

JOURNAL OF ASIA ENTREPRENEURSHIP AND SUSTAINABILITY

REFEREED EDITION - ISSN 1176-8592

EDITORS: ROSEL FONACIER & JENS MUELLER

VOLUME II, ISSUE 3

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INTERNATIONAL OUTSOURCING TRENDS CREATE GROWING OPPORTUNITIES FOR ASIAN FIRMS

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ABSTRACT

The purpose of this paper is to address some aspects of outsourcing with particular emphasis of offshoring, (also named international outsourcing, international sourcing, cross border sourcing).

Outsourcing projects are not always successful, whether they are local, regional or cross border. The paper addresses some of the underlying theoretical fields that should be taken into consideration to make outsourcing successful for both parties, with emphasis on the international aspect.

Competitive pressures among firms in high cost countries (HCC) have forced them to look for more cost effective ways of operation. An

increasingly important source of competitive advantage is buying components, finished goods and services from low cost countries in Asia. Strategic issues for HCC firms concerning offshoring are therefore addressed, as well as the growing political concern about lost jobs in the outsourcing countries that are in the lead of this trend.

The paper further suggests some underlying requirements for Asian countries to be able to benefit from offshoring trends in the short and long run.

Finally, some areas for research in the field of offshoring are suggested.

Introduction

We are witnessing a major shift in value creation that will have substantial effect both on the HCC and Asian employment and economies. Challenging structural changes will take place in the work forces in the two hemispheres as the offshoring trend is reinforcing.

A period of change creates new opportunities for Asian Small and Medium Enterprises (SMEs), both in market expansion and profit opportunities. The first due to improved access to HCC by means of digital technology and improved physical transportation systems. The latter is due to the present cost level differences, making the buyer willing to pay premium prices seen from the suppliers' point of view. Presently, huge savings are apparently possible. Anecdotal evidence suggests that cost levels at least 50% lower than in HCCs are common. The actual savings are, however, also dependent on the transaction costs associated with offshoring. These are unfortunately much harder to quantify.

An understanding of the underlying theories affecting a close relationship between the parties could aid in both interaction with international partners and making the co-operation successful.

Surprisingly little material relating to the principal aspects of international outsourcing has been published in academic journals. Mol et al. (2005) found that from 1989 to 2000 only 7 articles contained the words "global"

and “sourcing”. This author found 29 articles containing these words in 2005 alone, suggesting a substantial increase, but even so, still at a modest level. The general impression is that the topics in the articles are oriented towards industry issues, dominated by the finance, IT and manufacturing industries, and very few conceptual topics discussing underlying theories affecting the success rate.

What is happening?

External procurement of components as input to manufactured goods and outsourcing of services has become common practice among an increasing number of firms that are under competitive pressures in HCC. Local or regional providers that are specialized and thus can deliver goods and services at a lower unit cost normally perform the greatest part of delivery of outsourcing activities. That is not unexpected, as that does not require adjusting to a new business environment. The decision to let outside vendors take over some activities is in itself a change in the business model that can be difficult, and many outsourcing projects are reported to be unsuccessful. Lacity and Willcocks (1998) report that the success rate of IT outsourcing is only 56%. Aron and Singh (2005) state that “According to several studies, half the organizations that shifted processes offshore failed to generate the financial benefits they expected to”. Considering the fact that IT outsourcing is one of the earliest and most widespread outsourcing activities, the success rate is discouraging. Part of the cause of failures may be lack of understanding of the underlying theories regarding relationships with entities outside own organization, in addition to inadequate execution.

Over the past few years, the outsourcing phenomenon is being expanded to include offshoring of both goods and services, and it is growing at an increasing rate. Suppliers in countries with favourable factor conditions such as access to raw materials, lower priced energy, low labour cost and/or high education level are positioned to benefit from this development. Offshoring of services (business processes) is becoming increasingly widespread, and there seems to be tendency to move upward towards higher value creation activities. Asian countries have in particular benefited from the trend by offering lower cost, a pool well educated personnel and good language skills.

To make the transfer of work successful both for the outsourcer and the outsourcing partner (vendor), good understanding of strategic aspects, underlying economies and the required competencies is important. In the following, some aspects of this will be addressed.

Change in strategic thinking

The time of the fully integrated corporation that makes everything from its inputs to marketing and after sales service of the finished product may be coming to an end. Current thinking suggests that a concentration in the areas of the organization's unique (core) competencies and leaving the other activities to outside specialists increases competitiveness.

Numerous authors have in the past addressed the topic core competencies. It has been given several terms, such as invisible assets (Itami 1987) strategic assets (Dierickx and Cool 1988) meta skills (Klein et al. 1991) skills or competencies (Hall 1992) capabilities (Stalk et al. 1992).

The common denominator seems to be that a core competence is a unique organization specific quality. It has value if it gives a customer superior value of whatever is being delivered. There are two ways by which this is expressed: either by lower price or by increased performance for the user. In other words, a core competence has no value unless it can be converted into some form of customer satisfaction.

Identifying and nurturing such core competencies is thus an important issue for the organization as it is through them that a sustainable competitive advantage evolves. Most other value creation activities can be outsourced.

Some theoretical perspectives on outsourcing

Outsourcing, i.e. activities that are not considered to represent core competencies of the organization can be bought from specialized vendors outside the organization. Quinn (1992) states that if external vendors can perform the task better, the firm is sacrificing a competitive advantage by carrying it out itself. It may be added: unless the activity is critical to the business strategy.

A definition of the concept of outsourcing could be:

“Transfer to an outside entity of responsibility for production of a primary- or central support activity that formerly has been carried out by the organization”

Strategic aspects of outsourcing

Care should be taken when deciding on what to outsource. Obviously, activities associated with core competencies should not be outsourced as they are a very important part of the firm’s intellectual property.

A strategic evaluation must therefore be made even for all outsourcing proposals. It is of great importance to decide if the outsourced activity could mean loss of future control of processes and know-how. Even by outsourcing non-core activities, the company may facilitate transfer of own discretionary systemic competence to a vendor that will also use this to supply the competitors.

The outsourcer may also lose uniqueness that in the long run will reduce the full value proposition to the customers. Porter (2003) suggests that extensive outsourcing also has a tendency to standardize end products and thereby forego a strategic advantage. In the worst case, the outsourcing vendor develops into a full-fledged competitor over time. In case of a badly handled outsourcing process, the outsourcer may even be at ransom if their supplier develops a strong bargaining position.

Potential loss of intellectual property

Intellectual property consists of the rather obvious items as patents, trademarks and copyrights. But it also extends to trade secrets contained in internal systemic value creation activities such as planning systems and marketing approaches. The intellectual property extends in fact to all intangible proprietary information. An HCC firm may be reluctant to enter into an outsourcing agreement with an Asian partner for fear that important intellectual property may be diffused, sometimes by outright theft, but more likely by inadvertent leakage through employees or by employee attrition. Often, a non-disclosure clause on the part of the goods or service providing firm and its employees is thus required.

Mansfield (1985) found that the need for intellectual property protection varied with the intensity of R&D, the speed of technological change and the

significance of tacit knowledge. A starting point for both the HCC outsourcer and the Asian partner can be found in “A Guide to Intellectual Property Rights in Southeast Asia and China” by Deng and Townsend (1996).

A little transaction cost theory

Transaction cost theory assumes that market forces and hierarchies are alternative forms for control and decisions. Williamson (1979) suggests that the theory can be used to decide whether a transaction shall take place within the organization or outside, in the market. The cost is divided into two parts: production cost and coordination cost. The first is reflecting the direct costs of production, the second the need for meetings and management attention in a more complex setting.

In addition to the direct cost reduction, outsourcing also reduces the need for investment in plants or personnel, as well as operating capital.

Theoretically, it should therefore be rather simple to calculate whether an activity should be carried out internally by the organization, or be outsourced. Unfortunately, costs are difficult to identify clearly, partly due to allocation problems and inadequate accounting systems. The question is further complicated by the fact that human beings are not rational decision makers. Personal opportunism influences decisions, whether consciously or unconsciously. At best, the decisions are “intendently rational, but only limited so” (Simon 1976). A good understanding of the principal-agent theory is therefore useful in connection with an outsourcing decision.

A little alliance theory

Acknowledging the fact that no organization can be outstanding in all fields, one mode for compensating for this is establishing alliances with complementary organizations. An alliance has a greater degree of commitment than for example a regular supplier-customer relationship.

Hax and Majluf (1991) define a strategic alliance as

“Formal coalitions between two or more firms for short- or long-term ventures, borne out of opportunistic or permanent relationships that evolve into a form of partnership among players”.

Alliances are important instruments in the outsourcing context, as outsourcing is strategic, long term and requires formalized agreements. An

outsourcing relationship is therefore per definition an alliance. Outsourcing decisions can thus find a good theoretical basis in alliance theory.

Alliances can be placed on a scale from full ownership (internal alliances) through part ownership (joint ventures) to no ownership (formalized working relationship or outsourcing). An alliance contains a strategic component, and is therefore normally a long-term commitment.

A little relationship theory

This theoretical concept focuses on inter-organizational relations and the content of the relationship. A viable relationship is based on exchange of commercial, social and informational activities between organizations. Normally, a contract specifies the rights and obligations of the partners, and a long-term mutual benefit must accrue to both parties to make the relationship work.

Three elements of the relationship theory are important to be aware of in an outsourcing context:

Transaction content

In a commercial relationship, there is a stream of goods and services between the organizations. The contract that governs these transactions is according to Williamson (1979), established to avoid opportunism by the partners. Such contract clauses in an outsourcing relationship may for example be non-disclosure and exclusivity in addition to the ordinary price and delivery details.

It may be argued that in the long run the contract has diminishing value as the relationship develops organically, and the contract may even be irrelevant as the content of the relationship develops and changes.

Communication and information content

Proper communication with relevant content is essential when developing a lasting relationship. The success of an alliance is dependent on a steady flow of information to reduce transaction costs. Quality of content is part of this effort, so as to eliminate ambiguity and misunderstanding.

In an outsourcing situation, communication is of particular importance, as the partners often are expected to work intimately with each other for adjustments, information exchange, queries, etc. For many, a close, external cooperation is a novelty, and particular effort should be placed on establishing proper communication channels and content. The choice of

communication medium (face to face, group or individual, written or electronic) must be carefully selected for each particular relationship.

Social content

The qualitative part of a relationship is, according to Mitchell (1973), based on trust, norms and values, expectations, and feelings. The social aspect is in many respects the glue that ties the two partners together, and is of great importance in the outsourcing relationship. Personal relationships can act as a safety valve in case of disagreements that could develop into mistrust, and can to a certain extent substitute parts of the detailed contract that governs the relationship. A prerequisite for the well functional social interaction means a mutual understanding of the partners' cultural setting business ethics and conduct.

Offshoring

A big change took place in the latter half of the last century when offshoring, from the HCCs to low cost countries expanded in the 1990s.

Sourcing from firms in a totally different culture may yield substantial benefits, but it also requires different competencies in the outsourcing organization. Kotabe and Murray (2004) state that "sourcing directly from foreign suppliers requires greater purchasing know-how and is riskier than other alternatives that use locally based wholesalers and representatives". Fear of the unknown due to lack of knowledge about foreign cultures and business practices can furthermore hold back an otherwise rational decision to initiate international sourcing.

On the other hand, the offshoring company can benefit from both their own and their outsourcing partner's core competencies as well as factor condition advantages creating a lower cost. Substantial competitive advantages may therefore obviously be gained from offshoring if it is executed in the right way.

Offshoring of physical input factors

International sourcing of input components for one's own production process has been going on for a number of years, and has been well developed. Kotabe and Murray (2004) sum it up:

"Today, many companies consider not simply price but also quality, reliability and technology of components and products to be procured. These companies design the sourcing decision on the basis of the interplay between

their competitive advantages and the comparative advantages of various sourcing locations for long-term gains”.

It may be concluded that offshoring of physical goods has become a common practice, and seems hesitantly accepted by politicians, the public, management and employees in the HCC.

This trend has furthermore been developed into multi-nation sourcing (components bought in several countries and assembled in the HCC company's home country or even in a third country). This is particularly evident in the electronic industries where relatively high value and low weight components can easily be shipped by air.

Offshoring of services

Offshoring of services (or business processes) is a rather new dimension that is growing rapidly, and it is definitely not uncontroversial in the home countries.

“Cheap labour is the beginning, not the end ” state Agrawal et al. (2003). Outsourcing of business processes such as data entry, payroll processing, call centres and other “back office” activities are among the most common types of work that are tempting to consider. Transfer of such activities can supposedly cut costs by up to 50%. More sophisticated applications are being implemented, however. Pharmaceutical research, engineering, software development and component R&D are examples of more advanced activities that are on the rise.

By developing the skills needed for the transfer of business processes over time, an entire dis-aggregation of the traditional value chain may result for the outsourcing companies. The result is a massive transfer of work and competencies from HCCs to lower cost (and high competency) countries. The HCC's economies will benefit from lower priced products and the countries to which work is transferred will benefit from competence transfer and increased economic activity.

Models for offshoring of services

Kaka (2003) outlines six models for cooperation between the outsourcer of business processes and the outsourcing partner within the IT field. The outlined approaches can suggest solutions (but with different content) for both goods and service industries.

The contribution of the offshoring partner in the IT industry may be:

1. To supplement staff. This is mainly to cover peak demand on a temporary basis.
2. To build turnkey projects or provide ongoing support.
3. To assist in building permanent offshore centres.
4. To build and operate a facility
5. To provide specialized assets, human or physical.
6. To enter joint ventures, i.e. to be joint owners of a to exploit a business opportunity.

Information and Communication Technology (ICT) is the key

The success of both physical and business process outsourcing is dependent on ICT. Until a few years ago, ICT was reserved for the large, resourceful companies because of the high cost of equipment and software and the associated highly skilled personnel required to operate the systems.

This situation has changed dramatically. The PC revolution and extreme competitive pressures have brought down the price of hardware and software. The systems have been easier to operate (although the man-machine interface is still rather primitive) and networks have become available to everybody. Today, the cost of ICT is no longer an issue, as virtually unlimited capacity is available at low price. The question is now who can make use of ICT in the most innovative way.

The starting point is that anything that can be digitalized can be carried out over distance by means of ICT. Time and distance have been eliminated, as all authorized recipients will have the information at the same time regardless where they are located. It does not matter whether the recipient is a next-door factory or service provider or one thousands of kilometres away. Information exchange can be made continuous and seamless, keeping the processes uninterrupted except for the disadvantages (and sometimes advantages) of time zones.

By means of the Internet, suppliers of goods and services can easily be reached by interested HCC buyers, ranging from the largest corporations to SMEs. Buyers can receive physical goods within acceptable delivery times either by rapid ocean shipping services or by air. Services are delivered by

means of digital networks. The groundwork is ready for rapid development of offshoring.

Political considerations in HCC

Globalisation is nothing new in the world of commerce. Goods have always been bought from where they have a cost advantage, and have been part of the economic growth in HCC countries. The new aspect is, however, that the rapid growth is made possible by ICT and improved delivery systems (logistics).

Projections indicate vast transfer of work with assumed loss of jobs in the home countries. Globalisation has in many countries been associated with unemployment. The impact of both physical and service outsourcing to low cost countries is becoming a touchy issue in HCC, and some countries are contemplating establishing barriers to transfer of work.

What is the magnitude of offshoring?

McKinsey and Company, a consulting firm, estimates the value of offshoring to between \$25 and \$32 billion in 2002. Agrawal et al. (2003) refer to a consensus estimate between three consulting firms showing a projected growth of 30 – 40% per year. They further estimate that 400.000 US jobs have been transferred already, and that by 2015, 3.3 million jobs have been transferred. The figure will undoubtedly be substantially higher if all HCC are added.

The win-win proposition

The fact that work can be carried out at a lower cost means that the outsourcing company enjoys higher profits that can be used for profitable investments which again creates wealth and associated benefits for the home country.

Many of the tasks such as call-center work, data entry and basic accounting that can be offshored are considered unattractive in HCC. In low cost countries it may be an attractive and rather highly paid job. Motivation and quality of work can thus be better than in the originating country. Low cost countries also offer high competency capabilities in several fields that may be equal or better than in the HCC countries. Offshored activities may in turn develop into new business opportunities abroad that create repatriated earnings.

There seems to be a certain movement toward better acceptance of offshoring. The Economist (2004) quotes Gregory Mankiw, the US president's chief economic adviser, saying that if a thing or a service could be produced more cheaply abroad, then Americans were better off importing it than producing it at home.

The economy of HCC countries must be assumed to be able to convert the increased value creation into new economic activity that absorbs the employment made redundant by offshoring. Any HCC's ability to convert its workforce to new activities is the key, and activities such as education and re-training programs must be developed to ease the transition. The offshoring trend can thus be of benefit both for the high and low cost countries.

Opportunities for entrepreneurial SMEs

Transitional periods of transition like the one that is experienced presently create instability until the new structures for value creation are established. This instability creates a window of opportunity for Asian SMEs as they can more easily enter the market when it is in flux. It does, however, require determination and good planning. Even if a firm can deliver a high quality product or service, it is still obviously a substantial task to be known to potential outsourcers in other parts of the world. Sometimes a small company may be able to "piggyback" as sub-contractor on a more established local firm. But normally a plan for presentation to potential partners should be created. This can be in the form of participation in trade shows and delegations visiting HCC countries or at least by creating a good Internet site presentation.

SMEs in an industrial cluster could potentially form network organizations in which each partner contributes its core competency and the group is presented outward as if it were a larger entity. Access to HCC markets can thereby be more effective and convincing than trying to penetrate them as an unknown SME.

What is required to benefit?

Even local outsourcing is not as easy as it appears. Working closely together with another organization requires different skills than working with departments within one's own. There are indications, however, that the networked organization is becoming more common. See for example Collins (2003), Jackson and Stainsby (2000), Schwartz and Brock (1998).

Offshoring is obviously even more difficult. Emotional distance, culture, language and different modes of conducting business make the transfer of work even more precarious. Asia is well positioned, however. A. T. Kearney, a consulting company, has prepared an Offshore Location Attractiveness index based on the financial structure, business environment, people skills and availability variables, and five of the six highest ranking are Asian: India, China, Malaysia, Czech Republic and Singapore and the Philippines.

To be able to benefit from the offshoring trend, Asian countries must prepare the ground for transfer of work. The intellectual property issue should also be addressed in earnest to make potential partners confident that their interests are taken care of in that matter, as there is little doubt that there will be a fierce competition between countries to attract high quality outsourcers and expanded volume.

The following suggests some of the issues Asian countries should address to prepare for a future competitive advantage:

Availability of trained staff

It is obvious that no offshoring can take place without the local skills and competencies needed to perform the tasks with required quality level. In 2002, McKinsey and Company carried out survey among 30 executives at companies using outsourced labour in India. They found that a dominant factor for selecting an offshore outsourcing location was access to the right human resources.

Adapted educational system

As outsourcing ranges from simple physical labour contribution to business process activities and highly skilled research work, the low cost country should make an assessment of how to move up the value creation ladder over time and what the corresponding national education content should be.

At present, it seems as if the countries with English as one dominant language (India, the Philippines, Malaysia and a few more), seem able to benefit from the outsourcing trend sooner than others. English language education should therefore be high on the priority list for all countries.

Working conditions

Western societies have become increasingly concerned about working conditions for those who produce on behalf of the national buyers. There are cases where public opinion has forced offshoring firms to change suppliers due to unacceptable working conditions in the supplying firms. Even some cases of brand names that have been adversely affected by unfavourable news coverage are known.

The consequence is that countries that hope to stay competitive in the long run must not only have laws that protect employees from exploitation, but must enforce the laws vigorously.

Corruption

In most Western countries, it is illegal to pay bribes nationally or internationally. If the firm paying a bribe is discovered, severe penalties may result. In the long run, countries with a culture in which smaller or larger bribes are part of the business or public administration culture will be at a competitive disadvantage.

Political stability

It takes substantial energy and resources to develop a smooth working offshoring relationship. HCC firms will therefore avoid such investment in countries with a history of radical system changes. Such abrupt changes may lead to disruption of deliveries or even endanger the offshoring investment. A well functioning democracy seems to be the best long- term guarantee for continued growth.

Infrastructure

In the McKinsey survey mentioned above, a high quality infrastructure ranked as the most important factor for selecting an offshoring location. The infrastructure would encompass physical (air, road and sea) as well as the digital one.

Predictable government policies

Frequent changes in the legal system increase uncertainty for investors in offshoring relationships. It particularly pertains to unexpected state ownership (nationalization), taxation or cost increasing regulations. This aspect ranked very high in the McKinsey survey.

Summing up

Offshoring has the potential to expand the economies in Asian low cost countries and regions faster than traditional organic growth is able to. At the same time it increases wealth creation in the offshoring countries by giving

access to lower cost goods or services and re-directing capital to the most efficient use.

As offshoring is not easy, both outsourcer and the partner need to understand the underlying theories as well as practical processes involved to make it successful. This may develop into a core competence in itself and thereby be a source of competitive advantage.

Aggressive and flexible SMEs in low cost countries have a unique opportunity to establish themselves as outsourcing partners for HCC firms. That takes, however, good planning and systematic execution to succeed. The potential rewards are substantial for those who understand the somewhat difficult theoretical and practical aspects of offshoring processes.

Asian countries wishing to attract business from HCC need to satisfy a number of underlying conditions that are required to compete successfully, as price is not by any means the only determining factor.

Suggestions for areas of research

It must be anticipated that as offshoring trend continues, academia and practitioners will focus on understanding the processes and developing the skills needed. That will increase the success rate of offshoring activities and further stimulate international transfer of work.

The following may be of interest to investigate further to aid Asian SMEs in exploring the offshoring opportunities:

- Awareness of offshoring opportunities among Asian SMEs
- Information sources and support for Asian SMEs regarding access to HCCs
- What can be learned from Asian firms with ongoing offshoring business?
- Intellectual property protection attitudes among Asian SMEs
- How are post contract operating relationships between the partners in an offshoring relationship evolving?
- Effect of transaction costs on profitability of offshoring

BIBLIOGRAHPY

Agrawal, V., Farrel, D., and Remes, J. K. (2003) Offshoring and Beyond
McKinsey Quarterly, Special Edition, pp 25 – 35

Aron, R: and Singh, J. V. (2005) Getting Offshoring Right
Harvard Business Review, December 2005, pp 135-143

Collins, Ph. (2003) Going Virtual
Management Services; Vol. 47 Issue 6, pp 8 – 13

Deng, S; and Townsend, P. (1996) A Guide to Intellectual Property Rights in
Southeast Asia and China
Business Horizons, vol. 39, Issue 6

Dierickx, I and Cool, K. (1988). Competitive Advantage
INSEAD Working Paper No. 88/07

Hall, R. (1992). The Strategic Analysis of Intangible Resources.
Strategic Management Journal, 13, 135-144

Hax, A. C. and Majluf, N. S. (1991) The Strategy Concept and Process, a
Pragmatic Approach
Prentice Hall
Englewood Cliff, NY

Itami, H (1987). Mobilizing Invisible Assets
Cambridge, MA: Harvard University Press

Kaka, N. (2003) The Next Hurdle for Indian IT

McKinsey Quarterly, Special Edition, pp 46 – 47

Klein, J. A., Edge, G. M., and Kass, T. (1991) Skill Based Competition
Journal of General Management, 16, (4) pp 1-15

Kotabe, M. and Murray, J.Y. (2004) Global Sourcing Strategy and
Sustainable Competitive Advantage
Industrial Marketing Management, Vol. 33, Issue 1
pp 7–14.

Lacity, M. C. and Willcocks, L. P. (1998) An Empirical Investigation of IT
Sourcing Practices
Management Information Systems Quarterly, 22 (3) pp 263-408

Mansfield, E. (1985) How Rapidly Does New Industrial Technology Leak
Out? Journal of Industrial Economics, December 1985, pp 217-223

Mitchell, J. C. Networks, Norms and Institutions (1973)
in Network Analysis, Boissevain, J. and Mitchell, J. C. (eds.)
Mouton The Hague

Mol, M. J; van Tulder, R. J; Beije, P.R. Antecedents and Performance
Consequences of International Outsourcing
International Business Review, Volume 14, Issue 5,
October 2005, pp 599-617

Porter, M. Strategy: The New Learning (2003)
Lecture at Norwegian School of Management, June 11,

Schwarz, G. M., Brock, D. M. (1998) Waving Hello or Waving Good-bye?
Organizational Change in the Information Age.
International Journal of Organizational Analysis, Vol. 6 Issue 1,
pp 65-93

Simon, H. A. (1976) Administrative Behavior
MacMillan
New York

The Economist: The Great Hollowing Out Myth
February 21, 2004, pp 27-29

Williamson, O. E. (1979) Markets and Hierarchies: Analysis and Antitrust
Implications
The Free Press
New York

Quinn, J. B. (1992) Intelligent Enterprise
The Free Press
New York