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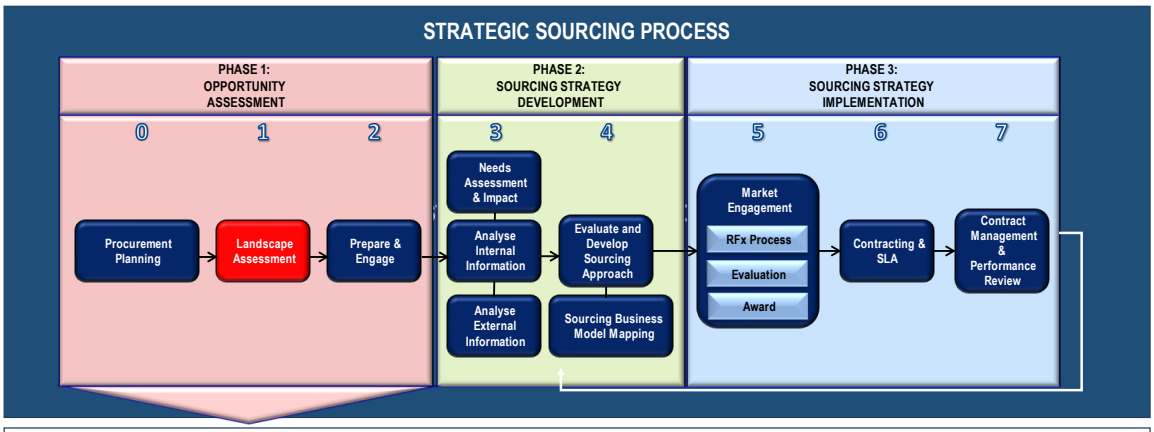
SPF GOOD PRACTICE GUIDE

PORTFOLIO ANALYSIS, COMMODITY POSITIONING AND PRIORITISATION

Using this guide
This guide accompanies the National Treasury's Strategic Procurement Framework (SPF) for Strategic Sourcing in the Public Sector. For more information, visit the National Treasury website at http://ocpo.treasury.gov.za/
The SPF can be found here: http://ocpo.treasury.gov.za/Resource_Centre/Documents/1A.%20Strategic%20Procurement%20Framework.pdf

PORTFOLIO ANALYSIS, WITHIN THE STRATEGIC SOURCING PROCESS



1.0 LANDSCAPE ASSESSMENT

1.1 Portfolio Analysis, Commodity Positioning & Prioritization

1.2 Commodity Group Classification

1.3 Sourcing Business Model Mapping (SBMM)

1.4 Project Proposal and Approval

1.0 Introduction

i. Portfolio analysis is the first step of the landscape assessment stage where the sourcing specialist gets an understanding of the institution's spending profile for strategic planning and procurement planning purposes.

ii. This involves identifying spending areas where there are opportunities to reduce costs or improve processes as part of the portfolio analysis.

iii. The following good practice guides and templates apply to portfolio analysis:

   a. Pareto Analysis (ABC classification/80-20 rule)

b. Category hierarchy analysis
c. Kraljic matrix

1.1 The objective

i. The objective of the Portfolio analysis is to identify, position and prioritise the spending categories under your management for three purposes:
    a. Strategic planning and budgeting purposes
    b. Procurement planning purposes
    c. Informing the most appropriate sourcing business mapping selection model

1.2 The output

i. A spend map for strategic planning and budgeting purposes
ii. A spend map for procurement planning purposes
iii. A wave implementation matrix
iv. Sourcing business models

2.0 Good practice guides

2.1 Portfolio analysis

2.1.1 The tools for portfolio analysis

i. Use tools such as the Kraljic matrix, the Pareto analysis and category hierarchies to carry out a portfolio analysis of a category.
ii. The Pareto analysis helps to determine the spending patterns based on the 80-20 rule: where 20% of the goods and services take up 80% of the institution's budget.
iii. Although the tool does not focus on the supply risk complexity, it provides insight into the spending patterns and the suppliers or commodities that take the bulk of the spend.
iv. The Kraljic matrix helps the procuring institution to maximise its purchasing power by considering the impact on its spending as well as the risk associated with the commodity should the supplier fail to deliver.

v. Commodity hierarchy analysis helps to show how the spending of an organisation is spread across commodity groups.

vi. It provides information that an organisation can use to assess the significance of particular categories of spend, such data as direct and indirect spending.

2.1.2 An example of portfolio analysis

i. This sample shows an institution's expenditure profile at SCOA Item Level 3.

ii. Level 3 provides high-level insight into spending categories for strategic planning and budgeting purposes.

iii. Extract the expenditure that is related to SCM (e.g. Goods and Services, Machinery and Equipment, etc.), in other words, items that are subjected to a procurement process.

iv. This example of a portfolio analysis indicates only 28% of the institution's spend relates to goods and services.

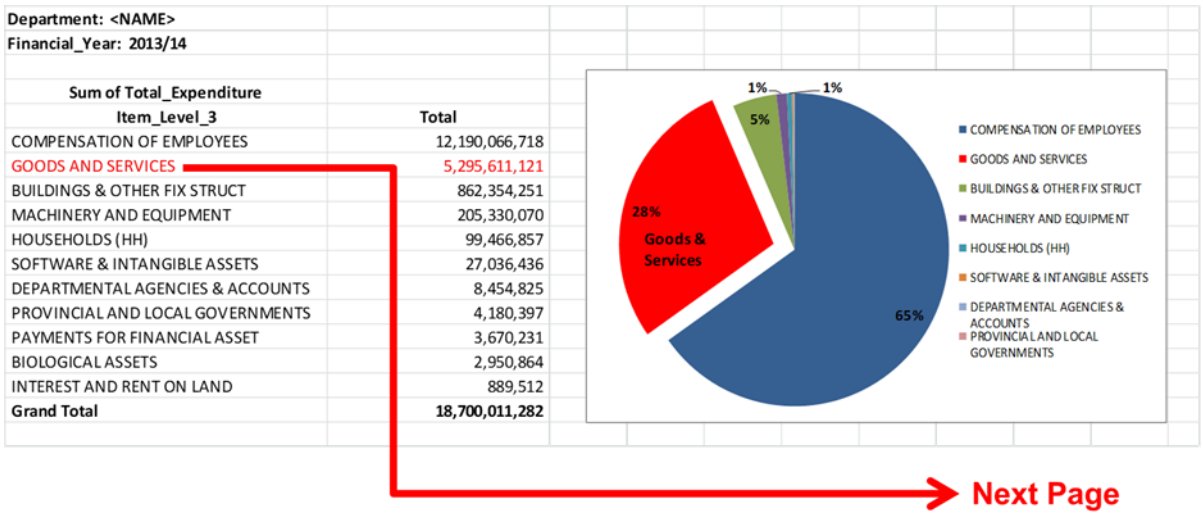


Figure 1: Expenditure profile

2.1.3 Data ranking as part of the portfolio analysis

i. The data is further ranked as part of the analysis.

ii. The following data indicates the top 10 commodities that constitute 20% of the commodities that take up more than 80% of the institution's spending.

Item_Level_3	GOODS AND SERVICES
Sum of Total_Expenditure	
Item_Level_4	Total
OPERATING LEASES	1,704,419,443
PROPERTY PAYMENTS	845,871,841
AGENCY&SUPRT/OUTSOURCED SERVICES	625,070,473
INV:FOOD & FOOD SUPPLIES	349,372,637
CONS SUPPLIES	285,684,405
FLEET SERVICES(F/SER)	244,224,533
TRAVEL AND SUBSISTENCE	242,306,213
INV:FARMING SUPLIES	166,140,999
CONTRACTORS	103,482,792
COMMUNICATION	99,929,941
COMPUTER SERVICES	93,596,008
INV: MEDICINE	84,702,746
INV:MATERIALS & SUPPLIES	64,263,032
CONS:STA,PRINT&OFF SUP	56,345,315
AUDIT COST:EXTERNAL	47,346,628
CONS/PROF:BUSINESS&ADVISORY SERV	43,614,758
INV:CLOTH MAT&ACCESSORIES	41,523,660
CATERING:DEPARTML ACTIVITIES	34,990,251
CONS/PROF:LEGAL COST	29,667,031
INV:FUEL, OIL AND GAS	24,058,002
MINOR ASSETS	22,039,439
CONS/PROF:LABORATORY SERVICES	14,105,397
OPERATING PAYMENTS	13,385,553
ADVERTISING	12,743,416
VENUES AND FACILITIES	9,907,036
RENTAL & HIRING	6,095,643
TRANSPORT PROVIDED DEPT ACTIVITY	5,959,475
ADMINISTRATIVE FEES: PAYMENTS	5,858,898
TRAINING & DEVELOPMENT	5,569,240
INV:LEARN&TEACH SUPP MATE	5,089,458
CONS/PROF:INFRASTRUCTRE&PLANNING	3,497,596
BURSARIES (EMPLOYEES)	2,819,432
INV:MEDICAL SUPPLIES	1,462,559
ENTERTAINMENT	256,852
INV:OTHER SUPPLIES	210,418
Grand Total	5,295,611,121

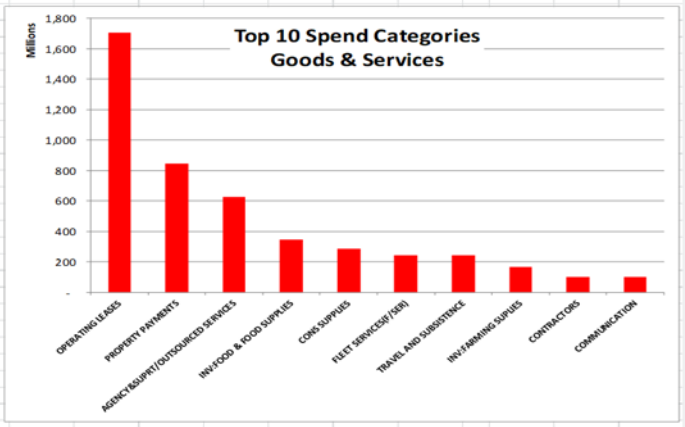


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Figure 2: Data ranking on goods and services expenditure

2.1.4 The Pareto analysis (ABC classification/80-20 rule)

i. The ABC classification (also called the 80-20 rule) is a tool used to determine the spending in terms of which commodities or suppliers constitute the biggest spend from the spending basket. For example, only 20% of the goods or services bought by a department or organisation constitute 80% of the spending and 80% of the goods and services take only 20% of the spending.

ii. The ABC classification (also called the Pareto Principle) is a tool used to analyse spending.

iii. This tool only helps to classify commodities based on spend and does not consider the supply complexity or risk.

iv. The data will also indicate the commodity per supplier.

v. Using an Excel sheet, the data can be arranged in order of highest to lowest as indicated in Figure 2.

vi. A decision can be made such as the top 4 or so commodities/categories constituting the "A" category with the last 10 out of 20 constituting the "C" category items as indicated in table 1 (analysed ABC classification data).

2.1.5 An example of applying the Pareto Analysis

i. Spend data of a basket of commodities (R'000)
ii. Table 1 shows the calculations of an ABC analysis calculated on spend data: R300, R40, R25, R15, R8, R5, R4, R3, R2, R225, R30, R15, R10, R150, R6, R5, R25, R4, R3, R125.
iii. By using an Excel spreadsheet, the data is arranged or sorted from highest to lowest.
iv. A total spend from 20 items is R1 million and the first four items constitute R800 000.
v. The first 4 commodities take 80% of the total spend of R1 000 000.

Spend Data high to low	Cumulative spend	# of items	ABC Classification
300	300	1	A items
225	525	2	
150	675	3	
125	800	4	
40	840	5	B items
30	870	6	
25	895	7	
25	920	8	
15	935	9	
15	950	10	
10	960	11	C items

Spend Data high to low	Cumulative spend	# of items	ABC Classification
8	968	12	
6	974	13	
5	979	14	
5	984	15	
4	988	16	
4	992	17	
3	995	18	
3	998	19	
2	1000	20	

Table 1: Analysed ABC classification data

2.1.6 Category Hierarchy Analysis

i. By implementing a category hierarchy, an organisation can group spending data and consider it at different levels of detail.
ii. The data can then be analysed at a category, sub-category, or sub-sub-category up to the commodity level.
iii. Further, the spending data need to be analysed as direct and indirect, and addressable and non-addressable.
iv. The ability to consider spend data as category hierarchies does the following:
    a. It helps an organisation understand how category management can be implemented
    b. It provides evidence that can be used by an organisation to allocate resources to procurement and supply
    c. It gives an organisation data to use for forecasting, analysis and identifying trends

Example 1: Category hierarchy for travel

i. Figure 3 (category hierarchy for travel) shows a breakdown of categories into sub-categories for better analysis.

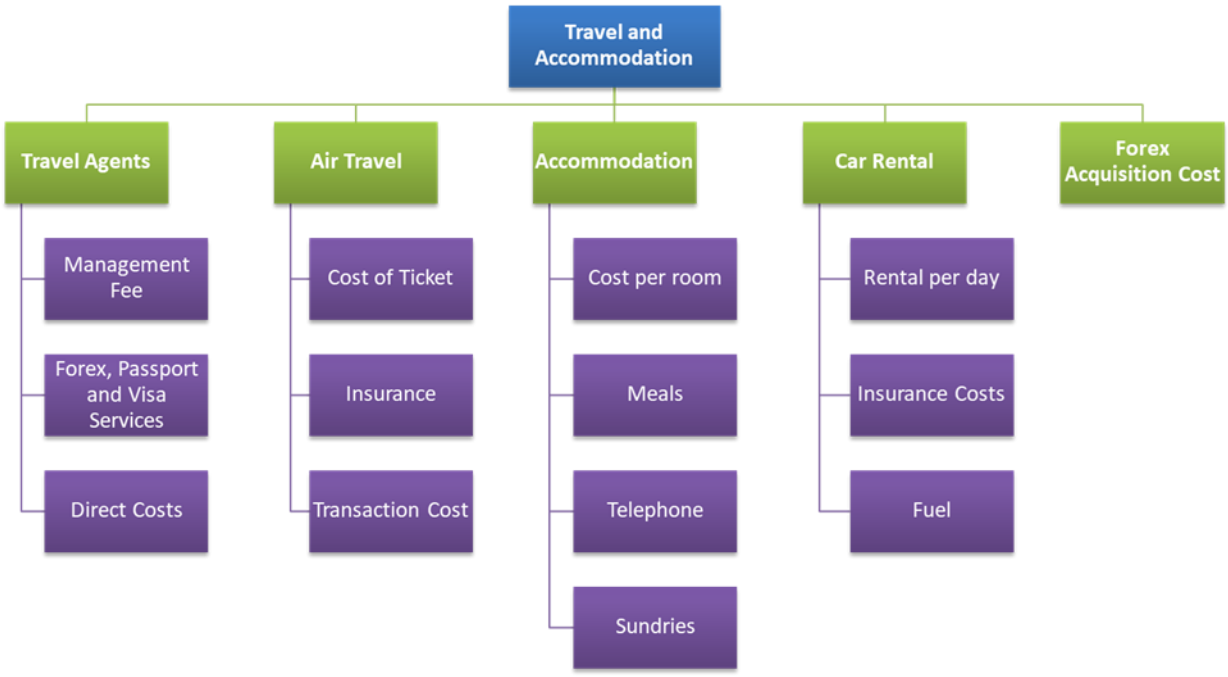


Figure 3: Category hierarchy for travel

ii. Once the category has been grouped into a hierarchy, the next aspect is to understand the spending.

Example 2: Spend breakdown: Travel

i. The spending breakdown helps to understand direct, indirect, addressable and non-addressable spending.
ii. Figure 4 shows the breakdown.

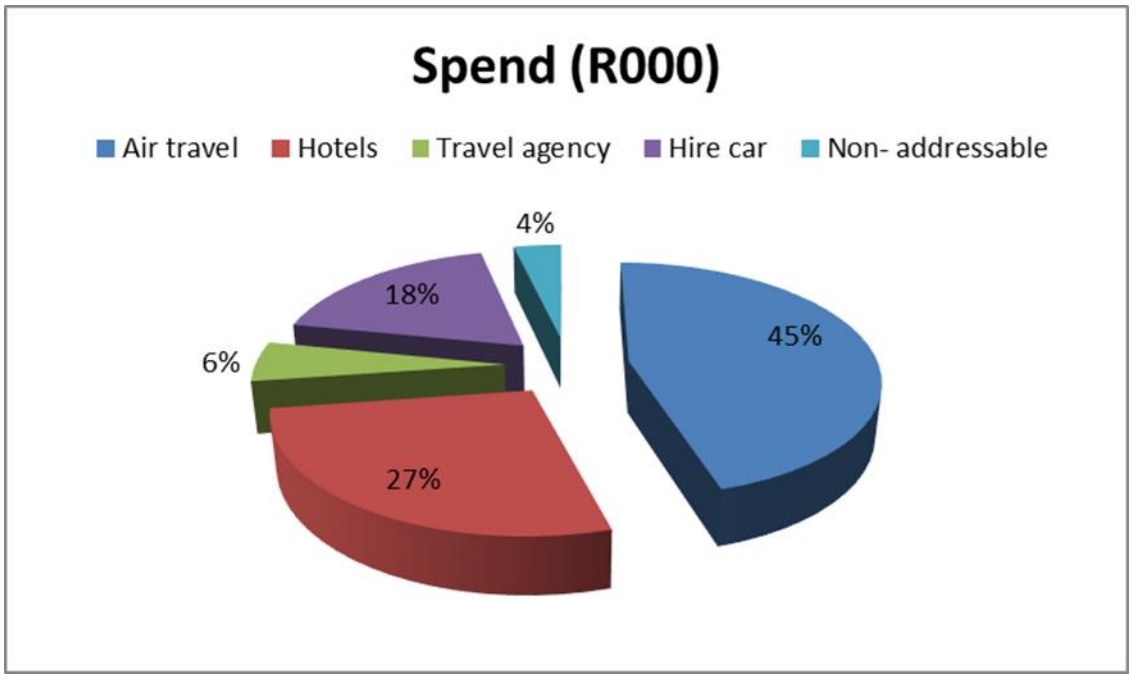


Figure 4: Category spend data breakdown

2.2 The Kraljic matrix

i. The Kraljic matrix is used to position and categorise the commodities according to strategic importance, and suggest generic sourcing objectives.

ii. The commodity positioning is determined by evaluating two sets of variables:
   a. Factors relating to the risk and complexity (Supply Market Complexity)
   b. Factors relating to the spend value and impact on service delivery (Business Impact)

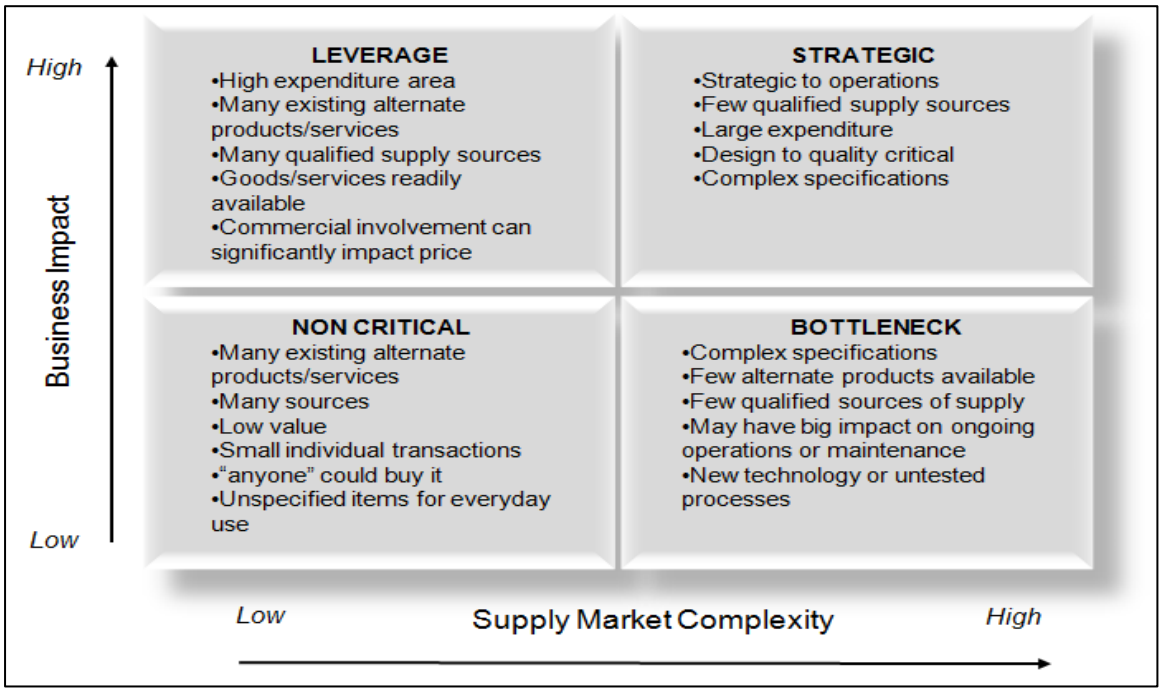


Figure 5. Commodity Positioning Matrix

2.2.1 Business impact

i. Business Impact refers to the impact or effect of the commodity on the Total Cost of Ownership (TCO) and the organisation's core service delivery objectives. Business impact is high when the item adds significant value to the organisation

ii. Examples of factors determining Business Impact:

   a. Expenditure levels
   b. Percentage of expenses
   c. Price volatility/impact on non-delivery
   d. Process/conversion costs
   e. Relationship to core service delivery mandate
   f. Value added to end-users of the commodity/service
   g. Business impact can be determined by answering questions such as:
   h. How important is the category's value in the organisation's total spending?
   i. Do the end users perceive this category as adding significant value?
   j. Does the category differentiate the end product significantly?

k. Would a category failure affect the end user satisfaction?

2.2.2 Supply Market Complexity

i. Supply market complexity refers to the criticality of business processes and market availability. Complexity is high when the item is scarce, when its availability could be affected by instabilities, when delivery logistics are difficult and could easily be disrupted, or when there are a few suppliers

ii. Examples of factors determining supply market complexity:
   a. Supplier concentration
   b. Threat of substitution
   c. Potential of new supplier
   d. Buyer leverage
   e. Share of market
   f. Time Sensitivity
   g. Regulated commodities such as gas transportation, receiving and storage in hospitals
   h. Quality and technical risk

iii. Supply risk can be determined by answering questions such as:
   a. How strong is the competition among the market players?
   b. Can you easily switch to another category?
   c. What is your buying power for this category?
   d. What is the bargaining power of suppliers?
   e. Can new entrants be easily found and invited to tender?

Complexity and Business Impact Scale

Complexity	*Rationale*
Min 0 1 2 3 4 5 Max	• Low complexity commodities include consumable items, services provided by utilities, and administrative services due to ease of sourcing.
Min 0 1 2 3 4 5 Max	• Low medium complexity commodities include travel and subsistence, catering services, office equipment and fuel due to the large supply base and ease of finding substitutes.
Min 0 1 2 3 4 5 Max	• Medium complexity commodities include security, human resources and advertising related services. Due to the specialised nature of the services, which however there is still a number of substitutes available
Min 0 1 2 3 4 5 Max	• Medium high complexity commodities include facilities, medical and legal goods and services, due to difficulty in substituting products and specialised technology of suppliers.
Min 0 1 2 3 4 5 Max	• High complexity commodities such as software, licenses and project management services, due to the stringent contractual and IP protection requirements

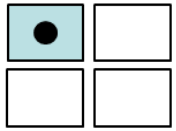
Business Impact	*Rationale*
Min 0 1 2 3 4 5 Max	• Low business impact commodities including support materials and services.
Min 0 1 2 3 4 5 Max	• Low medium business impact such as administration, equipment and machinery rental services because these do not have a direct impact on business activities.
Min 0 1 2 3 4 5 Max	• Goods and services that do not have a direct impact on business operations, but are important for staff morale such as training and development, events and office furniture.
Min 0 1 2 3 4 5 Max	• Relatively high business impact items that are important to the operations of the business such as utilities and professional services.
Min 0 1 2 3 4 5 Max	• Very high business impact items that are critical to the operations of the business such as medical and IT goods and services

Figure 6.

Figure 6: Complexity and Business Impact Scale

Case examples of commodities per quadrant

Quadrant Overview



LEVERAGE

Characteristics

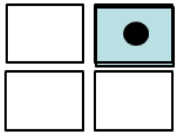
- *Goods and services required on an on going bases*
- *High spend /usage by National Departments*
- *Moderate lever on interdependency on suppliers*

Commodity Examples

Commodity	Spend (Rm per Year)	User
(Infrastructure maintenance services)	5 164	National
(Fuel, Oil & Grease)	903	National
(T&S Domestic- Air Transport)	781	National
(Audit Fees- Ext Current Year)	768	National
(Water)	735	National
(Catering Department Activities)	719	National

Figure 7: Commodities per quadrant (Leverage)

Quadrant Overview



STRATEGIC

Characteristics

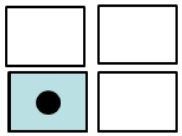
- *Goods and services that are crucial for the government.*
- *Characterised by a high supply risk caused by scarcity or difficult with delivery*
- *High level of interdependency and balanced power*

Commodity Examples

Commodity	Spend (Rm per Year)	Users
(New Buildings & Other Fix Structure)	13 302	Provincial
Commercial or industrial facility rental	8 658	National
Blood Analysis Laboratory Services	3 381	Provincial
(Building maintenance service -contracted)	3 210	Provincial
(Safeguarding & Security of property)	3 145	Provincial
(Project Management)	3017	National

Figure 8: Commodities per quadrant (Strategic)

Quadrant Overview



NON-CRITICAL

Characteristics

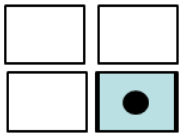
- *Goods and services that are easy to buy and also have a relative low impact*
- *Balanced power and low level of interdependencies*
- *The quality is standardised.*

Commodity Examples

Commodity	Spend (Rm per Year)	Users
(T&S Domestic- KM Allowance)	2 126	Provincial
(Telephone and Fax Services)	1 505	Provincial
Temporary manual labour	1 481	National
Office administration or secretarial services	1 057	Provincial
Conference Centres	983	Provincial

Figure 9: Commodities per quadrant (Non-critical)

Quadrant Overview



BOTTLENECK

Characteristics

- Products that can be only be acquired from few suppliers or their delivery is unreliable and relative low impact.
- Supplier has more power and moderate level of interdependency

Commodity Examples

Commodity	Spend (Rm per Year)	Users
(Upgrade and additional building & other fix structure)	8 435	Provincial
(Refurbishment and Rehab Buildings and Other Fix Structure)	6 004	Provincial
(Supporting Material)	2 906	Provincial
Catering services (Education Facilities)	3 156	Provincial
Supply of three phase electricity	2 750	Provincial

Figure 10: Commodities per quadrant (Bottleneck)

3.0 The templates

Not applicable