

# OVERVIEW OF BUSINESS PROCUREMENT PROCESSES IN SOUTH AFRICA

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## Abstract

The article focuses on the procurement of goods to support the business operations of organisations, with special reference to South African practice. The following aspects are detailed: (1) identifying and specifying procurement needs; (2) selecting suppliers; and (3) controlling suppliers' performance. It is deduced that the procurement management process consists of five principal steps: (1) identifying and specifying a procurement need; (2) supplier survey; (3) investigation and assessment of suppliers; (4) choice of supplier(s); and (5) establishing and developing relationships with suppliers and controlling their performance. Steps 2, 3 and 4 collectively form the supplier selection phase.

**Keywords:** Control, Need Specification, Procurement Management, Supplier Assessment, Supplier Selection

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## 1. Introduction

For a manufactured product to reach the market, all or some of the constituent parts for its processing need to be acquired through procurement transactions. It is evident; therefore, that procurement is an indispensable function within the supply chain of all finished products. In this article, procurement management is defined as that part of supply chain management that plans, implements and controls the efficient, effective acquisition of all raw materials, semi-finished goods, finished goods, services and information in order to support the core operations and ancillary activities of the organisation. The article focuses on the procurement of goods to support the operations of organisations, with special reference to South African business practice.

More specifically the article looks at (1) identifying and specifying procurement needs (i.e. exactly *what* must be purchased), which is discussed in Section 2; (2) selecting suppliers (i.e. *who* will supply goods inputs), which is reported on in Section 3; and (3) controlling suppliers' performance (i.e. monitoring and reviewing *how* the goods supply takes place) with reference to South Africa, which is dealt with in Section 4. The conclusions of the study are contained in Section 5 of the article.

The opinion of logistics and procurement professionals from 34 business organisations in the various business sectors in South Africa was sought to determine (1) how they specify input needs; (2) how they select input suppliers; and (3) how they control their input suppliers' performance. Of these

organisations, seven were in the primary (i.e. production) sector; 18 in the secondary (manufacturing) sector; and nine in the tertiary (i.e. service) sector. Of the latter group, four were wholesalers and five were large retail chain stores.

Based on the responses obtained from the above-mentioned group, it can be deduced that the procurement management process consists of five principal steps:

**Step 1:** Identifying and specifying a procurement need

**Step 2:** Supplier survey

**Step 3:** Investigation and assessment of suppliers

**Step 4:** Choice of supplier(s)

**Step 5:** Establishing and developing relationships with suppliers, and controlling their performance.

(Steps 2, 3 and 4 collectively form the supplier selection phase.)

## 2. Need identification and specification

Ten methods of procurement need specification for business purposes dealt with the literature,<sup>1</sup> and which are applied in South Africa, are discussed here: by brand, by brand equivalence, by market grades, by sample, by commercial standards, by performance, by engineering drawing, by physical design, by material and method of manufacture, and by a combination of any of the afore-mentioned methods.

**Specification by brand.** The brand is the quality ordered. The higher prices paid for branded products

are often offset by less preparation for need specification and lower inspection costs. Brand buying is used when:

- the supplier's production is secret;
- the item is covered by a patent;
- a supplier's workmanship exceeds that of all competitors;
- the quantity of items procured is so small that it renders the formulation of specifications unduly costly; or
- the downstream customers/end users have strong preferences in favour of certain branded items, which cannot be swayed when conforming to their requirements.

**Specification by brand equivalence.** Many types of branded products sell at price premiums, like certain chemicals (e.g. antiseptics, cleaning compounds, medicines, ointments) and certain vehicle spare parts. For these products, a generic alternative may be preferable. When these products perform effectively, substantial savings may be realised. Medical-aid insurers often make it mandatory for members to make use of approved equivalents as opposed to more expensive prescribed medical remedies.

**Specification by market grades.** Need specification on the basis of market grades is confined mainly to organic raw materials, i.e. the primary products of agriculture, fishing and forestry. Market grading is a method of determining the quality of these natural products in unison with defined and generally accepted standards. Inspection to verify desired quality is vital if procurers are to obtain raw materials of the characteristics needed to produce a market-ready product with consistent quality.

**Specification by sample.** Need specification by sample is the submission of a sample of the needed item; however, this manner of need description is favoured only if other methods of need specification are not feasible. Features for which feasible alternative need descriptions often do not exist are (a) colour and texture; (b) printed matter; and (c) appreciation through sense perception. These aspects are addressed below:

- (a) A precise shade of colour is difficult to match without a colour chart, or display of the item itself.
- (b) Lithographic work is best described by proofs of what is desired.
- (c) Sense perception might best be judged by visual appearance (e.g. wood), taste and odour (e.g. wine required for blending to ensure consistent quality), and sound (e.g. musical instruments).

**Specification by commercial standards.** A commercial standard is a comprehensive description of an item that has been standardised. The description covers aspects like quality of materials/ingredients, workmanship required in manufacture, dimensions, constituent parts/ingredients, tolerances and

containment/packaging required. Recurring needs for the same products have led industry and authorities to develop standards for such products. Components like nuts, bolts, screws, nails, pipes, wire, cables, fishing line, electrical items and building components (e.g. door and window frames) that are manufactured to standard specifications can be expected to fit all standard applications regardless of the manufacturer. Material ordered according to standard specifications leaves no doubt on the part of either the procurer or the supplier as to what is needed.<sup>2</sup>

**Specification by performance.** Performance specification is application- and output oriented. The procurement need is specified in terms of the functionality required of the item, i.e. what the item is required to achieve. No mention is made of any design specifications, leaving the supplier with the initiative on how to provide the most effective product. Manufacturers of electronic ware, aircraft, sailing vessels, road vehicles, mechanical handling equipment and machine tools frequently use this method of need specification. There are potentially two primary advantages obtainable through specifying the required quality of output: firstly, ease of formulating desired performance; and secondly, assurance of obtaining desired performance. Supplier compliance under this specification is a prerequisite for the procurer to manufacture a product whose functionality testifies to its high level of technological advancement.

**Specification by engineering drawing.** Specification by engineering drawing particularly applies to construction projects, machine and job shop work, mechanical components, electric and electronic assemblies, forgings, castings and stampings. Engineering drawings are often supplemented by descriptive text to simplify completion of the required product. Specifying by engineering drawing is the appropriate and most accurate method to describe those subsystems, components and items that require a high level of manufacturing precision. There are four main benefits of specifying by engineering drawing:

- It is both accurate and precise.
- It is the most practical method to specify items that require extremely high tolerances.
- It is amenable to open competition among competent suppliers.
- It establishes definite standards for inspection.

**Specification by physical design.** Several items and materials required in manufacture are not covered by brands or standard specifications, and for these items and materials procurers prepare their own specifications. By developing their own specifications, procurers can avoid the price premiums of branded products, and infringement of patented, copyrighted and proprietary products. This, however, entails risk, therefore items or materials procured under this method of need specification

normally require special inspection – the cost of which can be high. The method provides definitions of the properties of the materials (the 'recipe's ingredients') that the procurer desires. This method endeavours to state in measurable terms the properties critical for desired use at minimum cost and in line with desired quality. This method of need specification is the opposite of specification by performance. The procurer provides exact chemical, electronic, dimensional or other physical specifications of the product it requires, and assumes full responsibility for the product's performance.

**Specification by material and method of manufacture.** Under this method of specification, both the material and the method of manufacture (i.e. the complete recipe) are prescribed to potential suppliers. In business this method is used when special needs exist and the procurer is willing to accept responsibility for results. Specifications under this method are costly to prepare, and the ensuing costs of inspection are generally higher than those incurred by other methods of need specification. Consequently relatively little use is made of this form of need specification. It is, however, utilised by large resellers of paint, large retail chains that sell so-called 'no-name brand' products, and large resellers of 'generic' medication and remedies.

**Combination of methods of need specification.** Businesses often use a combination of the methods described above to specify a need, simply because some needs cannot be sufficiently described by one method alone. A growing number of finished products require more than one method of needs specification. For example, curtain manufacture may require specification by commercial standards to describe the cloth, its density and the fire resistance required; specification by physical design to prescribe the length and width of the drops, and whether it should be lined or unlined; and specification by sample to demonstrate the shade of colour desired.

### 3. Selecting suppliers

It is necessary for the focal business in every supply chain to collaborate with and coordinate the performance of the suppliers in their chain effectively. This can be done by selecting and appointing the most suitable suppliers and then forming longstanding collaborative relationships with them.

#### 3.1 Steps in the supplier-selection process

The following three steps can be followed in the selection of suppliers:

- Step 1:** Supplier survey
- Step 2:** Supplier investigation and assessment
- Step 3:** Supplier choice

These three steps constitute the second, third and fourth steps in the broad five-step procurement process referred to in Section 1.

##### 3.1.1 Supplier survey

The research indicated that the following sources are used most in the search for potential suppliers in South Africa:

- Trade journals – these often contain indexed sections of different industry sectors
- Trade registers and directories (e.g. the publications of Braby's Directories<sup>3</sup>)
- The Internet (especially supplier websites that are registered with search engines)
- Telephone directories (e.g. the *Yellow Pages*<sup>4</sup>)
- Suppliers' sales personnel and field representatives
- Suppliers' catalogues, price lists, mail promotions and advertisements
- Trade shows and exhibitions

It was found that the purchasers of fast-moving consumer goods, standard domestic appliances and standard furniture (i.e. products of pure push-oriented supply chains) often make use of, firstly, computer-aided, vendor-managed procurement with input from suppliers' sales personnel, and are made aware of new products and promotions through the field representatives of suppliers and, secondly, from supplier catalogues and standard price lists.

The research showed that the purchasers of customised consumerware (mostly model clothing, stylised and modular furniture, electronic equipment and computers, and recreational vehicles – i.e. the products of combined push-pull-oriented supply chains) typically make use of trade journals, registers and directories, the Internet and trade exhibitions in their search for suppliers.

Apart from merely identifying possible suppliers whose range of outputs may cater for the prospective procuring business's needs, the supplier survey stage can go one step further and identify all parties that are interested in being considered for supplier assessment. In the case of standard items in a push-oriented supply chain, the only required information at this stage may be whether the vendor is capable and willing to supply certain volumes of standard products at certain destinations and at certain times, and a preliminary indication of its price and payment conditions. In the case of non-standard (differentiated) items, more initial information is often required, as desired production lots might become smaller, and more careful goods treatment may be required. The likely approach is to establish whether suppliers of non-standard items are willing to be listed for investigation and assessment upon exact product specifications that will be provided at a later time.

Businesses sometimes also make use of an open pre-qualification tender system, which allows suppliers to tender in response to advertisements and

open invitations in the media and on the Internet. The solicitation of vendor response through an open tender or on invitation is usually used in a pull-oriented supply chain where the objective is to procure specialised and custom-made products. Once a list has been compiled of the vendors that, first, supply similar forms of inputs to those that are mission specific to the procuring business and, second, have indicated during the survey phase a willingness to supply such inputs to the business, the investigation and assessment phase follows.

### 3.1.2 Supplier investigation and assessment

This phase is usually initiated by an exchange of information. First, exact product specification or tender documents are provided to identify potential suppliers and preferred bidders. Second, sufficient assessable information should be made available to the investigating purchaser. The research showed that purchasing businesses typically consider the following factors when assessing potential suppliers:

- Specific production capability
- Corporate standing
- Specific logistical supply capability

#### *Specific production capability*

This refers to whether a supplier has:

- the appropriate facilities and equipment;
- the technical expertise;
- access to the factors of production, coupled with effective resource procurement arrangements;
- healthy labour relations;
- capacity for technological research and product development;
- the ability to supply maintenance and technical after-sales service; and
- adequate operational controls to supply the procuring business with:
  - the specific form of physical goods;
  - to the exact quality specification;
  - at the desired time; and
  - in the required quantity sustainably over the specified period.

It is evident that a failure to identify at least one supplier that passes the assessor's technical standards test terminates the selection process.

#### *Corporate standing*

Having found technically capable suppliers of the specific item(s), the assessment proceeds. Given the impact that a supplier can have on a procuring business's performance and the sustainability of its operations, the next selection criteria to assess are, firstly, the likelihood that it will remain in business to fulfil the promises it makes and, secondly, whether it is the kind of organisation that the purchaser would

like to be seen doing business with. In this regard, the respondents pointed out that the following supplier factors are important:

- Reputation
- Quality of management
- Financial stability and viability
- Corporate image

With respect to the supplier's reputation, present and past customers are often willing to provide first-hand information. It may be difficult to investigate the quality of the business's management. However, companies that are listed by the JSE<sup>5</sup> are easier to investigate, as they must provide financial reporting publicly. Extensive business details and performance measurements of each JSE-listed company (and many non-listed ones) appear in the data register of McGregor BFA.<sup>6</sup> The McGregor reports are diversified and of a high standard, and supply detailed information on the financial results and business performance of companies. In some cases, visits to a potential supplier's business operations should give the investigators an insight into the quality of management and operational housekeeping. Discussions with the personnel of the supplier can be an effective source of information.

The potential supplier's labour relations are of great importance, as poor labour relations can lead to operational stoppages, erratic supply and inconsistent product quality. Sources of information for investigation are the supplier's strike and turnover records of its labour force.

In addition to a supplier's annual report, website and press releases, the archives of business print media and news-clipping agents are good information sources on a supplier's adherence to sound ethical and good corporate governance principles (like those proposed in the King codes of corporate conduct<sup>7</sup>), its approach with respect to disadvantaged groups, and its support of charities.

#### *Specific logistical supply capability*

According to the survey, once the production capability and corporate standing of potential vendors have been established, logistical supply capability of the candidates needs to be determined. Over and above the capability of storing, handling, transporting and containing the required quantity of items safely and securely, logistical supply capability refers to the ability to deliver items timeously. This concerns, firstly, delivery (replenishment) lead time; secondly, delivery reliability; and thirdly, delivery flexibility. As delivery lead time increases, or delivery frequency decreases, the volume of buffer (safety) stock that needs to be held by the purchaser grows.

### 3.1.3 Supplier choice

During the choice phase, interviews and arm's-length talks are commonly held with the potential suppliers

that have been included in the prioritised shortlist of candidates with a view to choosing the most suitable one. Often, purchasing businesses decide to purchase similar items from more than one supplier to ensure that the required input is always available at an acceptable price and in the required volumes. This is known as dual (or horizontally split) sourcing.

In addition to dual sourcing, supplier choice and appointment can also provide a vertically split supply configuration. This can take place in the following ways:

- A supplier is appointed that conducts both the production and logistical aspects of the sourced item(s).
- The item is purchased from a producer, but all (or most) of the logistical arrangements are procured from a third-party logistics service provider.
- The item is purchased from a producer, and all (or most) of the logistical arrangements are taken care of by the purchasing business.

Whatever vertical supply arrangement is chosen, the procuring business should keep its options open to have deliveries expedited should they not take place on time. The coordination of incoming traffic with a view to rectifying the time performance of the party responsible for deliveries could entail any of the following:

- Tracking and tracing
- Expediting and cross-docking of in-transit shipments
- Shipment diversion and re-consignment

When no suitable supplier is identified, the procurer may have to develop one. Recruitment of a supplier is often based on the rationale that the similarities of the process to manufacture the product that stands to be developed and the current manufacturing process of the prospective supplier will afford the latter the opportunity to apply a common manufacturing process for all products. Through a shared manufacturing process permitting use of the same technology, the newly developed product's manufacturing cost will be less than the cost of manufacturing it separately. Whenever the prospective supplier possesses the research and development capability to fully finish the new product so that all the technical qualifications are met, certain business prerequisites need to be fulfilled. These may entail that, firstly, a sufficiently large and enduring order is guaranteed to elicit the prospective supplier's commitment and, secondly, a sound prospect for mutually beneficial business synergies exists so that a strategic alliance can be established with relative ease.

#### **4. Establishing and developing relationships with suppliers, and controlling their performance**

An organisation's desire to satisfy the needs of its customers and to provide continuous improvement in

its customer service is dependent on its suppliers to help accomplish these goals. Research indicates that the two most commonly used measures in supplier performance measurement systems are customer service received and quality of service provided.<sup>8</sup>

Respondents confirmed that in order to determine whether the desired goods, services and information are consistently made available at the designated place and arranged time, and in the required condition and quantity, supplier performance should be quantified at the time work is completed. In so doing, the following measures are judged to be most critical:

- *Percentage of orders delivered at the right (i.e. designated) place*
- *Percentage of orders delivered on time (i.e. at the arranged time)*
- *Percentage of orders delivered damage free (i.e. in the required condition)*
- *Percentage of orders fulfilled (i.e. in the required quantity)*
- *Percentage of orders documented as invoiced accurately*

Supply quality is closely related to the objective of achieving optimal customer service. Whereas customer service refers to how effectively procurers' desires are conformed to, supply quality refers to how efficiently (or cost effectively) procurers' desires are met. From this perspective, the following measures are indicated as being most important:

- *Damage frequency*
- *Frequency of credit claims by a procuring customer*
- *Frequency of product returns by a procuring customer*
- *Ratio of orders sorted, packed, shipped and delivered accurately*
- *Ratio of orders documented and invoiced accurately*

Although certain measures under the criteria 'customer service received' and 'supply quality' appear identical, for example orders documented and invoiced accurately, their relevance under each grouping differs. Under 'supply quality', performance relates to technical efficiency or how well a supplier contributes to cost containment. Under 'customer service', each measure relates to how well a supplier contributes to productivity or output enhancement.

#### **5. Conclusions**

Procurement management is the part of supply chain management that plans, implements and controls the efficient, effective acquisition of all raw materials, semi-finished goods, finished goods, services and information in order to support the core operations and ancillary activities of the organisation.

Five principal steps can be identified in the procurement management process: (1) identifying and specifying a procurement need; (2) supplier survey;

(3) investigation and assessment of suppliers; (4) choice of supplier(s); and (5) establishing and developing relationships with suppliers, and controlling their performance. Steps 2, 3 and 4 collectively form the supplier selection phase.

The ten methods of procurement need specification for business purposes that are applied mostly in South Africa are: by brand, by brand equivalence, by market grades, by sample, by commercial standards, by performance, by engineering drawing, by physical design, by material and method of manufacture, and by a combination of any of the afore-mentioned methods.

The following sources are used most in the search for potential suppliers in South Africa: trade journals, trade registers and directories, the Internet, telephone directories, suppliers' sales personnel and field representatives, suppliers' catalogues, price lists, mail promotions and advertisements, trade shows and exhibitions.

Purchasing businesses typically consider the following factors when assessing potential suppliers:

- Specific production capability
- Corporate standing
- Specific logistical supply capability

During the choice phase, talks are commonly held with potential shortlisted suppliers. Businesses often decide to purchase similar items from more than one supplier to ensure availability, acceptable prices and required volumes.

A business's desire to satisfy the needs of its customers and to provide continuous improvement in its customer service is dependent on its suppliers to help accomplish these goals. The two most commonly used measures in supplier performance measurement systems are customer service received and quality of service provided.

## Endnotes

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