.



Implementing modular strategies

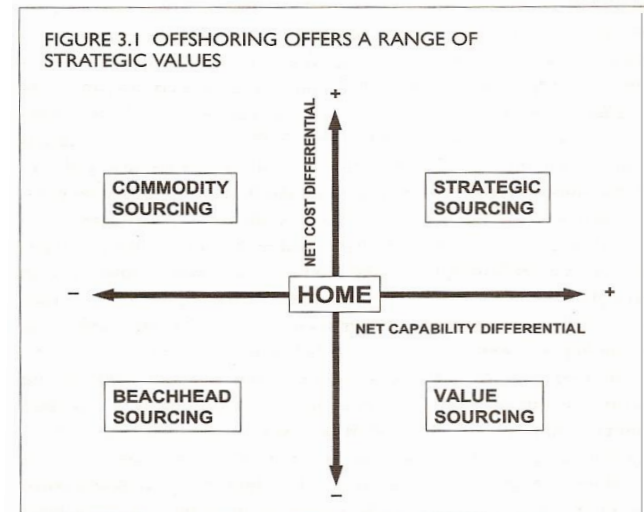
[M. Sako, F. Murray - 1999]

• Offshore

Offshore outsourcing is the practice of hiring an external organization to perform some or all business functions in a country other than the one where the product will be sold or consumed.

- Architects, developing blueprints from sketches, earn \$250 per month in the Philippines as compared to \$3,000 per month in the United States.⁹
- Java programmers in India earn \$5,000 per year verses \$60,000 per year in the United States.¹⁰
- Aerospace engineers in Russia earn \$650 per month as compared to \$6,000 per month for their U.S. equivalents.¹¹
- A top electrical engineering graduate in India earns \$10,000.¹²
- U.S.-trained and -licensed radiologists in India read X-rays, MRIs, and CT scans for less than half their U.S. counterparts.¹³

[M. F. Corbett – The outsourcing revolution]



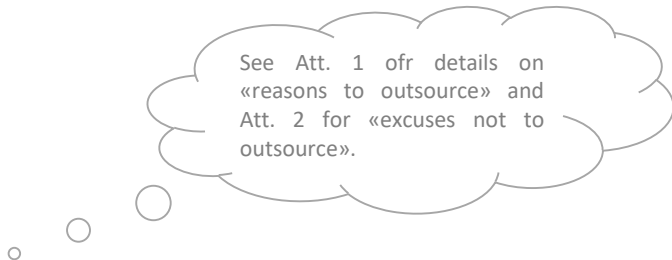
Outsourcing – the framework – targets' deployment

Now, taking into account the ROI optimization as light tower of any outsourcing process, such target can be suitably resolved into some other topics like the ones showed here below:

Reasons to outsource

- Organizationally driven reasons
- Improvement driven reasons
- Financially driven reasons
- Revenue driven reasons
- Cost driven reasons
- Employee driven reasons

[M.F. Greaver II - Strategic Outsourcing]

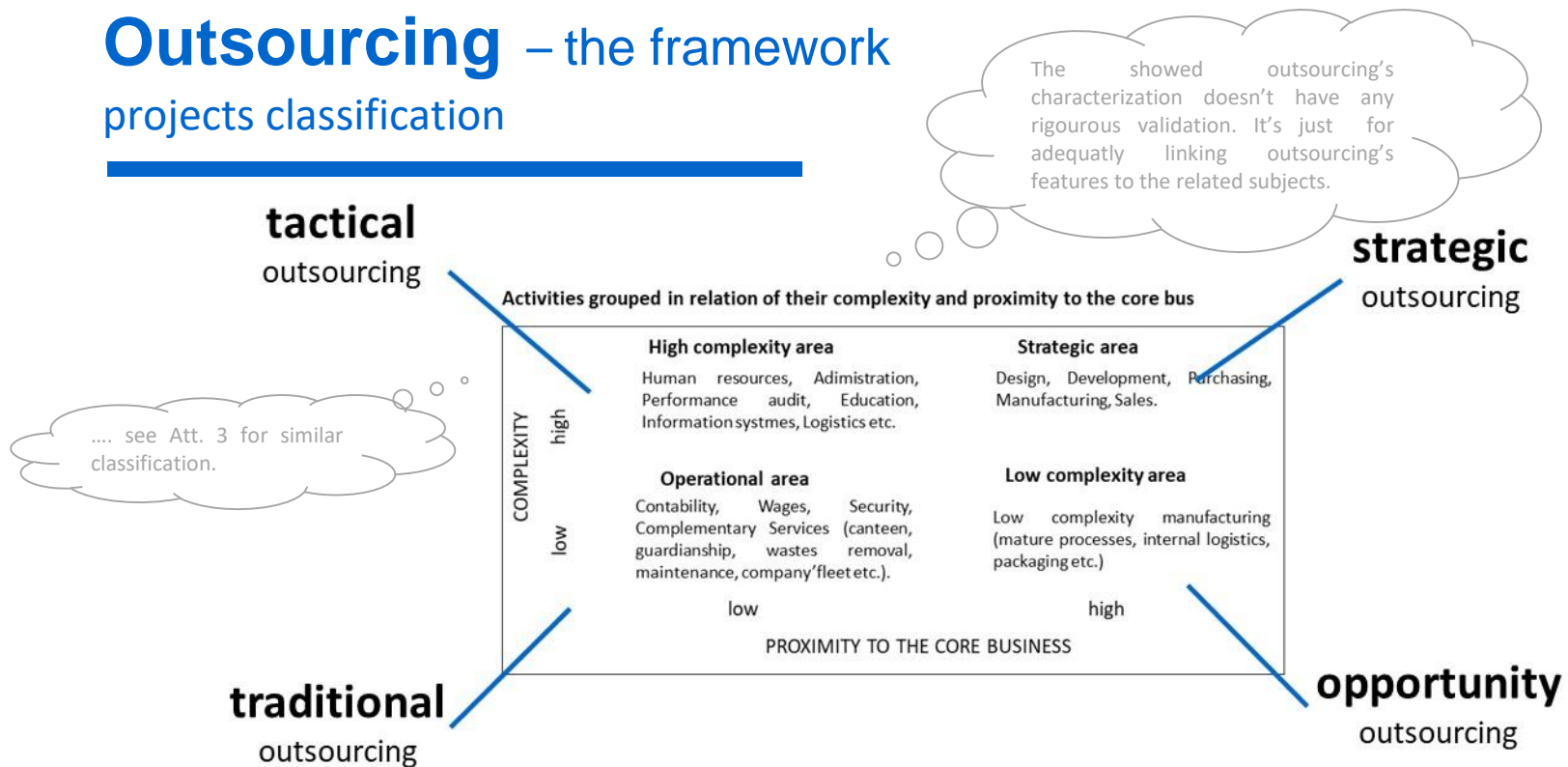


See Att. 1 ofr details on «reasons to outsource» and Att. 2 for «excuses not to outsource».

... anyway, besides the above reasons, of course **both the time expectation and the distance from the core are very important in the shaping of an outsourcing project.** Such factors lead to another classification on the outsourcing projects, as showed in the following slide.

Outsourcing – the framework

projects classification

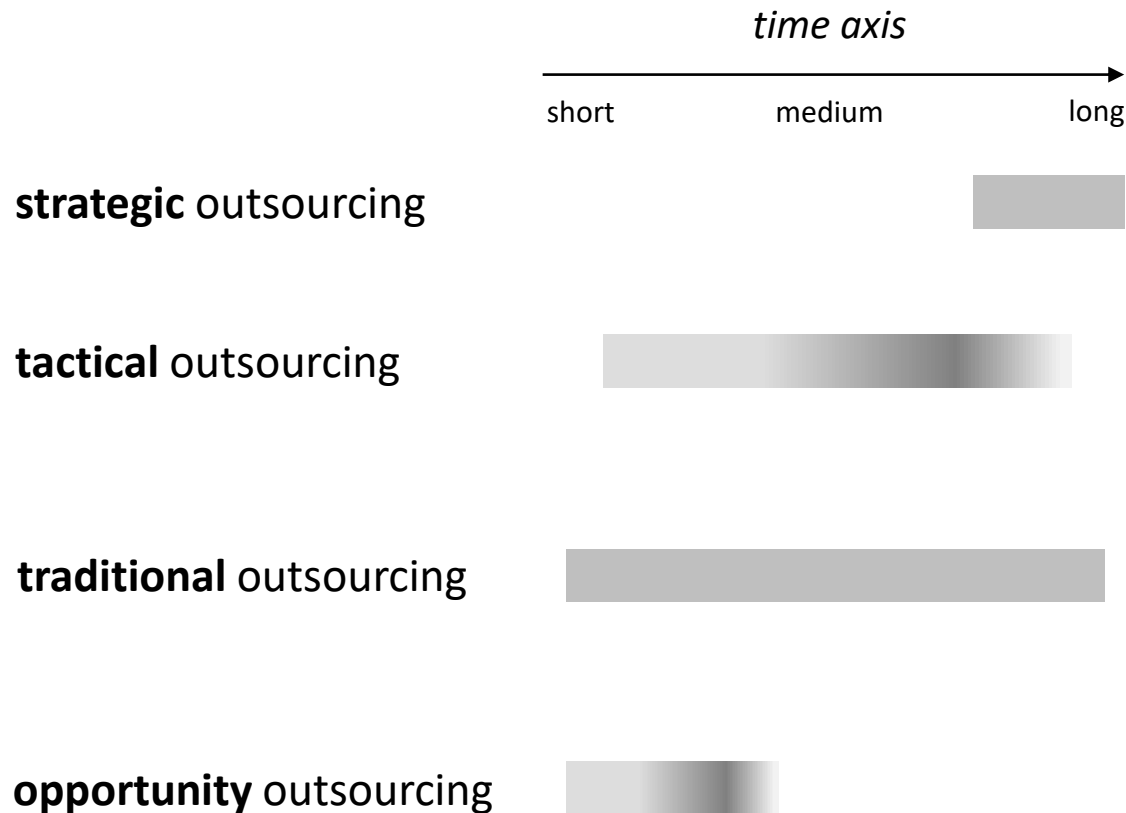


The meaning of the showed attributive adjectives should be explanatory, indeed:

- the meaning of «**tactical**» is «a way you look at in order to achieve something»: so tactical outsourcing is related to complexed and quite relevant topics on which a company can't have a significative know-how (as a matter of fact they're far from the core), so outsourcing would be the best solution in order to optimize quality and costs (the alternative would be a company knowledge's development on them, but, looking at the distance from the core, such choice woudln't be sensible).
- **strategic** outsourcing characterization comes from understading outsourcing as a tool useful for a deep change of a company's structure (indeed it could mean to achieve Virtual Organization).
- **traditional** outsourcing's adjectivation is simply because the involved subjects are the ones traditionally outsourced: indeed on them no company could have any interest on know-how improvement (of course besides the ones belonging to specific subjects' sectors).
- **opportunity** outsourcing is referred to the use of outsourcing both about not relevant phases of core processes (for instance, as packaging could be) and mainly as chance to solve extemporary troubles, like lackness of capacity for production.

Outsourcing – the framework - projects classification

... that said, the time expectation comes from the classification itself.



for the same meaning of strategy, strategic outsourcing will be referred to the long term.

the meaning of tactical strategy implies that it can't be so long, at the same time the related subjects are quite complexed. So, it tactical outsourcing should be balanced on the medium-long term.

traditional outsourcing duration can take any length in dependance by the client's satisfaction and by the improvement opportunity. Indeed, the low complexity of the related subjects lets a relative not difficult exploitation of possible possible improvements opportunities.

for its-own definition and in opntrapostion with strategic outsourcing, the opportunity one is wellbalanced on the short ter. This is particularly true in case of outsourcing as solution for possible extamporary lackness.

... and what about partnership?

Outsourcing – the framework - partnership meaning

So, first a definition of partnership

A commitment to both customers and suppliers, regardless of size, to a long-term relationship based on clear, mutually agreed objectives to strive for world class capability.

[Partnership sourcing Ltd – Making partnership sourcing happens]

The answer comes from the definition itself:

Partnership intensity is related to the transactions' duration and, at the same time, a necessary ingredient for long-term ones.

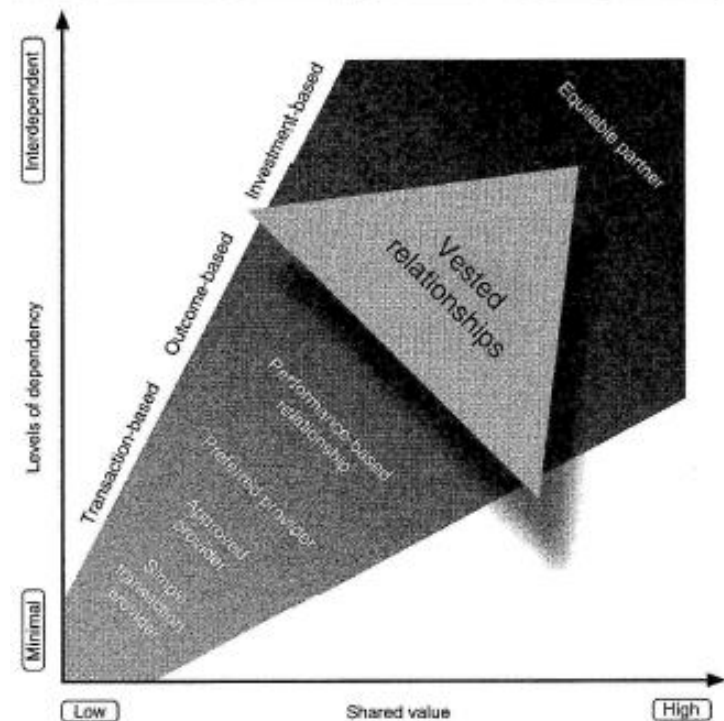


... consequently

Partnership must be set-up for strategic and traditional outsourcing, anyway, providing an adjusted managing of it, one mustn't ignore it for tactical and neither for opportunity outsourcing as well.

... indeed, what's the most common cause of outsourcing's flops?

Figure 3.1 Business Mapping Framework



[K. Vitasek – The vested outsourcing manual]

Outsourcing – the framework - causes of failure

... consequently

the most common cause of outsourcing is lackness of quality



... and where lackness of quality origins from?

Besides any business fraudulent behaviour and considering that quality is «satisfaction of explicit and implicit expectations» lackness of quality comes from not having well clarified the parts' targets.



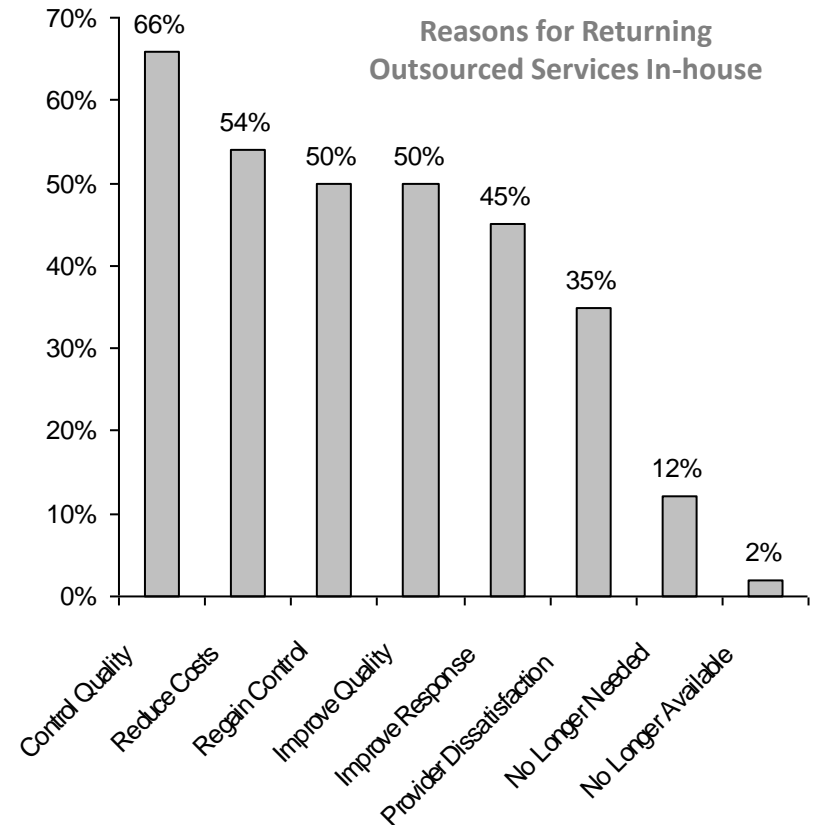
... in the end one can say tha, being partnership based on agreed objectives (that's on target sharing), **outsourcing flops come from lackness of implementation of an effective partnership.**



And how partnership can be built?

first one must define its-own targets, which can't be improvised, as well as the provider's choice must be prudent. In other words, the establishing of partnership and, more in general, **a successful outsourcing comes as outcome of a well managed project.**

... and what does a well managed project include?,

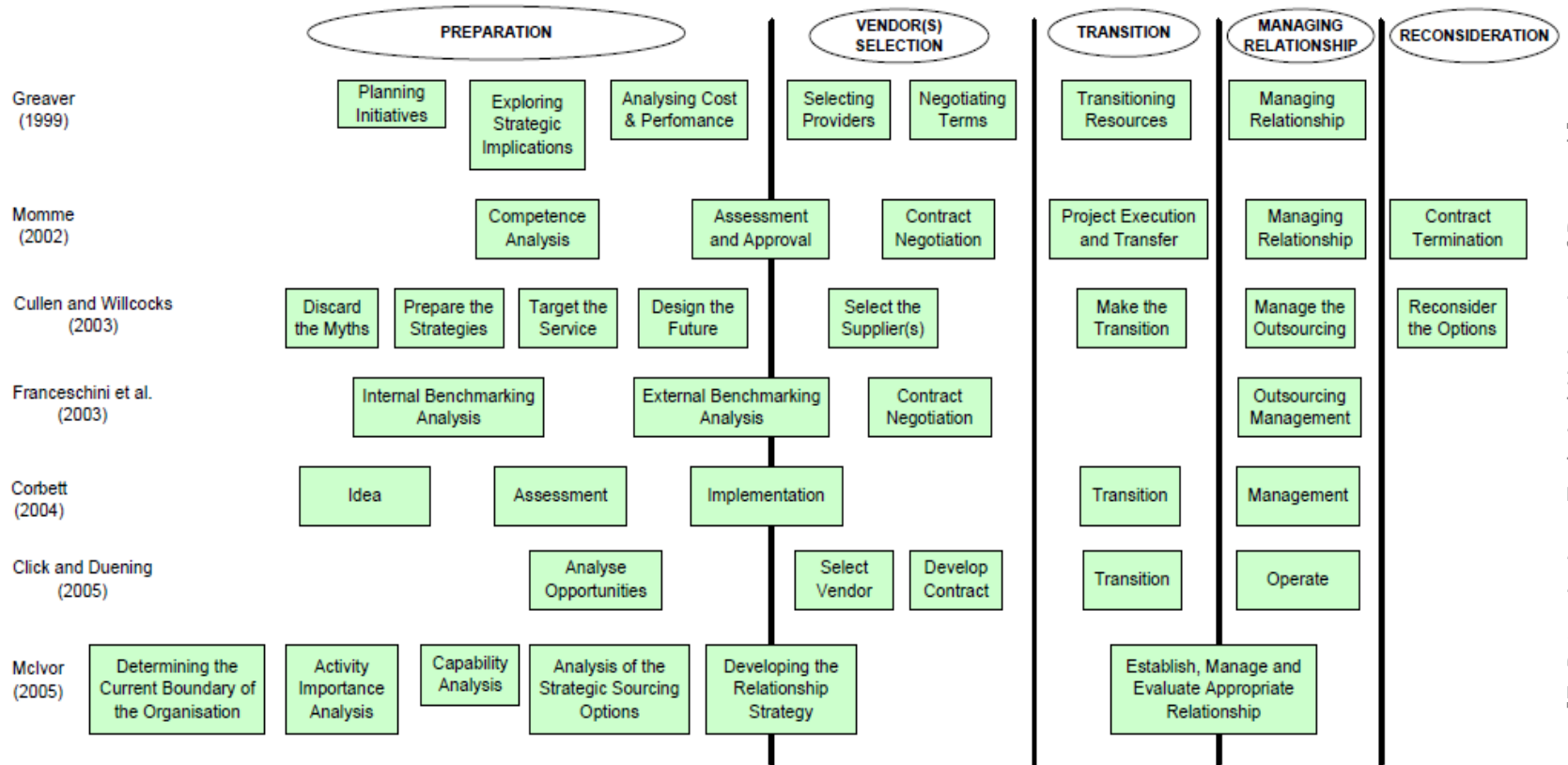


Source: International Facility Management Association / Association Management

Outsourcing – the framework - project's patterns

... and how to well manage it? You can manage it applying simple project management criteria, so

Besides any business fraudulent behaviour and first one must define it-own targets, that's starting from a sound investigation on real targets and on what outsourcing could imply. Here below an exhaustive framework of outsourcing process.



[Z. Petruniovic, - Technical University of Denmark]

Figure 1 - Overview of the outsourcing process frameworks

Outsourcing – the framework - project's patterns

... just some further words on outsourcing process' phases.

we already said that preparation is focused on the targets definition, but at the same time it must include how the company will have to work about the project.

... and the provider relationship must be kept in a «lively state» through continuous improvement.

of course the provider choice is the core of the whole process ,

... as last but not least: «make-or-buy decisions taken at one moment in time are often not reconsidered at a later date. Inertia, a reluctance to add additional executive tasks and avoiding possible short-term problems militate against taking appropriate reviews. Once made, make-or-buy decisions often remain unchallenged».
[T. Hill - Operations Management]

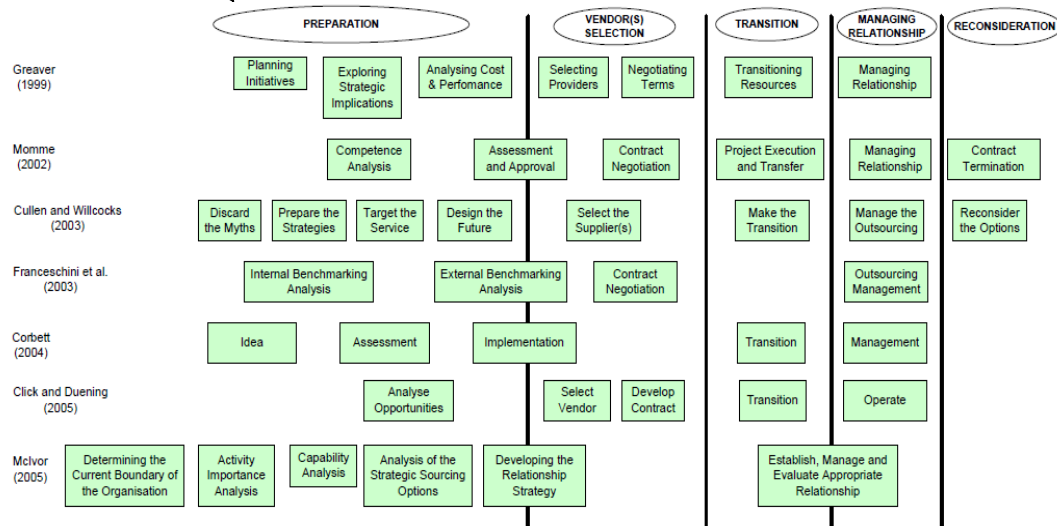


Figure 1 - Overview of the outsourcing process frameworks

Outsourcing – the framework - project's patterns (ref. manufacturing)

... further notes on outsourcing process' phases, specifically on **manufacturing outsourcing**.

The outsourcing processes showed in the two previous slides are certainly good as general reference, and so applicable for any case. However, it's to consider the **significant difference of complexity between outsourceable topics far from the core and the next ones. Such matter is particularly relevant in case of full business areas, like for instance manufacturing.** One can perceive the above complexity just looking at the right side drawing.

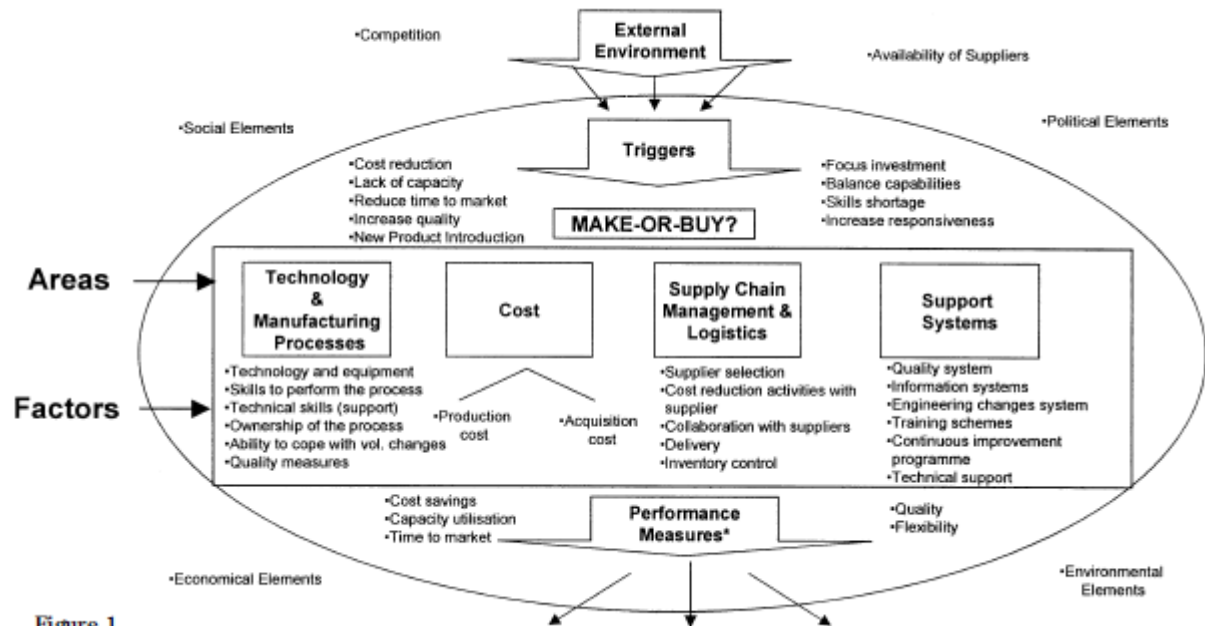


Figure 1.
Make-or-buy framework

[L.E. Cáñez, K.W. Platts, D.R. Probert – Developing a framework for make-or-buy decisions , 2000]

What mentioned about manufacturing outsourcing could be related to VO Virtual Organization's project, that's in case of strategic outsourcing.

Outsourcing – the framework - project's patterns (ref. manufacturing)

... additional words on **manufacturing outsourcing**.

While the limits of general no core items can be better set, or, in other words, while the related processes usually cross no or few other ones (for instance: about them you can think to canteen, company's fleet etc., whose contents and the linked processes are quite circumscribed), the opposite is in manufacturing items where some processes could be related to different products and anyway usually crossed by several others (as example, one can consider a process whose inputs are sub-assemblies coming from other processes or just the supply of some parts). That said, **manufacturing outsourcing is more complexed. Indeed one must first suitably infer on the competitiveness of the outsourceable processes and then, by the linkage with the products made on them, define suitable actions** (as shown by the below drawings).

Generally, competitiveness' analysis must be quantified on the four typical manufacturing variables, that's costs, quality, lead time and flexibility..

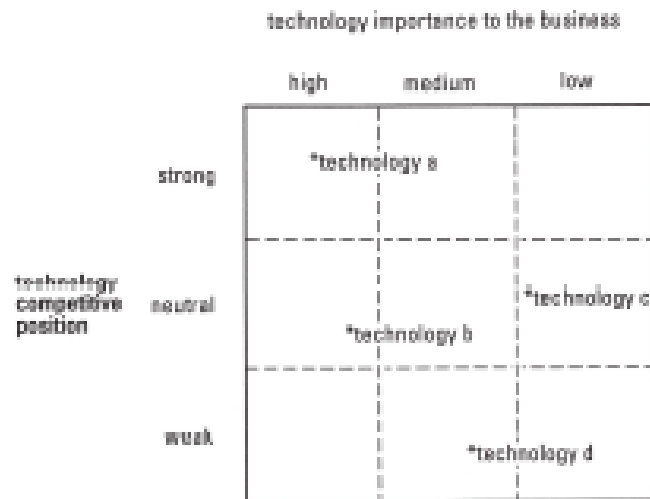


Fig. 2.7 The technology competitiveness/importance matrix

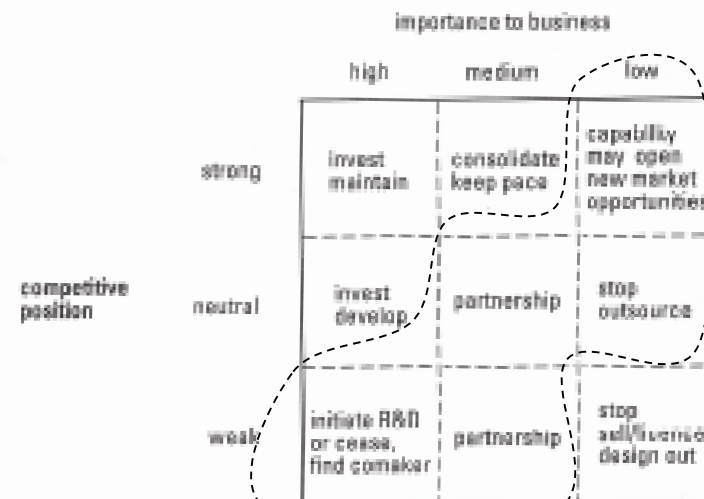


Fig. 3.2 Generic sourcing strategies

Activities areas inside the dotted line are the ones involved by outsourcing projects, anyway, by «leveraging on external resources».

[abstract from D. Probert – Developing a Make or Buy strategy for manufacturing business]

Outsourcing – the framework - project's patterns (ref. manufacturing)

... last notes on manufacturing outsourcing.

First, for manufacturing strategic outsourcing one must consider several and important topics.

At any rate, looking at technological processes the linkage between products and processes must be carried out in a sound way (the below pattern just suggests for «product architecture definition» and «manufacturing technology definition», then for «architecture/technology relationship»).

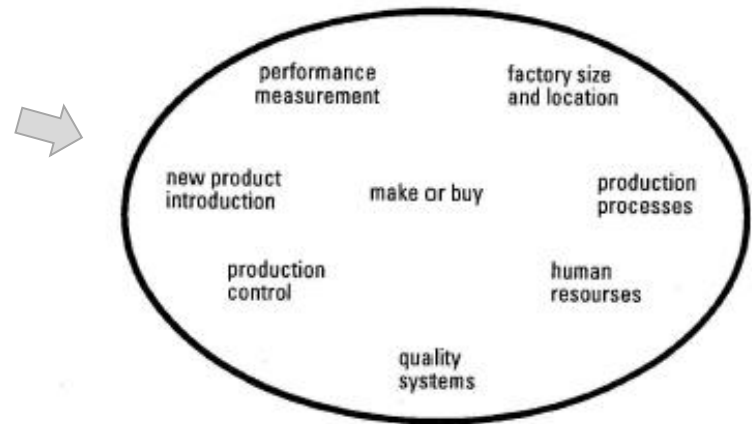


Fig. 2.2 Make or buy is at the centre of a company's manufacturing strategy

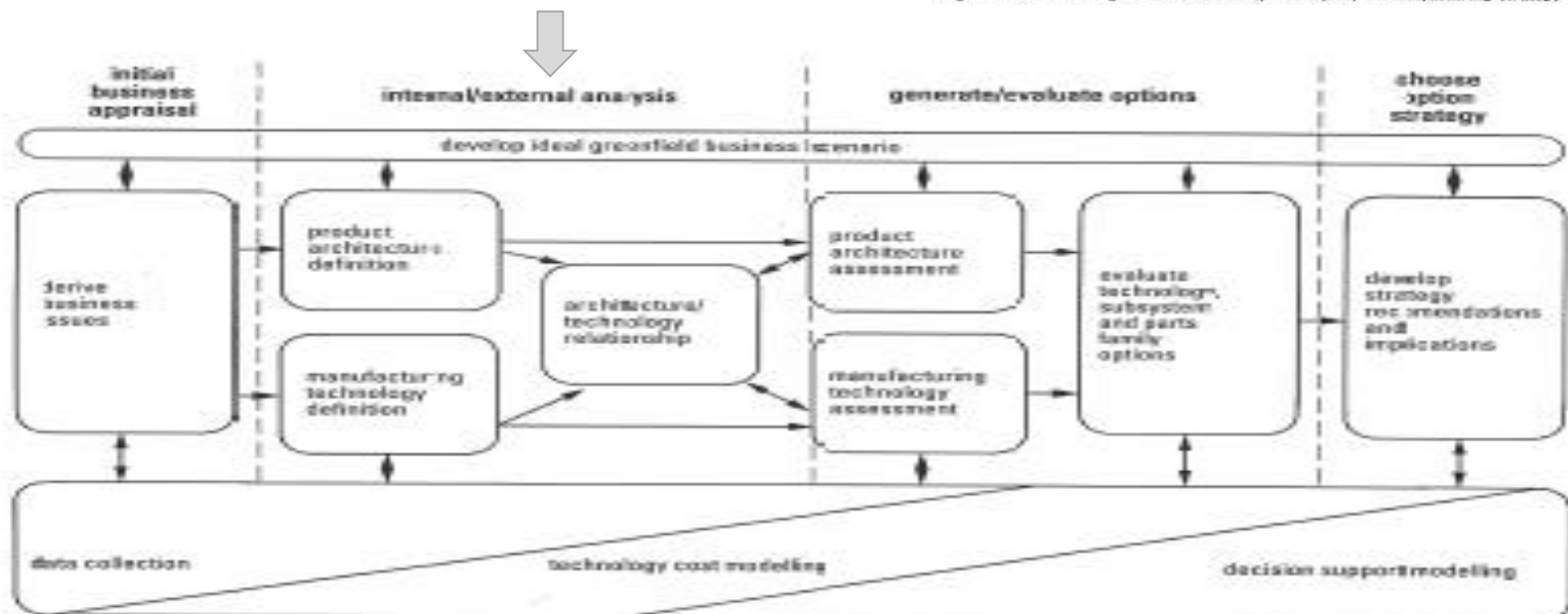


Fig. 4.1 Strategic make versus buy methodology

[D. Probert – Developing a Make or Buy strategy for manufacturing business]

Outsourcing – Att. 1 – Details on “reasons to outsource”

- **Organizationally driven reasons**
 - enhance effectiveness by focusing on what you do best
 - increase flexibility to meet changing business conditions, demand for products and services, and technologies
 - transform the organization
 - increase product and service value, customer satisfaction, and share-holder value.
- **Improvement driven reasons**
 - improve operating performance
 - obtain expertise, skills, and technologies that would not otherwise be available
 - improve management and control
 - improve risk management
 - acquire innovative ideas
 - improve credibility and image by associating with superior providers.
- **Financially driven reasons**
 - reduce investments in assets and free up these resources for other purposes
 - generate cash by transferring assets to the provider.
- **Revenue driven reasons**
 - gain market access and business opportunities through the provider’s network
 - accelerate expansions by tapping into the provider’s developed capacity process, and systems
 - expand sales and production capacity during periods when such expansion could not be financed
 - commercially exploit the existing skills.
- **Cost driven reasons**
 - reduce costs through superior provider performance and the provider’s lower cost structure
 - turn fixed costs into variable costs.
- **Employee driven reasons**
 - give employees a stronger career path
 - increase commitment and energy in not core areas.

[M.F. Greaver II - Strategic Outsourcing]

Outsourcing – Att. 2 – Details on “excuses not to outsource”

Excuses not to outsource

- Uncertainty
- Loss of control
- Conflict
- Employees unhappiness
- Financial
- Excuses

[M.F. Greaver II - Strategic Outsourcing]

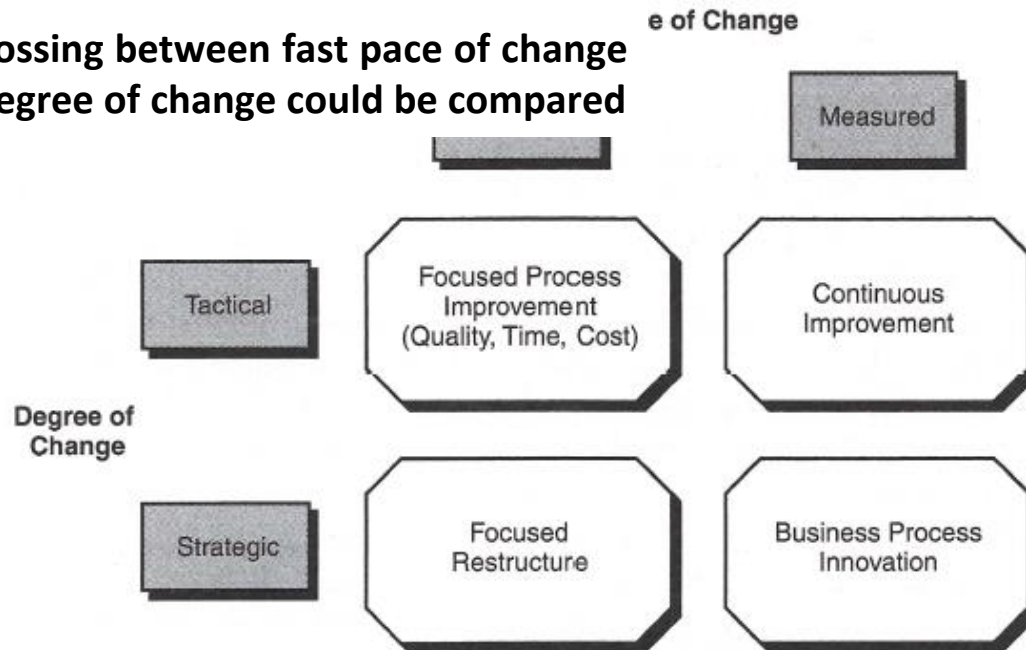
Outsourcing – Att. 2 – Details on “excuses not to outsource”

- **Uncertainty**
 - significant uncertainty exist
 - existing costs are not well understood
 - anticipated savings will never materialize
 - providers’ excellence reputations are underserved
 - superior providers to the existing internal unit do not exist
- **Loss of control**
 - will lose control over provider
 - will become dependent on providers
 - will lose cross-functional skills, informal networks, and corporate learning
- **Conflict**
 - will lose core competences
 - will lose confidentiality
 - the conflicting interests between the parties will never work
 - providers could expand into our business
- **Employee unhappiness**
 - will fail to fulfill corporate responsibility to preserve jobs
 - may undermine employee loyalty (what kind of message will be this send to the rest of the employees ?)
 - will lessen commitmet to our community
 - will damage morale of all employees, not just those outsourced
- **Financial**
 - providers cannot do these same activities, earn a profit, and give a price that is less than the internal unit
 - will lose economies of scale
- **Excuses**
 - it needs more study
 - we’re too busy to study that now
 - it’s a good idea, but the timing is bad
 - several pilot projects need to be successful first to prove it works
 - customers will hate this
 - there are too many hidden costs to outsourcing
 - we would never actually terminate employees who would not transfer to the provider

Outsourcing – Att. 2 – Further classification of outsourcing

The above sketch suggests interesting considerations: Transition to Operational Change

- indeed the crossing between fast pace of change and tactical degree of change could be compared



Thomas H. Davenport, "Need Radical Innovation and Continuous Improvement? Integrate Process Reengineering and TQM," *The Planning Forum* (May/June 1993), page 8.

[M.F. Greaver II - Strategic Outsourcing]