

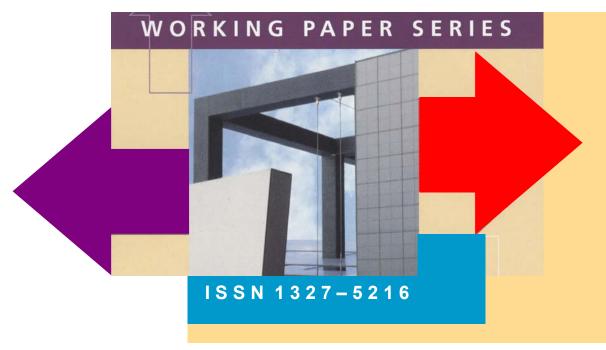
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Abstract

This paper describes Telstra's (Australia's dominant telecommunications company) change from ad hoc to strategic management of its numerous suppliers and the resulting benefits. The need for change, recognized by top management, required careful planning and execution. The change had many ramifications; mostly beneficial but painful for some supplanted suppliers and employees reluctant to adapt to a new culture.

Benefits of the new approach were: rationalization of the number of suppliers; a more rational and fruitful approach to procurement; the professionalisation of procurement personnel; classification and consequently different treatment of suppliers; and, most importantly, changing the relationship between the company and its key suppliers from one of attempted exploitation and short term thinking to long-term, mutually profitable co-operation. The changed approach required cultural change within the procurement function but suppliers came to appreciate the company's fact-based, rational, and commercial approach.

Data for this study was obtained from interviews and surveys. The study demonstrates the advantages and difficulties of changing to rational procurement practices that support corporate objectives.

This paper is a work in progress. Material in the paper cannot be used without permission of the author.

DEPARTMENT OF MANAGEMENT

STRATEGIC MANAGEMENT OF SUPPLIERS: AN AUSTRALIAN CASE STUDY

INTRODUCTION

Procurement is the process by which goods and services are obtained from other organisations. In Australia at least, the stereotypical purchasing function has had low status. It has been characterised by poor relationships with the departments it was supposed to serve and adversarial relationships with suppliers. It has saved money by beating down suppliers and purchasing inferior substitutes for the goods and services requested by its internal clients. Ostensibly arms-length relationships with some suppliers have been undermined by personal relationships and it has been reluctant to identify organisations that might undercut extant suppliers (Christopher and Ryals 1999; McIvor and Hugh 2000; Oliver 1999; Valenzuela and Villacorta 1999).

The style, status and performance expectations of the purchasing function have changed. Purchases comprise 50 to 70% of a typical manufacturing company's total costs. An organisation is a single node of the whole supply chain and partners may obtain long-term benefits from co-operation. Especially when the supply chain produces complex goods and services in a changing environment, supply chain members can cooperate to satisfy changes in needs and tastes; improve products and services; and reduce costs across the whole supply chain.

The changed terminology (*procurement* or *sourcing* instead of *purchasing*) reflects the change from purchasing to strategic sourcing, partnering, and vendor management (Goh, Lau and Neo 1999). Strategic sourcing has been defined as a disciplined and systematic process for reducing total procurement costs in the context of business goals and strategies while improving the quality of goods and services consumed internally and/or delivered to customers (Slaight 1999). Ellram, Zsidisin, Siferd and Stanly (2002) investigated relationship between the procurement function's status and practices, and corporate success but found that only collaboration with suppliers was associated with corporate success. This finding is supported by Janda and Seshadri (2001) who sought relationships between efficiency and effectiveness, and procurement practices.

"Co-petition"

Purchasers and suppliers simultaneously cooperate and compete. The degree of co-operation and trust (McQuiston 2001) depends in part on the alignment of the partners' strategies and cultures (MacKay 2000). Relations depend on the parties' relative power (Cox 2001; Park, Reddy and Sarkar 2000) and the kinds of goods and services provided. Particular goods and services can be positioned on a scale whose endpoints are labeled "commodities" and "complex".

Commodities are standardised goods or services such as financial instruments, coal, and computer chips, that are widely available and whose quality and price can be unambiguously specified and measured. When procuring commodities; purchasers can easily measure suppliers' performances and may exploit a competitive market. "Arms-length" relationships are ostensibly appropriate.

The attributes, quality and prices of "complex" goods and services cannot be unambiguously measured or ascertained. Important element of call center services may be operators' politeness and empathy as well as efficiency. There is no perfect market for many intermediate products: the supplier and principal have to negotiate prices and specifications knowing that the relationship is continuing. Aspects of the supply of complex goods may include the supplier's innovative capacity or flexibility, especially the ability to meet changing requirements at short notice. Co-operative relationships, even partnerships are appropriate and inevitable.

Many writers have identified benefits of co-operation (McIvor and Hugh 2000), Ellram, Zsidisin, Siferd and Stanly (2002), and Janda and Seshadri (2001) "Good purchasing-supplier relationships can be posited to improving performance" (Goh, Lau and Neo 1999). "By working more closely with selected suppliers into areas such as process integration, enduring improvement in shareholder value can be achieved" (Christopher

and Ryals 1999). Even in "arms-length" relationships, parties can reduce costs by co-operation. Production scheduling informed by estimates of the customer's future orders can reduce production, inventory and transport costs. Cooperation between parties may allow organisations to improve the quality of products, accelerate delivery, reduce uncertainty and costs, facilitate technology development and make their production and trading more agile (Park, Reddy and Sarkar 2000).

The supplier-vendor relationship must be managed. Vendors must be selected; contracts negotiated; the agreement monitored and renewal discussed before the agreement terminates (Chow, Heaver and Henriksson 1995; McQuiston 2001). Changes in markets or technology, will inevitably create situations not envisaged when the contract was agreed that necessitate renegotiation (Narasimhan and Das 1999). Telstra procures a large number of products and services with high technical content and complex uses, and cooperation with suppliers to define requirements and resolve problems is appropriate.

Supplier Selection Criteria

Many writers have discussed criteria used to evaluate suppliers. Criteria should be derived from strategic objectives and cost, quality, delivery, technology, performance, timing, service levels, accuracy, outcomes, communication and customer service have been nominated (Degraeve and Roodhooft 1999; Goh, Lau and Neo 1999; Petersen, Frayer and Scannell 2000). Dobler and Burt (1996) note the objective of minimizing total supply chain costs. Gelderman and Weele (2002) and Kraljic(1983) have provided categorisation models of the sourcing function that indicate e.g. that the procurer should exploit its market power, vary the emphasis on cost and/or flexibility amongst categories, and have multiple suppliers of critical components or services. Cox (2001) provides a framework emphasising the parties' relative power. Sarkis and Talluri (2002) give a model for supplier selection.

The adoption of a new procurement philosophy exemplified by changing from adversarial to cooperative vendor-buyer relationships (or partnerships) may require stressful structural and cultural changes within the procurement function. The procurement function may gain status and be recognised as an essential strategic tool but such changes have triggered turnovers of purchasing personnel (Anderson and Katz 1998; Sislian and Satir 2000).

Electronic commerce techniques have changed procurement procedures and vendor/buyer relationships (Kalakota and Robinson 2001). Modern Information and Communications Technology's (ICT) has drastically reducing the cost of collecting, storing, replicating, transmitting and analysing digital data. The new technologies, exemplified by e-mail, can greatly reduce the costs of co-ordination inside and amongst organisations.

THE COMPANY

Telstra is Australia's dominant telecommunications company. Oiginally a government owned monopoly wholly concerned with POTS (plain old telephone service), it has been corporatised and sells more varied products and services. The Australian government has progressively sold half its stake in Telstra to the public and relaxed regulations constraining competitors. Although Telstra owns and operates Australia's fixed phone network it has faced vigorous competition in the mobile and data markets. New technologies such as Wi-Fi and VoIP (Voice over Internet Protocol) may undermine its network's value. Telstra's culture has changed with corporatisation: For example, a universal service objective and dominance by engineers has been replaced by profit imperatives and a marketing culture.

Before corporatisation, procurement was managed traditionally. Purchasing officers took short-term views, seeking goods and services at the lowest possible price with little regard for user perceived quality and less for creating mutually beneficial, long-term relationships with suppliers (with whom it had difficult relationships, sometimes softened by personal friendships). The Corporate Supply Group (CSG) was physically and intellectually isolated from the departments it was supposed to serve. It was passive, rarely questioning the arrangements that some departments, effectively bypassing CSG, made with suppliers.

The purchasing function had an insular culture. Some symptoms were:

- Engineers insisted on purchasing the "best product"- defined as the one most closely conforming to design specifications, not the most functional. Telstra incurred extra costs by insisting on non-standard components.
- Because Telstra was a government-owned monopoly until 1990, there was little incentive to reduce costs.
- Distrust of suppliers manifest in rarely writing supply contracts of more than one year's duration.

Telstra felt that changes to traditional purchasing systems and better management could reduce procurement costs by about 5%. Slaight (1999) opined that telecommunications companies can reduce procurement costs by between 10% and 15%. Parker (2001) reports that Telewest (a UK Telecom) has so far saved £11.8M by improving the culture of its purchasing and logistics functions and reducing the number of suppliers from 8000 to 400. In 1998, Telstra's top management decided to change the culture and operations of the Corporate Sourcing Group so that it would:

- Where appropriate, develop long-term relationships with suppliers. This would encourage the suppliers to invest in research and development that would ultimately result in lower unit costs and improved products.
- Develop and maintain fruitful relationships with the departments it served.
- Develop criteria for assessing the performance of different classes of supplier.
- Investigate the merit of introducing a Vendor Award System that would reward and/or recognise meritorious suppliers.

THE CHANGE PROCESS

The change to a strategically significant procurement process entailed:

Changes in Personnel and Culture

A headhunted procurement expert became the head of the (renamed) Corporate Sourcing Group (CSG), the above four points defining his brief. The new head correctly anticipated that substantial benefits would be obtained from: (1) More careful, competitive, and forceful management of sourcing processes. (2) Implementing professional management of vendor relationships and (3) Improving physical distribution systems.

Changed Procurement Processes

Before the changes, procurement was effected primarily by tender with little regard for long-term relationships. Tendering is still critical, but is now embedded in a more complex procurement process comparable with a process described by Wilson (2002). The redesigned process (described below), that is now applied to all contracts whose value exceeds \$A3M, achieved savings of about \$A600 in its first two years of operation.

Implementing and Analysing Benefits

Each supplier's performance is monitored using mutually agreed key performance indicators (KPIs) that always reflect cost and quality but may also measure delivery performance, product development, and responsiveness to Telstra's changing requirements. Long-term contracts almost always include a service level agreement (SLA) reflecting agreed key performance indicators (KPIs) and guaranteeing an agreed level of service (typically defined in terms of quality, price and delivery). Service Level Management (SLM) (Sturm, Morris and Jander 2000) is especially relevant to monitoring and managing service levels in Telstra's critical telephony networks.

Managing Vendor Relationships

Telstra now uses a formal Vendor Relationships Management (VRM) discipline that emphasizes commercial and fact-based management of each vendor's relationship with Telstra. By providing a consistent approach to and rich communication with important suppliers, Telstra manages the risks to supply; minimises the time taken to bring new products to its market; monitors the quality of services and products supplied; monitors vendor performance; minimizes the total cost of procurement; engenders continuing and fruitful relations with suppliers; and ensures that Telstra has complete and current market intelligence and benchmarking information on relevant industry sectors.

Telstra intends to collect and analyze more vendor performance data. These analyses will be used to assess and compare vendors' performances and decide whether both party's contractual obligations have been met. Telstra examines cases in which actual purchases deviated significantly from plan.

THE REDESIGNED PROCUREMENT PROCESS

The new sourcing process comprises the following steps. Throughout the process, the sourcing office works in close cooperation with user departments. Although the sourcing office is responsible for negotiating contracts and managing vendors, user departments will execute purchases (70% of orders are executed via the Web or EDI).

Screen Products and/or Services

Where Telstra is approached with new product or service proposals, these are subjected to a preliminary evaluation of their usefulness to Telstra.

Internal and Market Analysis

The requirements for a product or service are quantified; a procurement cost is estimated and relevant extant suppliers identified. Telstra ascertains the prices paid by comparable overseas companies and estimates potential suppliers' cost structures. Where Telstra anticipates establishing a strategic, integrated or key relationship with a supplier (see Table 1), the form of the business relationship (co-operative or arms length?) and emphases given to criteria such as unit cost, product improvement, and reliability of supply will be roughed out.

Relationship	Description
Strategic	Telstra's most significant and important suppliers. These
	have the ability to affect Telstra's position and reputation in
	the market
Integrated	Companies that integrate and coordinate their activities with
	Telstra to deliver their critical products and services
Key	Companies that provide specialised products or services to
	Telstra on a regular and routine basis.
Commodity	Companies that provide standard products or services to
	Telstra on a regular and routine basis
Occasional	Suppliers that periodically provide products or services to
	Telstra but have little or no impact on Telstra's market
	position.

Table 1 Telstra's Five Kinds of Vendor Relationship

Determine Sourcing Strategy

The appropriate relationship (see Table 1) is determined and the plan augmented by incorporating targets, especially financial targets. A schedule for specifying the requirements, writing the tender documents, awarding the tender and implementing the agreement will be prepared and approved.

Competitive supplier selection

Tender evaluation criteria will be defined. For critical infrastructure such as Telstra's network, network reliability and supplier dependability are paramount. Telstra depends on the supplier's expertise to fix, correctly and rapidly, any faults found in network hardware or software. For high-tech products and services, the supplier's ability (sometimes in cooperation with Telstra) to improve and vary the product or services may be important. For commodities such as office stationery, cost and delivery criteria will usually dominate. Supplier ISO9001 certification is normally required.

Supplier development

If the relationship between Telstra and the supplier is classified as strategic, integrated or key (Table 1), Telstra tries to establish a mutually beneficial, long-term relationship with the supplier. However, Australian law recognizes only black-letter contractual obligations; the element of cooperation implicit in a partnership has no legal basis.

Although a supplier and customer are always in conflict over how savings are shared, both parties will cooperate to reduce costs and improve product or service quality. Long-term contracts allows the supplier to invest in machinery with high fixed and low variable costs; in R&D that may improve the quality and/or reduce the cost of the product or service; and in recruiting and training staff. Like most purchasers, Telstra anticipates steady declines in the cost of its purchases and expects a modest share of the benefits of the supplier ascending the learning curve.

Other Cost Savings

Three other ways in which costs have been reduced are:

The parties sharing information. If customers provide suppliers with figures of their sales or consumption augmented with forecasts, suppliers can reduce production, transport, and inventory costs by optimally planning production. In future, Telstra may share with suppliers its forecasts of demand for relevant products or services. Telstra and some major suppliers are now attempting to co-ordinate activities and reduce procurement costs by using, for example, just-in-time technologies.

One desk. Consolidating all of a vendor's dealings with Telstra at a single, authoritative reference point within Telstra will ensure that information provided to the vendor is consistent and complete; that relevant Telstra policies are consistently applied and updated; and that any problems or ambiguities are quickly resolved.

OTHER ASPECTS OF TELSTRA'S PROCUREMENT

A Reduced Number of Suppliers

Telstra reduced the number of its suppliers from xxxx to yyyy between 2000 and 2003. There is a cost in maintaining a relationship with a supplier. Selection was made on the basis of past performance. Some retained suppliers acted as middlemen for a number of smaller suppliers who had previously dealt direct with Telstra.

Relationships with Suppliers

The level of trust between Telstra, its suppliers, and their employees is important. Telstra's top management should be aware of extant levels of trust and the effect they have on procurement efficiency. Trust is essential when e. g. the supplier provides services such as new computer systems whose design and delivery requires intimate cooperation between both parties' employees.

Telstra's procurement culture has changed, becoming more impersonal; the best tender wins regardless of the supplier's history or personal contacts. Telstra notes the need to accumulate knowledge about suppliers and that employees' knowledge of a supplier's capacities and past performance may be lost if they leave Telstra.

Some suppliers have tried to resist changes in Telstra's procurement procedures. Because Telstra remains half government owned, some suppliers unsuccessfully sought relief by lobbying politicians. However, most supplies prefer Telstra's more rational, transparent, and commercial methods. Telstra's large size and purchasing power ostensibly allow it to dictate to suppliers but this power is used with restraint.

E-procurement

Matthies (2001) opines that "...the typical European incumbent [telecom] can expect benefits in the order of 5-10% of operating costs if it puts its core business on the web." Telstra is introducing electronic commerce to streamline its procurement activities and will have most of its sourcing, purchasing, and payments online within five years. It is committed to ensuring that its vendors are able to participate in the adoption of e-commerce. In some cases, the web has allowed Telstra to bypass intermediaries and deal directly with principals.

The purchasing function has introduced several e-commerce initiatives:

- Telstra now places its open Requests for Tender (RFTs) online (www.telstra.com.au/tendersonline). At present, Telstra deals almost exclusively with local suppliers.
- Telstra is implementing systems that will enable automated web-based replenishment. The cost savings will be specially marked for repetitive purchases of commodities such as office stationery. Such systems may greatly facilitate obtaining quotes that minimize the cost of travel and accommodation (Kalakota and Robinson 2001 ch 10). A prerequisite is accessing suppliers' electronic instead of paper catalogues.
- Telstra prefers to pay by using Electronic Funds Transfer (EFT). In some cases, payment will be triggered by delivery, not statement. It is symptomatic that Telstra has recently decided to pay dividends by electronic transfer only. Preparation and postage of cheques (often not presented) is expensive.
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Training and Personal Development

As part of the change to professional procurement, Telstra includes training in each employee's personal development plan. It encourages procurement staff to undertake outside study. Experts have presented inhouse courses on, for example, contract law and negotiation.

CONCLUSIONS AND SUGGESTED RESEARCH

This paper has described the consequences of a large corporation's change from an unsophisticated purchasing office to a strategically oriented sourcing function. A significant reduction in procurement costs has been achieved by implementing rational business procedures and using vendor/buyer cooperation to reduce sourcing costs.

Telstra still has much to learn: the Internet and e-procurement will be used to automate routine purchases and promulgate tender documents with very large potential savings in clerical costs. The coordination of suppliers' production schedules with Telstra's forecast demand requires more work. Changes in procurement culture should be accelerated and embedded in all aspects of sourcing.

Telstra is considering implementing a Vendor Award System (VAS) that would recognise and motivate exemplary suppliers. The effectiveness of such schemes merits study. We want to study the wider ramifications of the new procurement policies: how much money do they actually save and do they, as promised, make Telstra more flexible? Will they allow Telstra to use overseas suppliers with advantage? Is outsourcing a form of procurement and could Telstra exploit outsourcing more? Should formalised procurement systems be used when one Telstra department (e.g. HRM) supplies another? Should Telstra use a Supply Chain Management paradigm (emphasizing the need to manage the whole supply chain) instead of a sourcing paradigm (focusing on managing direct suppliers) (Larson and Halldorsson 2002)?

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