The Evolution of Outsourced Operations - A Five-Phase Model

A Case Based Approach

Kimmo Pekkola[1], Riitta Smeds[1], Heli Syväoja[1] and Pekka Turunen[2]

1) *Helsinki University of Technology, Business Process Networks, SimLab, P.O. Box 9560, FIN-02015 HUT, Finland. Email: {kimmo.pekkola, riitta.smeds, heli.syväoja} @hut.fi*

2) *EC Project Solutions Oy, Särkiniementie 3A, FIN-00210 Helsinki, Finland. Email: pekka.turunen@ecprojectsolutions.fi*

Abstract: This article presents a framework to study the development of an inter-firm relation in the context of transformational outsourcing. Current literature is mostly focussed on studying the motivations and rationale for outsourcing. However, the value added of outsourcing can be realised on the operational level only after the outsourcing event. This occurs in a process between Outsourcer and Supplier. Considering the development of the operational inter-firm relationship at the strategic level before the outsourcing decision can provide opportunities to gain value, whereas neglecting this approach creates challenges.

Key words: Business, Process, Outsourcing, model

1. INTRODUCTION

Outsourcing is currently a central topic among IT companies as they strive for enhancing efficiency to survive in the current market environment (SAWHNEY 2003). It is also a topic of increasing academic interest (WILLCOCKS, KERN 1998). Most outsourcing research focuses on decision-making based on environmental analyses, or analyse the outsourcing event itself (KESSLER et al. 1999; KAKABADSE, KAKABADSE 2000; McIVOR 2000) rather than studying the development of the outsourced operations after outsourcing. Further analysis on the development of outsourced services is needed (KAKABADSE 2000). Longitudinal studies could reveal new knowledge on institutionalisation and adaptation in the context of outsourcing (KERN, WILLCOCKS 2002).

In this study, a longitudinal view on the development of an inter-firm relation and the implications on the business logic and organisation, leads us to analyse the process to achieve outsourcing goals. Two case examples are discussed.

2. RESEARCH METHODOLOGY

The research methodology of the study is a mixture of grounded theory building (GLASER, STRAUSS 1967; STARRIN 1997) and case study approach (YIN 1981). Theory-generating case study by EISENHARDT (1989) is very similar to the grounded theory approach, because it is based on material collected without hypotheses, and it formulates new concepts (HAHO 2002).

The data concerning the two examined cases was gathered using the SimLab business process simulation method (SMEDS 1994, 1997; SMEDS, ALVESALO 2003; FORSSÉN, HAHO 2001; HAHO 2002). In the context of this study, process simulation was utilised for business process development.

The following research procedure was followed in both cases presented later in this article a selected inter-firm business process was first modelled through real life examples. Secondly, the model was complemented with approximately 15 interviews and written material.

The researchers prepared a simulation day aimed for personnel from operative to management level. The simulation day's goals were to establish a common view to the process and develop the process through group work and discussion.

This methodology provided a lot of data concerning a specific inter-firm business process and its context. This study utilises mostly the collected contextual data without describing the specific processes or their details.

3. OUTSOURCING

Highlighting its operational appearance, KERN and WILLCOCKS (2002) define IT outsourcing as a process whereby an organisation decides to contract-out or sell the firm's IT assets, people and /or activities to a third party supplier, who in exchange provides and manages these assets and services for an agreed fee over an agreed period.

From an economic point of view the previous means transfer from a hierarchy (i.e. coordinating resources inside a company) to market oriented direction, but not necessarily to the markets (i.e. coordinating resources through price mechanism). Thus, another definition for outsourcing can be found through the organisation of economic activity. Two fundamental ways discussed by classics like Adam Smith (in The Wealth of Nations) and Ronald H. COASE (1937) are market and hierarchy. They differ by dimensions like coordination of production factors, essence of competition, contracting time frame and organisational structure.

In addition to market and hierarchy, a network can also be considered as a form of organising economic activity. It is long-term coordination between independent, specialised companies (WILLIAMSON 1975; JARILLO 1988; GRANDORI, SODA 1995) – a hybrid between market and hierarchy.

According to the previous classification FIEBIG (1996) has presented the following constellations for outsourcing: Simple outsourcing, Transfer outsourcing, and Joint Venture outsourcing. The Joint Venture constellation includes two forms of outsourcing: Group and Joint Venture outsourcing.

Table 1. Outsourcing type and market relation (adapted from FIEBIG 1996 and KIIHA 2002).

Relation	Characteristics	Outsourcing type
Hierarchy	Coordination of production factors is based on ownership	Joint Venture outsourcing, Group outsourcing
Network	Companies remain independent entities. Scope is several years. People and assets are transferred. Coordination of production factors is based on common interest.	Transfer outsourcing
Market	Scope is on transaction. Satisfactory market solution is available. Coordination of production factors is based on price mechanism.	Simple outsourcing

Group and Joint Venture outsourcing include establishment of a new business unit either internally (Group) or through the markets (Joint Venture). It results in hierarchical control through joint ownership.

Transfer outsourcing involves a complete transfer of employees and equipment from one organisation to another. The agreement for Service Provisioning is done for a pre-defined period of time, typically for several years. The result is a networked relation between the outsourcer and the supplier.

Simple outsourcing requires an "off the shelf" solution between the outsourcer and the supplier. This creates a pure market relation. The outsourcer simply stops certain internal activities and starts to buy them from the markets.

In addition, MAZZAWI (2002) differentiates two motivations for outsourcing: traditional and transformational. Traditional outsourcing focuses on transaction through leveraging economies of scale in non-core and non-complex areas. Transformational outsourcing stimulates and facilitates business change, and helps to create and sustain adaptive enterprise.

In this article, we focus on Transfer outsourcing.

4. THE MODEL

Based on two case studies, we present an evolutionary model to analyse the development of an inter-firm relation in Transfer outsourcing (see Figure 1). The model includes five phases: Internal Operations, Outsourcing Event, Resource Leasing, Service Provisioning and Public Service Provisioning. These phases are further presented in the following chapters.

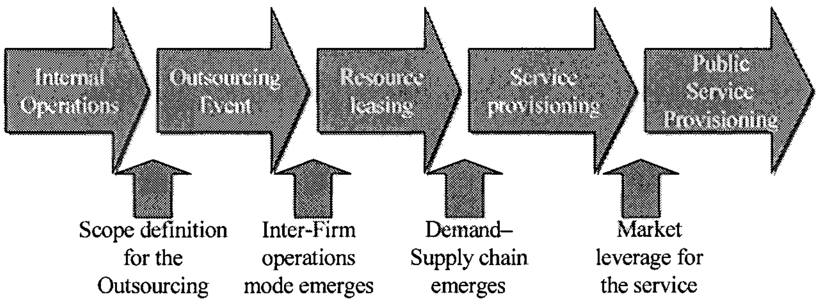

Figure 1. An evolutionary five-phase model to analyse the development of outsourced operations
(Source: PEKKOLA et al. 2003, p. 283)

4.1 Internal Operations

In the Internal Operations phase, the underlying motivation for outsourcing is reduction of cost (WILLIAMSON 1991) and cost control (WILLCOCKS, CHOI 1995). Cost considerations are often driven through strategic considerations (KAKABADSE, KAKABADSE 2000). The transformational view to outsourcing highlights organisational renewal and new business opportunity (MAZZAWI 2002; KAKABADSE, KAKABADSE 2003).

To maintain control on cost, organisations must know their own business and processes before handing them to suppliers (KAKABADSE, KAKABADSE 2000). The decision to outsource must be based on a clear need that guides the outsourcing process further on. Common definitions for outsourced operations and a shared view on the outsourcing process are essential for success (HIRVENSALO et al. 2003). Thus, operational maturity can have an effect on the outsourcing decision.

4.2 Outsourcing Event

The Outsourcing Event is critical regarding inter-firm operations in the future. KESSLER et al. (1999) highlight the human resource management point of view in aligning two organisations, in which well-coordinated communication is essential. Neglecting HR issues can cause fear with employee resistance (DORMBERGER 1998) challenging outsourcing success. This culminates in informing relevant stakeholders at the right time to prevent rumours and maintain motivation (HIRVENSALO et al. 2003).

4.3 Resource Leasing

In the Resource Leasing phase practices like open book accounting enable transparency and control in inter-organizational processes through cost and operational transparency (MOURITSEN et al. 2001). During this phase the demand-supply process between outsourcer and supplier develops, and has to be integrated to the processes of the outsourcer and the supplier through operational interfaces.

From the marketing point of view, transformational outsourcing means commitment for a long-term customer relation. According to STORBACKA and LEHTINEN (1997) the organisational interface is in such cases "a zipper" in which the outsourcer's and supplier's value producing processes are integrated in the most efficient way. Thus, organisational rearrangements are necessary to institutionalise the new operations mode and divest duplicate and low value activities.

4.4 Service Provisioning

In the Service Provisioning phase the supplier provides the service for the outsourcer only. Cost transparency is lost through service pricing. The operational demand-supply process between outsourcer and supplier has clear interfaces and organisational linkages.

Service consumption is essentially consumption of the service process (GRÖNROOS 2000), which can be defined as the process between order penetration point (OPP) in the supplier's supply process and value offering point (VOP) in the outsourcer's demand process (HOLMSTRÖM et al. 1999). These concepts become the tools for controlling the service process as outsourcer and supplier learn each other's processes and are able to increase efficiency and add value through measurement and re-evaluation.

4.5 Public Service Provisioning

In the Public Service Provisioning phase the supplier offers the service for several customers. This enables increased capacity utilisation, decreased competence development cost per client, stability through balanced customer base, and service process innovation in interaction with the markets.

The requirement for this phase is that the service has become well defined and can be provided through market transactions. The "zipper" orientation in previous phases is changed into more transactional orientation in which the firms' processes meet at fixed points. Exchange occurs through these points only.

5. CASES

In cases A and B, we studied outsourcing as an event and analysed the operational level processes between the Supplier and the Outsourcer (Client) one and a half year after the Outsourcing Event. Both cases were about business critical operations that were outsourced with a scope of three or more years. The cases are about industrial product design service (A) and data centre hosting (B). The former was a challenge while the latter one was a success.

5.1 Case A

In the Internal Operations mode, the design operations had not been a separate entity in the Outsourcer's line organisation. Instead, the working practices had varied between units. The motivation to outsource design was to decrease or avoid competence development costs and release internal development resources for core competence development.

The Outsourcing Event was considered successful, especially regarding human resources. About 60 designers and the equipment were transferred locally. However, operational definitions were later found to be loose, and contracting was not aligned with the operations and the strategic intent of the Supplier.

The Supplier thought it would receive a uniform and a relatively well-defined design service. Instead, it received a divergent service embedded with redundant support functions. The Supplier got rid of these functions through downsizing, which it found irritating.

The Resource Leasing phase was bypassed in Case A. The Outsourcer and the Supplier proceeded right away from outsourcing to the service-provisioning phase. It caused operational challenges through lost cost transparency and control, especially from the Outsourcer's point of view.

The Service Provisioning phase had most effect on the Outsourcer's product development projects that bought the outsourced service. The Outsourcer's product development managers had not been involved in the outsourcing, nor were they prepared for the new operations mode. The outsourced design service was considered as poor and costly among outsourcer's product development personnel, despite the fact that it was provided by their former colleagues. No organisational rearrangements had taken place in the Outsourcer's design related operations after the outsourcing. Service purchasing became a long process compared to the design time of an average product, which increased overheads in product development.

The realisation of the financial goals of outsourcing was questionable, because no clear goals or benchmarks existed. The lack of clear common targets challenged consistent managerial intervention and caused conflicts.

The outsourcing contract allowed the Supplier to provide the design service for the Outsourcer only. This means that market leverage could not be gained through Public Service Provisioning. This caused financial challenges for the Supplier and affected its competence development. Varying demand for design service increased Supplier's uncertainty.

5.2 Case B

During the Internal Operations phase, the Outsourcer's motivation for outsourcing its data centre was to decrease operational cost and to gain business agility and scalability. The scope for the outsourcing was defined as a set of IT services between the Supplier and the Outsourcer. This set can be changed through a predefined process. Financial goals were jointly agreed and measured during fixed intervals, and the goals and results were communicated to Outsourcer's and Supplier's personnel.

More than 300 people with equipment were outsourced globally. It was later found out that the operations did not develop in a homogenous manner in all locations.

During the Resource Leasing phase, all costs were transparent to both parties through open book accounting. The Supplier and the Outsourcer developed a shared web based tool to support and monitor the service delivery process.

After the Outsourcing event the legacy of the Internal Operations mode within the Outsourcer's personnel was strong. Therefore, the Outsourcer changed its organisational structure, and introduced new roles to better fit the inter-firm process and to gain control over the outsourced operations. Organizational restructuring was complemented with an internal marketing and training package to educate the personnel into the new operations mode. In the long run, this organisational change enabled the Outsourcer to achieve the goals set for outsourcing.

To further increase operational efficiency, both companies are currently introducing measures to control the demand-supply process of the outsourced IT services. They aim first to identify the process control points and start measuring lead-time for different process phases.

Especially the Outsourcer regarded the Resource Leasing phase as necessary for successful outsourcing. The transparent pricing had created openness in the inter-firm relationship and built trust. The outsourcer has been able to see the market price of formerly internal service. This has ensured a well functioning market oriented relationship.

In the upcoming Service Provisioning phase, price transparency will be lost as the current cost plus pricing will be replaced by service oriented single line pricing. Since the Supplier has received similar IT service operations earlier, it is already able to leverage its competence in the next, Public Service Provisioning phase.

However, the Supplier is not expected to provide new solutions for the market. Thus, the relation of the Outsourcer and Supplier is likely to remain "networked" also in the near future.

5.3 Summary and Discussion

Table 2 below summarises cases A and B and their evolution through the five-phase model.

The cases support the cost argument for outsourcing Internal Operations. In Case B, strategy was successfully linked with cost considerations. In Case A, the contract prevented the companies from achieving their financial goals. This highlights the importance for aligning contracting process with strategy and business process management in the future. In addition, the companies in Case B were able to set goals for the development of their relation before the outsourcing event, whereas in Case A the lack of goals caused challenges.

Often, the Outsourcer's motivation to outsource some operations is to control cost. According to KAKABADSE (2000), to maintain cost control, the Outsourcer must know before outsourcing its operations and processes, but not necessarily the internal costs of the operation. This sheds light on an interesting financial issue. Outsourcing can be a tool to establish a price that coordinates the use of resources. In cases where knowledge about the subject and the scope for outsourcing is asymmetric or does not exist, it might be difficult for the Supplier to set a price. As well it might be difficult for the Outsourcer to evaluate the price against the target, which often is set as a fixed percentage cost reduction, compared with the cost of internal operations.

The case companies of this study had the necessary management capability and tools to manage the Outsourcing Events. However, the adjacent phases caused challenges, especially in the learning of each others' processes and in introducing organisational change to realise the value potential of the new mode of operation beyond cutting cost. Thus, the inter-company processes and their development in outsourcing should be researcher further.

According to our two cases, transformational opportunity exists in the Resource Leasing phase. The processes in both companies must be developed to take control over the emerging inter-firm process and overcome the legacy of the Internal Operations mode. Otherwise overheads are likely to rise.

The new operations mode, a transformation, became institutionalised in the companies of Case B. This was achieved through the introduction of new roles that changed the previous production-oriented mindset increasingly towards service. Instead of production, the remaining personnel got more time to evaluate the real business need and plan for the most efficient solutions. In Case A, the mindset in the outsourcing company did not change, which lead to challenges on the operational level. Thus, in Case A, the lack of organisational restructuring reduced operational efficiency, whereas in Case B, organisational rearrangements enabled the companies to benefit from the new outsourced mode of operations.

Table 2. Comparison of cases A and B using the five-phase model.

Phase	Case A	Case B
Internal Operations	A design service embedded in the line organisation with strong linkages to adjacent product development phases. Aim to reduce/avoid personnel cost in competence development.	Global service. Aim to gain economies of scale with cost control through centralised service. Clear cost reduction goals agreed by both companies.
Outsourcing Resource Leasing	Approx. 60 people locally Bypassed	More than 300 people globally "Current state" Open book accounting to maintain cost and operational transparency. Organisational restructuring resulted in a renewed demand-supply process.
Service Provisioning	"Current state" Challenges at Outsourcer due to lost cost and process transparency and control. No organisational restructuring at outsourcer.	"Next step – common goal" Cost and operational transparency will be decreased through service pricing.
Public Service Provisioning	Outsourcer prohibits through contract → high cost for the Outsourcer, low profitability for the Supplier. Divergent goals.	Exists already. Benefits through economies of scale.

Introducing process control points in the Service Provisioning phase can further decrease overheads in planning, speed up response time and clarify roles in decision-making. These hypotheses should be verified in future research.

In Case B clear goals, which were openly communicated between the companies, guided the development of outsourced operations in both organisations. In Case A, the lack of measurable goals challenged consistent managerial intervention.

The Public Service Provisioning phase can realise the financial goals of an outsourcing. Although the Outsourcer might want to secure its intangible knowledge through contractually restricting the Supplier, it should not ruin what was the goal for its outsourcing – cost benefits and innovation.

From an economic point of view, the model presented in this article (Figure 1) describes a possible transition path between two fundamental economic governance mechanisms, a firm and the market, through a networked relation. Whether the collaborating companies are aiming toward a market or a networked relationship is likely to have an effect on the operational development of outsourcing. Maybe the five phase model also differs depending on the target of outsourcing? This should be investigated in future studies.

6. CONCLUSIONS

This study has investigated transfer outsourcing and presented a five-phase model as an analysis tool. This tool can be used to plan and valuate the development of an outsourcing relationship. When applying the tool, the Outsourcer and the Supplier should have a shared goal about the nature of their relation.

Transactional motivations like cutting cost, cost awareness and cost control were clearly present in both studied cases. Beyond cutting cost is the ability to add value through business process transformation. However, transformation requires that the Outsourcer company is able to change the orientation of the remaining employees from production towards service.

ACKNOWLEDGEMENTS

We thank warmly the members of SimLab, who contributed to this article. The research was funded by Tekes - National Technology Agency of Finland, pilot companies of the R&Net and Co-Create projects, and Helsinki University of Technology, which we gratefully acknowledge.

NOTES

A previous version of this article is presented as "The evolution of a commercially viable service concept through a five step model" IFIP Working Group 5.7 International Working Conference 2003 Human Aspects in Production Management October 5-9, 2003 Karlsruhe, Germany.

REFERENCES

COASE, R. H.:
The Nature of the Firm.
In: Economica, Oxford, 4(1937)16, pp. 386-405.

FIEBIG, André:
Outsourcing under the EC Merger Control Regulation.
17 European Competition Law Review 123, 1996.
FORSSÉN, Minna; HAHO, Päivi:
Participative Development and Training for Business Processes in Industry: Review of 88 Simulation Games.
In: International Journal of Technology Management,
Geneva, 22(2001)1-3, pp 233-262.
HIRVENSALO, Antero; EVOKARI, Juha; FELLER, Jan; PEKKOLA Kimmo; TURUNEN, Pekka; SMEDS, Riitta:
R&DNet Final Report.
Espoo: Helsinki University of Technology, 2003.
(SimLab Publications, Report Series: 2)
GLASER, Barney; STRAUSS, Amselm:
The discovery of grounded theory: strategies for qualitative research.
London: Wiedenfeld and Nicholson, 1967.
GRANDORI, Anna; SODA, Giuseppe:
Inter-firm networks: Antecedents, mechanisms and forms.
In: Organization Studies, 16(1995)2, pp. 183-214
GRÖNROOS, Christian:
Palveluiden johtaminen ja markkinointi.
Helsinki: Werner Söderström Corporation (WSOY), 2000.
HAHO, P.:
Benefits of the Simulation Game Based Development Method in Business Process Development Project. Success Factors of a Good Development Method.
Helsinki: Helsinki University of Technology, Department of Industrial Management and Department of Computer Science and Engineering,
Espoo, Licentiate's Thesis, 2002.
HOLMSTRÖM, J.; HOOVER, W. E.; ELORANTA, E.; VASARA, A.:
Using value reengineering to implement breakthrough solutions for customers.
In: International Journal of Logistics Management,
Ponte Vedra Beach, FL, 10(1999)2, pp. 1-12.
JARILLO, J. Carlos:
On Strategic Networks.
In: Strategic Management Journal,
Chichester, 9(1988)1, pp. 31-41.
KAKABADSE, Andrew; KAKABADSE, Nada:
Outsourcing Best Practice: Transformational and Transactional Considerations.
In: Knowledge and Process Management,
Chichester, 10(2003)1, pp. 60-71.
KAKABADSE, Nada; KAKABADSE, Andrew:
Critical review - outsourcing: A paradigm shift.
In: Journal of Management Development,
Bradford, 19(2000)8, pp. 670-728.
KESSLER, I.; COYLE-SHAPRIO, J.; PURCELL, J.:
Outsourcing and the employee perspective.
In: Human Resource Management Journal,
London, 9(1999)2, pp. 5-19.

KERN, T.; WILLCOCKS, L.:
Exploring relationships in information technology outsourcing: the interaction approach.
In: European Journal of Information Systems,
Birmingham, 11(2002)1, pp. 3-19.

KIIHA, Jarkko:
Yritystoiminnan ulkoistaminen ja sopimusvastuu. Kauppakaari,
Helsinki, 2002.

MAZZAWI, Elias:
Transformational outsourcing.
In: Business Strategy Review,
Oxford, 13(2002)3, pp. 39-43.

McIVOR, Ronan:
A practical framework for understanding the outsourcing process.
In: Supply Chain Management,
Bradford, 5(2000)1, pp. 22-36.

MOURITSEN, J.; HANSEN, A.; HANSEN, C. Ø.:
Inter-organizational controls and organizational competencies: Episodes around target cost management/functional analysis and open book accounting.
In: Management Accounting Research,
London, 12(2001)2, pp. 221-244.

PEKKOLA, Kimmo; SMEDS, Riitta; SYVÄOJA, Heli; TURUNEN, Pekka:
The Evolution of a Commercially Viable Service Concept through a Five Step Model.
In: Current Trends in Production Management.
Eds.: ZÜLCH, Gert; STOWASSER, Sascha; JAGDEV, Harinder S.
Aachen: Shaker Verlag, 2003, pp. 282-288.
(esim – European Series in Industrial Management, Volume 6)

SAWHNEY, Anjum:
Outsourcing: A cure for the industry's bills?
In: Telecommunications International,
Dedham , MA, 37(2003)5, pp. 18-19.

STARRIN, B.; DAHLGREN, L.; LARSSON, G.; STYRBORN, S.:
Along the path of discovery: qualitative methods and grounded theory.
Studentlitteratur, Lund, 1997.

SMEDS, Riitta:
Managing Change towards Lean Enterprises.
In: International Journal of Operations & Production Management,
Bradford, 14(1994)3, pp. 66-82.

SMEDS, Riitta:
Organizational learning and innovation through tailored simulation games: Two process re-engineering case studies. Knowledge and Process Management.
In: The Journal of Corporate Transformation,
Chichester, 4(1997)1, pp. 22-33.

SMEDS, Riitta; ALVESALO, Jukka:
Global business process development in a virtual community of practice.
In: Production Planning and Control,
London, 14 (2003)4, pp. 361-371.

STORBACKA, Kaj; LEHTINEN, Jarmo R.:
Asiakkuuden ehdoilla vai asiakkaiden armoilla.
Helsinki: Werner Söderström Corporation (WSOY), 1997.

WILLCOCKS, Leslie; CHOI, Chong Ju:
Co-operative Partnership and 'Total' IT outsourcing: From Contractual Obligation to Strategic Alliance?
In: European Management Journal,
Oxford, 13(1995)1, pp. 67-78.

WILLIAMSON, Oliver E.:
Strategizing, Economizing, and Economic Organization.
In: Strategic Management Journal,
Chichester, 12(1991)1, pp. 75-94.

YIN, R.:
The case study crisis: Some answers.
In: Administrative Science Quarterly,
Ithaca, NY, 26(1981)1, pp. 58-65.