EXPLORING THE IMPACT OF THE STRATEGIC SOURCING PROCESS ON THE PRODUCTION OF CIRCULATION COINS AT THE SOUTH AFRICAN MINT COMPANY

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Abstract
The South African Mint’s new commercial strategy requires the business to compete against other mints globally. All typical profit-making facets of being a supplier of choice to governments and central banks must be considered. These being; costs, delivery, mitigating risks, ease of doing business and overall relationship management. The sourcing function was identified as a key area of the SAMC that could make a perceptible impact to the company’s strategy by acquiring raw materials and other critical items for the manufacturing department so that coins can be manufactured optimally while managing costs prudently. The aim of the research was to explore the impact of a strategic sourcing process on the production of circulation coins at the SAMC.

Keywords: Exploring, Impact, Strategic, Sourcing, Production, Coins, Circulation, Mint, Risks, Costs

1.1 Introduction
According to Kampmann (2014), mints around the world are experiencing an unprecedented pace of change. As a result, various mints are rapidly re-evaluating their operating models and market strategies not just to withstand these market forces, but capitalise on them. Kampmann (2015) argues that the only mints that remain successful are ones which manage to manufacture circulation coins increasingly cheaper, faster and more forgery-proof, thus becoming a preferred partner for countries who do not have a mint of their own. The SAMC’s sourcing process is regarded as traditional. According to Accenture (2007), the traditional approach to sourcing is to solicit competitive bids and award the contract to the lowest bidder. Khan (2014) declares that the strategic approach to sourcing, takes into account the role of long-term supplier relationships, total cost, risk management and the opportunity to create an integrated supply chain with strategic partnerships for future purchases of goods and services which are critical to the overall objectives of an organisation. According to the BCG Global Manufacturing Cost Competitiveness study (2014), companies should assess their manufacturing competitiveness and advises that they should reassess their global production and sourcing footprints in light of costs, supply risks and production efficiency. Therefore, the SAMC should re-evaluate their sourcing process in order to add strategic value to the SAMC’s support functions that enable its manufacturing activity to operate continuously.

The South African Mint Company needs to become a global player in the coin market and has developed a strategy that over the next 3 to 5 years will realise the company’s objective of becoming a globally competitive mint. The Hackett group (2015) claim that such a strategy will require support from various service areas of the business including the procurement function. This study will therefore explore the effectiveness of the sourcing process in the manufacture of circulation coins. It will further discuss how strategic sourcing
1.2 Aim of the Study
This study aims to explore the impact of strategic sourcing process on the production of circulation coins at the South African Mint Company.

1.3 Objectives of the Study
1. To explore the nature of the current sourcing process at the SAMC
2. To explore the impact of strategic sourcing on the manufacturing of circulation coins
3. To explore the effectiveness of the strategic sourcing process
4. To offer recommendations to the executive of the SAMC and other relevant stakeholders

LITERATURE REVIEW
2.2 Definitions of Sourcing
Sourcing is a core activity in the procurement function that can create value for customers, stimulate innovation and identify new products and market possibilities for modern organisations (Milliken, 1987). Therefore, it can be argued according to Monczka, Handfield, Giunipero and Patterson (2011), sourcing is essentially a cross-functional process, aimed at managing, developing and integrating with the supplier capabilities to achieve a competitive advantage (Monczka et al., 2011).

Van Weele (2010:2-3) believes that improving the sourcing process is a critical factor for the success and competitive advantage for companies. Robust purchasing policies and procedures fundamentally contribute to business success in several ways such as improved sales margins, improved quality and logistics arrangements with supplier; establishes a competitive supplier base and shapes better business relationships.

From a strategic point of view, sourcing can be defined as a systematic process that directs purchasing and supply managers to plan, manage, and develop the supply base in line with the organisation’s strategic objectives (Ball, 2005). Strategic sourcing refers to the value added process of selecting suppliers which is supported by advanced analytics, market intelligence, supplier performance information and a concrete and well developed strategy (Deloitte, 2014).

Sabri and Shaikh (2010:78) define strategic sourcing as selecting the best strategy to reduce cost and risk while at the same time maximising flexibility. According to Coyle, Langley, Novack and Gibson (2013:551), the unique aspects of strategic sourcing are the following:

- Consolidation and leveraging of purchasing power: Looking at everything purchased by business, significant savings can be achieved through consolidation of purchasing power.
- Emphasis on value: The total cost approach makes it possible to gain value through insight on the total cost of the product and service.
- Improves supplier relationships: Sound business relationships are developed with suppliers which can lead to greater collaboration and innovation.
- Attention directed towards process improvement: Business practices are looked at as a whole as oppose to just purchasing process. This view results in knowing the impact of strategic sourcing to the total business
- Teamwork: strategic sourcing encourages teamwork as cross functional teams are understood as being comprised of two paramount strategic dimensions: the choice among various supply markets and the choice among various supply channels.

2.3 Importance of supplier relationship management for strategic sourcing
Relationship management is critical in strategic sourcing. Skjott, Schary, Mikkola, and Kotzab contend that relationships between buyer and supplier have shifted from “arm's length to close collaboration” with strategic suppliers (2008). For each supplier the measurement for customer relationship management process is the change in the customer’s profitability (Skjott-Larsen et al., 2008). For the customer, the measure of success of its supplier relationship process is the impact the supplier has on the profitability of the customer (Lambert, 2008:55). Bidgol (2010:122) advance that customer and supplier relationship management constitute the essential interfaces within the supply chain.

2.4. Benefits of supply risk management in strategic sourcing
Coins form an integral part of any economy and are of national importance. According to the SARB (2015), the non-supply of coins can result in a slow-down in the economy. Therefore, any risk that
could impact the manufacturing of coins has to be managed diligently. The risks associated with the failure of suppliers to supply raw materials can result in reputational damage and financial loss to the SAMC and its customers.

According to Culp (2014), it has become increasingly important for companies to consider and take actions upon risks both internally and externally since organisations are more dependent in a global marketplace. The SAMC sources raw material and maintenance spares from other countries as well as having a global customer base. This type of global supply chain in combination with higher expectations and demands from stakeholders, ease of communication and spread of information has made it increasingly important for many companies to consider a risk management approach in their organisation (Hopkin, 2012).

Risk is a daily aspect of personal and organisational life which is reflected in decisions associated with investment, human resources, new products and services and the management of supply chains (Khan and Zsidisin, 2012:1). The global financial crisis as an example and a number of severe natural disasters are just some reasons why organisations need to be prepared for disturbances (Jüttner and Maklan, 2011:246).

Handfield and McCormack (2008:55) argue that addressing risk management in manufacturing amounts to changing organisational culture and priorities. The SAMC is associated with a culture of complacency because of the enduring support from the SARB. However, due to the commercial strategy adopted, the culture of the SAMC would have to be transformed to a risk conscious organisational culture.

Business environments currently are characterised by a high degree of complexity and insecurity, therefore, manufacturing companies are forced to manage their supply chains effectively in order to increase efficiency and reactivity (Culp, 2013). According to Dittmann (2014), supply complications such as supplier losses or quality problems of products places supply chain risk management as being imperative as the resultant difference between a successful or unsuccessful business.

Companies aspire to be as cost-efficient as possible at the same time as responding in an optimal way to customer and market risks (KPMG, 2012). For businesses, a general rule is that the more complex a supply chain is, the more interfaces are present and the higher the vulnerability will be (Thun and Hoenig, 2009:242).

2.4.1 Process of supply risk management

According to Leung (2014), supplier risk management is a systematic approach to identify, assess and mitigate risk and identifies the 6 step approach to supply risk management as follows:

- Step 1 defines the supplier population in order to include suppliers in a risk management programme
- Step 2 identifies the risk segmentation model in order to evaluate each supplier through the initial risk segmentation analysis that provides a consistent and efficient means to segment existing or potential suppliers
- Step 3 a risk scoring model is developed in order to identify supplier risks inherent to the raw material and service being procured
- Step 4 controls the effectiveness by evaluating the effectiveness of the supplier’s inherent risk
- Step 5 of risk mitigation ensures suppliers are appropriately monitored, managed and reported on through supplier life cycle
- Step 6 addresses the off boarding process to ensure that the risk management process releases suppliers who no longer provide services and products to the business

Leung (2014) states that supply risk management is not a process that occurs at any given period but rather a process that is continuous. Bugalla and Narvaez (2014) further claim that to manage supplier risk effectively, dedicated human and capital resources are required.

Dornfeld and Linke (2012:40) assert that the supplier risk management process is an actual cycle and a continuous process.

According to Dornfeld and Linke (2012:41), the steps have to be controlled continuously in order to achieve the acceptable risk targets. The cycle is only complete after feedback is given to the supplier. Feedback to supplier is also provided at each step of the risk management process.
The SAMC’s supply base consists of several direct interfaces externally with key commodities such as copper and nickel being exposed to various risks for instance price fluctuations due to exchange rates and quality risks because a high quality product is required in coin manufacture.  

2.4.2 Benefits of improved process efficiencies through strategic sourcing

One of the critical roles of strategic sourcing is reducing lead times and improving on delivery to meet the customers demand (Lysons and Farrington, 2006). By reducing lead times and achieving faster delivery, the company's competitiveness will be enhanced (KPMG, 2011). Lysons and Farrington (2006) argue that within a supply chain context, delivery, speed and reliability have become key requirements for competitive differentiation and increased profitability. According to Cunha and Manuela (2011:191) firms need to be more efficient in their purchasing process in order to maintain their competitiveness. Another important role for strategic sourcing is to place emphasis on administrative routines of the actual purchase order cycle state Cunha and Manuela (2011:190).

The procurement team at the SAMC processes 800 purchase orders per month on average. Ameredes (2007) describes a traditional sourcing process as a nine step process and is largely reactive and are the following:

- step 1 research products for purchase
- step 2 create requisition
- step 3 approve requisition
- step 4 create purchase order
- step 5 supplier creates sales order
- step 5 supplier delivers and receipt of goods
- step 7 supplier invoice received
- step 8 pay supplier
- Step 9 post to general ledger

Ameredes (2007) states that the traditional sourcing method is not efficient due to its reactive nature. Procurement is only included at the administration end of the process. The end user researches the service or product required only when the need arises, a requisition is created and then approved. This model is currently utilised at the SAMC.

According to Han (2005), the above traditional procedures are only administrative and provide a documented logistical trail. The inefficiencies include according to Han (2005): a sequence of non-value adding clerical activities; tendency to result in excessive documentation; excessive order processing time and excessive administrative cost for pure transactional activities. Organisations need to transform their administrative function into value-added processes by reducing, eliminating or combining the traditional purchasing procedural steps and the need to adopt a strategic sourcing process (Han, 2005).

According to Cuomo and Desito (2013), when organisations have strategic sourcing in place, procurement decisions pertaining to procurement are more efficient since analysis is based on fact. Therefore, decisions can be made far more quickly as initial analysis of the supply market, business requirements and an approved supplier engaged.

According to Wallace and Xia (2014), strategic engagement with suppliers assists in time reduction obtaining quotes, adds value to the procurement function and improves the efficiencies to the end user. The end user is not required to continually scan the supply market for every purchase. All that is required is to purchase against the implemented agreement which has addressed costs of product or service, risks and general conditions of purchase in advance by identifying the supplier well ahead of the requirement (Wallace and Xia, 2014).

2.5 The Process of Strategic Sourcing

Narasimhan (2014) reiterates that strategic sourcing decisions must not be solely based on operational metrics such as cost, quality, and delivery. Narasimhan (2014), argues that it should incorporate strategic dimensions and capabilities of suppliers such as emphasis on quality management practices, process capabilities, management practices, design and development capabilities, and cost reduction capabilities into the decision-making process.

Strategic sourcing process is a collaborative and organised process that promotes cross functional teams for unified decision making with guidance and leadership and entails a four phase approach (Dominick and Lunne, 2012:70). Phase 1 entails organising a sourcing team, phase 2 analyses and
makes recommendation on the various solutions, phase 3 negotiates with the supplier and implements the action plan and phase 4 implements the strategy and sustains the strategy.

2.6. Definition of change management

Creasey (2009) states the organisational change management can be defined as structured, proactive approach to transitioning organisations, teams and individuals from a current state to a desired future state. Planned change is synonymous with organisational development which has its origins in the work of Kurt Lewin (1951), who is well known for his three-phase model of change: i) unfreeze the organisation, ii) change it; and then iii) refreeze in the new configuration.

According to Bain and Company (2015), change management enables companies to control the installation of new processes to improve the realisation of business benefits. Bain and Company (2015) further assert that change management involves devising change initiatives, generating organisational buy-in, implementing the initiatives as seamlessly as possible and generating a repeatable model for ensuring continued success in future change efforts.

Change management makes reference to when there is an attempt to move faster than the current culture or expertise allows according to Elearn (2007:8). Elearn (2007:8) advances that it should be one of the aims for change management to make the organisation more receptive of future change.

Decenzo and Robbins (2005) define organisational change as “any alterations in people, structure or technology”.

2.6.1 Significance of change management when transitioning to strategic sourcing

The impact of change to the sourcing process cannot be underestimated. Failure to manage the change can result in failure as well as the procurement department’s inability to deliver on its mandate. According to Shaw (2014), a typical change management process for transforming a transactional sourcing process to a more strategic process requires a four step process. That is: current state with no defined process; period of disruption will impact various role players in the sourcing process; future state adopts a sourcing process and eventual business outcome will be indicated through savings and efficiencies.

Shaw (2014) explains that there is no strategic process to begin with. When transforming from the transactional to strategic process, disruptions will occur and will impact various stakeholders of the business. The business outcomes will result in savings, efficiencies and process visibility.

KPMG (2012) makes the assertion that sourcing strategies offer significant potential benefits to organisations wanting to drive cost saving throughout their organisation as well as take advantage of economies of scale, access to technical expertise and back office consolidation. However, due to the transformational nature of implementing such changes they often come with significant potential business risks, especially if the changes are not well managed (KPMG, 2012). Shaw (2014) states that the impact of change to the various stakeholders when changing the sourcing process must be managed closely in order to attain the business outcomes.

Sourcing teams, end users and executives fail to realise the importance of change management when implementing strategic sourcing process (Payne and Dorn, 2012:25). Payne and Dorn (2012:25) further state that change management would require support from the executive in order to accomplish any of its strategic aims, let alone the aims of strategic sourcing.

2.7 The importance of Supplier Performance Management in Strategic Sourcing

Subsequent to a strategic sourcing process and new contract implementation, the actual effort begins by ensuring the organisation realises the expected benefits (The Claro Group, 2015). The Claro Group (2015) further states that attention shifts to sourcing the next set of categories leaving the organisation unable to assess whether suppliers are meeting deliverables, service-level agreements or other contractual terms. Key sourcing metrics support successful supply chain performance according to Jacob (2005). He further adds that the performance of the strategic sourcing function can only be determined if the critical aspects can be measured.

Once the customer has selected a provider, the customer and supplier each use metrics to assist managing their relationship. Parallel to customers’ sourcing activities, suppliers use metrics to promote and enable continuous improvement in the provision of services (Baldwin, Camm and Moore, 2000:105).
2.7.1 Definition of performance management

According to literature pertaining to performance management, there are many different definitions. Hoffecker and Goldenberg (1994:5) define a performance measurement system as: a system that strikes a suitable balance between financial and operational performance measures, translates strategic vision and objectives into actions for individual employees, provides a set of modern performance indicators, and links performance to recognition/reward. Bourne and Neely (2003) describes a performance measurement system as a multi-dimensional set of performance measures for the planning and management of an organisation. Performance measurement literally means “the process of quantifying action”, where measurement is the process of quantification and action correlates with performance. According to Kotler (1984), organisations achieve their goals by satisfying their customers with greater efficiency and effectiveness than their competitors. In the context of strategic sourcing, effectiveness refers to the extent to which customer requirements are met, while efficiency is a measure of how economically the company’s resources are utilised when providing a given level of customer satisfaction. This definition clearly defines that there are two fundamental dimensions of performance, but also highlights the fact that there can be internal as well as external reasons for pursuing specific courses of action.

The definition from Neely et al. (1997:1131) suggests that a performance measurement system can be viewed at the following levels: the individual performance measures, the set of performance measures and the relationship between the performance measurement system and the (organisational) environment within which it operates.

From a management perspective, Neely et al. (2005:1235) believe that measuring performance is a necessary tool to highlight the extent to which organisational objectives were achieved and to provide information necessary to improve various processes and activities within the organisation.

2.7.2 The significance of supplier performance management in strategic sourcing

According to Tech Target (2014), manufacturers adopt supplier performance management plans to reduce costs, lower supply chain risk factors and promote continuous improvement. Kannan, (2002) describes three facets that support supplier management: effective supplier selection, innovative supplier development strategies, and a meaningful supplier performance assessment approach. The supplier selection is important because it includes the performance criteria on which the supplier later is evaluated. However, the performance of those suppliers in making certain the correct goods are delivered at the right time, right place, right quality with the right documentation maybe more difficult. Apart from these basics, KPMG (2013) assert that performance on less direct aspects like service, time it takes to solve queries, safety record play an integral part in overall supplier performance.

Weele (2010: 306) contends the key areas for performance measurement based on the purchasing dimensions: effectiveness and efficiency. The two concepts of purchasing effectiveness and efficiency, Weele (2010:307) states the sub-groups and metrics in each category. Purchasing prices, product quality, and purchasing logistics are the first three elements belong to the purchasing effectiveness; while the purchasing efficiency consists of only purchasing organisation. According to Thiruchelvam and Tookey (2011:443), price, delivery and quality are among the top criteria relating to how suppliers are measured on performance. The supplier’s criteria on production and technical capacity are rated below these top three, this however are still important metrics that belong to supplier’s continuous improvement and innovation efforts.

A well-constructed supplier performance evaluation system can benefit various operational aspects (Cousins, 2008:147; Simpson, 2002:32). The SAMC manufacturing department considers quality, delivery and price vital in their sourcing process.

2.7.3 The process of supplier performance management

Gordon (2005) explains that there are seven steps making up the process of supplier performance management.

a. Align supplier performance goals with organisational goals and objectives: According to Gattoma (1998), businesses wishing to source strategically will identify the most appropriate supplier and develop a purchasing relationship with the supplier in accordance with the business’s core functions.
b. Determine an evaluation approach. Gordon (2005) states that the evaluation approach should include these basis aspects at least which is: financial health, operational performance metrics, business processes and practices, enabling behaviours or cultural factors and risk factors. These aspects are important fundamental criteria to any supplier evaluation process (Gordon, 2005). If any of these basic evaluation criteria and are not being evaluated, the business is exposed to financial, reputational or supply risk (Deloitte, 2014).

c. Develop a method to collect information about suppliers. According to Ariba (2015), in order to manage performance of suppliers effectively, good processes are required. Ariba (2015) assert further the benefits of effective information collection can lead to;
- 360-degree view into all aspects of supplier information, including contracts, quotes, performance, certificates, internal stakeholders, and contacts.
- Speedy supplier assessment and qualification
- Gain additional insights into supplier information
- Protect against supply disruptions, regulatory and compliance risk
- Drive faster time to value and lower total cost of ownership and results

d. Design and develop a robust assessment system. Gordon (2005) argues that for a supplier performance process to be successful, the performance measurement system requires deep business knowledge, familiarity with high performance systems and knowledge of measurement methodologies. It requires expertise in properly constructing the questions to elicit accurate responses and correctly measure performance.

e. Deploy a supplier performance assessment system: Gordon (2005) asserts that the deployment of a supplier performance management system is most difficult as it may require the extraction of data from various systems impacting on user friendly capability. KPMG (2013) remark that a supplier performance system is commonly a system that is purchased over and above an ERP system. This is increases IT costs in the procurement department.

f. Give feedback to suppliers on their performance: Dornfeld and Linke (2012:40) claim that no performance management evaluation is complete if suppliers are not given feedback. Feedback, according to Gordon (2005) allows for continuous improve in the supply chain

g. Produce results from measuring the supplier performance: Measuring supplier performance is about understanding, communicating and then improving supplier performance. If all the important components of a good supplier assessment are in place and you and your supplier are getting relevant, actionable results, then the suppliers can take the next step of improving their performance (Gordon, 2005). He further explains that supplier performance measurement can lead to supplier development, and supplier performance improvement has the potential to impact the customer financially and competitively.

2.8 Current Sourcing Process at the South African Mint Company

2.8.1 Transactional sourcing
The procurement function at the SAMC is perceived as low priority and is managed on a tactical level. It is based on a purely transactional process. Cox et al. (2005), contribute to the argument that the procurement role or the procurement function is still basically a support function which is engaged at low value adding activities.

2.8.2 Stakeholder relationship management
The relationship or collaboration between suppliers and buyers tend to be an adversarial relationship at the SAMC. Morrissey and Pittaway (2004) argue that this approach results in a short-term relationship where price signifies the main focus. The influence of the procurement department at the SAMC is limited. Tassabehji and Moorhouse (2008) enhance the view that procurement in organisations should influence areas such as planning, managing strategic partnerships, risk management and adds value to the entire organisation.

One of the main purposes of procurement is to select strategic partnerships which will furnish them with products, components, services and materials to create or maintain a competitive advantage (Sarkis and Talluri, 2002). Traditional relationships based on price have been replaced by strategic and operational criteria such as minimum lead time, quality and flexibility (Sarkis and Talluri, 2002).

2.8.3 Trends impacting strategic sourcing
The SAMC has been shielded from global market turbulence by operating primarily to support the SARB. The global environment for procurement has been unstable during the last few decades (Schul and Blanc, 2008). Schul and Blanc (2008) identify seven mega trends that place importance to develop procurement strategically. These mega trends include: managing extreme competition and pressures for deep cost reduction; addressing the accelerating pace of globalisation; addressing the increase of unique and dynamic relationships with the supply chain; coping with the rapid advance of technology in products and services and in procurement operations; assisting with revenue growth and innovation; managing constantly changing consumer demand and dealing with complex regulatory, environmental and ethical requirements.

2.8.4 Improving efficiencies in the sourcing process
The view of the different business units at the SAMC, the length of time taken to place and receive an order is onerous. Spray (2009) advances the use of technology in the sourcing process as it creates a real time image of the flow of goods and cash while streamlining and optimising the supply chain. Spray further asserts that E-sourcing when implemented in strategic sourcing, is an easy means for suppliers to bid for contracts online through reverse auctions or by submitting electronic requests for proposals, quotes, and information. It provides suppliers the information they need. It brings standardisation and efficiency into a function which is ad hoc (Ghahremani, 2008).

RESEARCH METHODOLOGY
3.1 Target Population
Groves, Fowler, Couper, Lepkowski, Singer, and Tourangeau (2009:69) state that the target population is the group of elements for which the researcher wants to make “inferences by using sample statistics” and are finite in size. They further claims that the population must be observable and exist within a specified time frame. This is important for achieving the objectives of the survey as well as permitting replication of the survey.

The research study comprised of respondents from the procurement department, manufacturing department and suppliers. The twenty respondents to the internal questionnaire consisted of: 5 buyers, 2 production planners, 5 process managers, 2 maintenance managers, 2 maintenance planners, 2 logistics administrators and 1 lab manager and 1 Safety officer. The research further targeted fifteen suppliers with an external process.

3.2 Limitations of the Research
The main constraint was the time limitation and resource limitations for the research. Only the manufacturing department was analysed during the research. Another limitation was that the research utilised the quantitative approach which is an analytical approach and might not necessarily demonstrate the impact of strategic sourcing on manufacturing.

As the SAMC is a wholly owned subsidiary of the South African Reserve bank, procurement is regarded as bureaucratic as the process to purchase any services or goods takes longer than the average business. With this in mind, questionnaires that were completed by the various respondents, may have been inclined to perceiving the sourcing process as a poor performing or cumbersome business function.

RESULTS, DISCUSSION AND INTERPRETATION OF FINDINGS
4.1 Response Rate
The total sample population of 35 respondents had been selected to participate in the study. Therefore in total, 35 questionnaires were administered in the study. Twenty respondents were targeted for the internal questionnaire (see annexure A). The research further targeted fifteen suppliers with an external questionnaire (see annexure B). The target population of 20 internal respondents yielded a return of 95% while the external respondents of 15.
A collective of 89% of respondents strongly agreed or agreed that the procurement department aligned the sourcing activities to the overall goals of the SAMC. However, 11% of respondents remained neutral. Morscher and Horsfeldt (2012) assert that sourcing requirements must be aligned to the overall needs of the organisation, irrespective of the size of the organisation. Even if there are no strategic partnerships Floyd (1997:115) argues that sourcing activities must be aligned to support business decisions. There were no respondents that disagreed with the statement which can be attributed to the procurement department’s involvement in the weekly manufacturing meetings. This information is then used to obtain quotes or make purchases only after decisions are taken. These sourcing plans are based on weekly requirements with no long term sourcing plan in place.

4.3.5 Suppliers segmentation

Respondents were asked if suppliers are segmented according to the criticality of the product that is being supplied. A collective of 74% of respondents agreed. However, 26% remained neutral. There were no respondents that disagreed with the statement. Frick and Laugen (2011:318) propose that there are two main dimensions of supplier segmentation; difficulty of managing the purchase situation and the strategic importance of the purchase. The segmentation of suppliers is not a complex process for the SAMC. At the SAMC, there are only nine critical suppliers whose products have strategic importance to the manufacturing department therefore no respondents disagreed. Carlsson (2015:136) contends that segmentation of suppliers as part of strategic sourcing, can maximise collaboration, lower cost, improve customer benefit and gain influence. Further, management time and effort is directed at strategic relationships through supplier segmentation.

4.3.6 Risk management process is linked to the manufacturing processes

A collective of 53% of the respondents agreed that the risk management process is linked to the manufacturing processes. However, 37% respondents remained neutral and only 10% of respondents
disagreed. According to Sollish and Semanik (2011), supply risk management is a major aspect of supplier selection and forms an integral part of sourcing activities. They further add that when strategic sourcing is implemented, the potential risk can be identified. Azevedo (2013:60) contends that risk management is a central factor of all manufacturing enterprises and is necessary to improve methods of risks management into “enterprise processes”.
The SAMC as a subsidiary of the SARB is subjected to various risk audits annually. Therefore, there is significant agreement by respondents to the statement. The operational risks are identified through these audits and business process owners are given the responsibility to plan around the risk. The 37% of respondents that are neutral could have been audited previously while the 10% of respondents that disagreed could be strongly attributed to employees that may not be part of the process or have not been directly involved in the risk management process.

4.3.7 Manage risks with critical suppliers

Figure 4.7 Manage risks with critical suppliers

A collective 47% of respondents agreed that the risks associated with critical suppliers are well managed. However, 37% of respondents remained neutral. A total of 16% of respondents disagreed. This signifies that the procurement department is not necessarily managing the supplier risks with critical suppliers effectively. According to Schlegel and Trent (2015:268), supplier risk management is a “proactive and systematic process for cost-effectively identifying and reducing the frequency and severity of unwanted events that result in disruptions in the supply chain”.
At the SAMC, the current process of supplier risk management is principally reactive with procurement sourcing alternate vendors and products only when required. Schlegel and Trent (2015:268) further motivate that procurement needs to shift from being a reactive risk taker to a more proactive risk role. They further state that there are four specific objectives. That is; gain visibility to high risk suppliers, identify drivers of supply risk, be proactive with risk as well as measure risk mitigation. However, the procurement department of the SAMC at present do not adhere to any formal risk management methodology that could mitigate supply risk in manufacturing.

4.3.8 Clear delineation of roles and responsibilities to manage risks

Figure 4.8 Clear delineation of roles and responsibilities to manage risks

A collective of 53% of respondents are in agreement that employees understand their roles in risk management, 26% of respondents were neutral. However, 21% of respondents disagreed. Jenney (2009:197) asserts that assigning resources to manage risk is an important aspect of risk management. Jenney (2009:197) further adds that senior managers view risks that workers are unable to see and workers see risks that senior managers fail to identify. As a part of a robust strategic sourcing approach, employees in their respective areas of work have to assume responsibility of risk in order to make informed sourcing decisions.
4.3.9 Collaboration between supplier and buyer

Figure 4.9 Collaboration between supplier and buyer

A collective of 79% respondents are in agreement that there is collaboration between supplier and buyer during the sourcing process. 16% of respondents remained neutral. However, 5% of respondents disagreed. The significant number of respondents that were in agreement can be attributed to the weekly outstanding request for quotes (RFQ), reports that are sent to manufacturing that indicates the status of quotes and the comments that transpires between supplier and buyer. Sanders and Wood (2015:246) mention that supply chain collaboration between supplier and buyer is key to long term partnership and a shift away from “agnostic sourcing”. Although the sourcing process at the SAMC may be regarded as transactional, the constant collaboration around requirements between supplier and buyer could form the foundation for shared value creation and strategic partnerships (Sanders and Wood, 2015:246).

4.3.10 Collaboration between manufacturing and buyer

Figure 4.10 Collaboration between manufacturing and buyer

A collective of 79% respondents agreed that there is collaboration between manufacturing and the buyer, 16% of respondents disagreed while only 5% of respondents remained neutral. The respondents that were in agreement can be attributed to the weekly manufacturing meeting that includes the procurement department. Giannoccaro (2013:111) iterates that partners in the supply chain are interdependent and that one partner cannot complete a function without the others assistance. Giannoccaro (2013:111) further explains that strategic sourcing is a collaborative approach to sourcing; the buyer cannot purchase without understanding specifications of a requirement from the manufacturing department. Neither can the manufacturing department manufacture coins without raw materials. Angelo and Caglio (2008:73) further assert that internal collaboration can be improved by making decisions that are consensus based and approved by all. The high response rate is indicative of there being collaboration; however this view could be tainted as the end users continue to sidestep procurement on purchasing decisions. The end user only engages buyers when administrative duties need to be completed thus regarding this as collaboration.
4.3.11 Regular communication between supplier and buyer

Figure 4.11 Communication between supplier and buyer

A collective 63% of respondents agreed that there is regular communication between supplier and buyer. This is reflective of the existence of communication channels between supplier and buyer. According to Selig, LeFave, and Bullen (2010:159), developing good communication channels is imperative to relationship management in the strategic sourcing process. The concern however, is that a large number of respondents may not agree that the channels are effective. Twenty one percent of respondents disagreed while 16% of respondents were neutral. A weekly report on the status of outstanding orders is distributed by the procurement department to the manufacturing department. The report indicates purchases that still need to be delivered or placed, supported by supplier comments. Further, the researcher mentioned that the weekly manufacturing meeting that is attended by the procurement department. At these meetings supply issues are communicated to manufacturing.

4.3.12 Regular communication between manufacturing and buyer

Figure 4.12 Communication between manufacturing and buyer

A collective of 74% of respondents are in agreement with 21% of respondents adopting a neutral view that regular communication between manufacturing and buyer is present. 5% percent of respondents disagreed. The weekly manufacturing meetings could attribute to the significant percentage that agree that there is regular communication between manufacturing and buyer. In efforts to improve relationship management Selig et al (2010:159) explain that a communication channel should be included at all levels in business from executive management to peers and must include all forms of communication in order for strategic sourcing to be successful. Meaningful communication builds good relationships and strengthens old relationships internally and externally (Selig et al., 2010:159-160). Effective internal communication strengthens the company’s position in negotiations with suppliers (Rudzki and Trent, 2011:153). Although a large portion of the respondents agreed that communication is regular between buyer and manufacturing, however, the communication may not be effective. Strategic sourcing entails negotiating with suppliers on various aspects. Therefore, fundamental to negotiations is the communication between buyer and manufacturing so that the aligned approach results in costing savings or better terms of purchase.
4.3.13 Queries are resolved timeously
Figure 4.13 Queries are resolved timeously

A collective of 58% respondents agreed that the queries arising from the procurement process are resolved speedily. 21% of respondents remained neutral, while a further 21% of respondents disagreed. The healthy positive response rate can be attributed to the structure of the procurement department. Each business unit is allocated a designated buyer that specialises in the specific procurement of goods and items related to that business unit. This specialist approach according to Rudzki and Trent (2011:71-73), results in improved understanding of requirements, better problem resolution and ultimately better performance the supply chain.

The disagreement with the statement can be attributed to the technical aspects of manufacturing purchases. These require specialist knowledge in order to resolve queries. Van Weele (2009:85-86) argues that in order for internal customers to concentrate on their core responsibilities, the sourcing specialist or buyer must be adequately trained to manage specialised purchases. Thus improving the efficiency in the problem resolution process.

4.3.14 Clear delineation of buyers and manufacturing their roles in the sourcing process
Figure 4.14 Clear delineation of buyers and manufacturing roles

Fifty eight percent of respondents agreed that the roles are clearly understood by both buyers and the manufacturing department during the sourcing process. A significant portion of respondents, 26%, were neutral. A further, 16% of respondents disagreed. The noteworthy agreement with the question can be attributed to each business unit being serviced by a specific buyer as indicated.

However, Easton et al. (2011:158) argue that team members that currently perform tasks in cross-functional teams during the sourcing process may cross over into each other’s area of responsibility and may not have the right skills to do so. Easton et al. (2011:9) further contend that those roles result in silo-based approaches that are also detrimental. Strategic sourcing requires a significant degree of team work through specialisation. The significant proportion of respondents that chose to remain neutral implies that they require clarity on their placement into the sourcing process. The buyer and the manufacturing department require clear guidelines on the levels of contribution in the sourcing process.
4.3.15 Buyers are informed on manufacturing spend

Figure 4.15 Manufacturing spend

A collective of 42% of respondents agreed that buyers are familiar with the manufacturing spend. Thirty two percent of respondents remained neutral and 26% of respondents disagreed. The significant neutral response rate is an indication that procurement is not willingly included in manufacturing purchasing decisions as the buyer is managing the administrative function of the process. The buyers on most occasions are only aware of the spend when quotes are handed to them. They are not involved in the sourcing of quotes. According to Carlsson (2015), as the strategic sourcing process matures, costs should become more visible. The negotiation of a favourable pricing structure then becomes possible. Carlsson (2015) states that in order for the buyer to make informed decisions with regards to purchase price, buyers would have to be included in the negotiating and budgeting process.

4.3.16 Cost drivers from the suppliers are visible

Figure 4.16 Cost visibility

A collective of only 26% of respondents agreed that cost drivers from suppliers are visible while 37% of respondents remained neutral. The neutral responses suggest that raw materials purchased using stock exchange pricing is transparent. However, maintenance spares pricing is not as visible as raw material pricing. A collective of 37% of respondents disagreed. The significant disagreement is an indication that the supplier relationships are not managed at a strategic level but rather at an operational level. According to Berger and Gattoma (2001:61), strategic sourcing can lead to cost visibility in the supply chain in the long term. As the SAMC engages more frequently with the supplier and builds the relationship, trust between the SAMC and the supplier is being formed. Gadge, Deora and Kasture (2013:107) assert that “revenue and cost drivers are really what define the business” and mention it is important to have visibility into the cost drivers as it could impact the net income of the business. The long term view is to partner with the supplier so that they are in a position to disclose costs without the fear of losing out on further orders.
4.3.17 Budgets are aligned with manufacturing spend

A collective of 69% of respondents agreed that budgets are aligned with manufacturing spend and 26% respondents disagreed. A further 5% of respondents remained neutral. The process managers from the manufacturing department are included in the budget process at the end of every year. The planning department advises the manufacturing department of the following year’s forecast and a budget is set against the forecast. The significant positive response rate can also be attributed to the inclusion of the finance department in its weekly production meetings ensuring in the alignment of the budget. Wallace and Xia (2015:19) contend that understanding the company’s spending habits will benefit negotiations during the sourcing process. This can be done if the budgets are aligned to requirements.

The disagreement can be emanating from the engineering maintenance department employees who, on a regular basis are faced with the challenge of having the plant operational with limited downtime. Inevitably, there are unbudgeted expenses with the engineering maintenance department having to purchase spares to maintain the plant. According to Payne and Dorn (2011), strategic sourcing identifies preferred suppliers for the main areas of business and even when spend with the suppliers is unbudgeted, the costs for the unbudgeted expense can be lower.

4.3.18 Comprehensive supplier evaluation process

A collective of 57% of respondents agreed that there is a comprehensive supplier evaluation process. However, 32% of respondents remained neutral and 11% of respondents disagreed. The majority of agreement from respondents can be attributed to the use of the SAP system by the SAMC. The system furnishes details on supplier performance metrics such as; on time delivery, correct quantity delivered, cost deviation and quality pass or fail. Suppliers are evaluated only when delivery of the goods or service takes place.

A collective of 32% of respondents who remained neutral could be indicative of a reactive supplier evaluation process. Monczka et al. (2011:43) contend that one of the main aspects of strategic sourcing is to manage supplier performance. However, they add that supplier evaluation process precedes procuring from the supplier and is actually a proactive process. Monczka et al. (2011:43) mention that strategic sourcing can identify potential suppliers that can meet all performance metrics prior to purchasing.
4.3.19 Supplier evaluation criteria are adequate to manage the performance of suppliers

A collective of 47% of respondents agreed that supplier evaluation criteria are adequate while 11% of respondents disagreed. A further 42% of respondents however adopted a neutral response. This indicated that the current supplier criteria may not be satisfactory in managing the performance of suppliers. The criteria used to evaluate suppliers at the SAMC are; on time delivery, quality and price. Monczka et al (2010:77) state that buyers must analyse other criteria besides the three when managing supplier performance. Monczka et al. (2010:77) enhance the claim by including management capability, financial condition; cost structure, technical capability and IT capability as well when evaluating suppliers. End users in manufacturing cannot tolerate a poor performing supplier. Poor performance can ultimately impact delivery performance or result in an inferior quality product being manufactured. Strategic sourcing according to Carlsson (2015), request that suppliers meet all these criteria before engagement.

4.3.20 The current supplier sourcing process is effective

57% of respondents agreed that the current sourcing process is effective. However, 32% respondents remained neutral and 11% of respondents disagreed. The significant positive response rate can be attributed to the end user currently liaising directly with suppliers and supply market and sourcing goods and services themselves. Payne and Dorn (2011) assert that in order for the strategic sourcing process to be effective, cross functional teams are required. They add that the end user in a transactional process is reluctant to engage and has the ability to negatively impact the process. The end user must then be included in the transition of the sourcing process from transactional to strategic. The current sourcing process at the SAMC may be effective at operational level however long term value is gained through a well implemented strategic sourcing process.

4.4 Analysis of Data of the External Questionnaire

An external questionnaire was developed to gain in-depth insights of suppliers understanding of strategic sourcing. A total of fifteen suppliers were identified and questionnaires were distributed to these key suppliers.
4.4.1 Well-developed system to manage orders from SAMC

Figure 4.21 System to manage orders

A collective of 92% of respondents agreed that there is a well-developed order system to manage orders from the SAMC. A total of 8% of respondents disagreed. The significant agreement to the statement can be attributed to the use of various Enterprise Resourcing Planning (ERP) systems by most suppliers to manage orders from the SAMC. Lee, Chan, Dawisha, Kalla, Lam, Majithia, Oakley, and Patel (2011:5) claim that order fulfilment is no longer a simple, repetitive process and state that customer demands change frequently. They add that in order to manage the constant change, suppliers require a robust system to execute the orders to customers efficiently.

Wallace and Xia (2014) assert that as part of the criteria when selecting suppliers during strategic sourcing, a fundamental requirement is for suppliers to manage orders through a vigorous system. Information must be readily available so that the customer is informed at all times and orders are processed as efficiently as possible.

4.4.2 Supplier System is linked to the SAMC

Figure 4.22 System is linked to the SAMC

A collective of 46% of respondents agreed that the ordering system is linked to the SAMC. 15% of respondents remained neutral. However, a collective of 37% of respondents disagreed. The considerable negative response rate is credited to the non-existence of any e-sourcing tool linked to the suppliers system or the lack of a supplier managed e-commerce tool linked to the SAP system of the SAMC. Menken and Blokdijk (2008) claim that the process of system integration creates a competitive advantage by improving operational efficiency. They further state that these systems can create specific indicators and metrics for the system in order to manage the business process more efficiently.

Seshadri (2005:44) explains that new business to business sourcing functionalities and strategies using “electronic exchanges and the internet, serve to expand market reach, lower prices, cut the cost of buyers sourcing processes and identify best practices for all participants in the supply chain”. As current systems between supplier and the SAMC are not integrated, there are constant interactions between supplier and the buyer that create further bottlenecks in the procurement process as each waits for information. Through integrated systems, these bottle necks can be addressed immediately making for a more efficient process.
4.4.3 Order placement process from SAMC to supplier is efficient

A collective of 84% of respondents agreed that the order placement process is efficient. 8% of respondents disagreed with the question and a further 8% of respondents remained neutral. The notable agreement with statement can be attributed to the SAP system. Once orders are approved on SAP, these orders are automatically sent via email to the supplier. There are no requirements for the buyer to first print the order, then scan or fax it to supplier. The elimination of paper and the time consumed in traditional manual processing of orders is reduced significantly. Saxena and Bharadwaj (2007:24) contend that the order management function to suppliers can be optimised and designed for speed during the sourcing process. A further benefit arising from a well management order placement process is that it improves efficiency and predictability (Saxena and Bharadwaj, 2007:24).

4.4.4 Requirements of the SAMC manufacturing department are well understood

A collective of 85% of respondents agreed that the requirements of the SAMC are well understood. 8% of respondents remained neutral. The positive response rate is attributed to the specialised products and raw materials that are required by the SAMC’s manufacturing department. Sollish and Semanik (2011) argue that understanding customer requirements is really knowledge sharing and that customers must provide all the required information. The SAMC has a limited number of suppliers that are capable of supplying certain strategic products and raw materials. These strategic suppliers do work closely with the manufacturing department in order to understand the requirements. Sollish and Semanik (2011) adds that suppliers should include understanding customer requirements in their own strategic plans. Sollish and Semanik (2011) claim that an aligned supplier and customer plan results in a better understanding of the requirements of each participant.

4.4.5 Risk management process is aligned to the supply of material to the SAMC

A collective of 77% of suppliers indicated that there is a risk management process that addresses the issue of supply security to the SAMC while 23% of respondents remained neutral. The extraordinary agreement with the statement is an indication that suppliers are confident that when faced with
uncertainty, suppliers will continue to supply the manufacturing department the required raw materials or products. Waters (2011:8) states that managers cannot change risks but they can “design operations that work as efficiently as possible” to reduce its effects. Waters (2011:226) contends that as part of the business continuity plan, strategic sourcing should support the plan around risk management. The limited amount of downtime during manufacturing at the SAMC as a result of non-supply from suppliers is a further reason for the positive response rate from suppliers. Schlegel and Trent (2015:221) add that in order to mitigate risk with suppliers, it is important for the customer to become a preferred customer to the supplier.

4.4.6 Cost drivers of material supplied to the SAMC are transparent

A collective of 62% of respondents agreed that cost drivers are transparent. The positive response rate can be attributed to the suppliers that supply raw materials where prices of these materials are specified on various stock exchanges. Copper, nickel, zinc and steel and are traded on the London Metal Exchange thus the trading value is visible to both supplier and customer. Twenty three percent of suppliers responded with a neutral perspective and a further 15% of respondents disagreed. The neutral responses can be attributed to suppliers that seek to protect their profit margins; cost drivers are not totally visible to the SAMC.

Strategic sourcing according to Wallace and Xia (2014:83), analyses the total cost of material. When the material costs are not visible, the buyer should work closely with the end user and supplier to understand the make-up of the product so that input cost of the material become visible. Wallace and Xia (2014:83) advance once these costs are visible, cost reductions on the overall product can be obtained.

4.4.7 SAMC procurement department collaborates closely on manufacturing requirements

A collective of 69% of suppliers agreed that the procurement department collaborates with the suppliers on manufacturing requirements. The notable positive response rate is attributed to the quarterly meetings with all strategic suppliers facilitated by the procurement department. 15% of suppliers remained neutral and 16% disagreed. The negative responses and uncertainty can be attributed to suppliers that have not been regularly updated by procurement on manufacturing requirements or are not included in the strategic meetings.

Martichenko and Grabe (2010:93) argue that supplier collaboration is a continuous process and requires regular engagement with suppliers to form strategic partnerships. Rudski and Trent (2011:128) assert that supplier collaboration is a necessity to develop long term relationships. The SAMC procurement department must focus on potential suppliers that can become strategic. The
current quarterly meeting must be extended to potential strategic suppliers so that the supply base supports manufacturing over the long term.

4.4.8 SAMC collaborates closely with regards to new product developments

**Figure 4.28 Collaboration on new products**

A collective of 53% of suppliers agreed that supplier collaboration is imperative to new product development. A significant number of suppliers, totalling 31% of respondents remained neutral. A collective of 16% suppliers disagreed. Rudski and Trent (2011:127) contend that supplier collaboration is imperative to the innovation and development of new products. The significant portion of the respondents that either disagreed or were neutral is an indication that the SAMC has to collaborate more closely with suppliers on product development. The 53% of suppliers that agree is a result of the manufacturing department working with suppliers when product development is required. Rudski and Trent (2011:127) advance that collaboration with suppliers during development is essential to long term success of the business. The SAMC had to improve collaboration when developing products in order to remain successful. The 53% of respondents is not a sufficient percentage as all suppliers supporting the development must be involved from conception (Rudski and Trent, 2011:127). Strategic sourcing creates the long term relationship with the key suppliers which will enable the SAMC to develop new products successfully.

4.4.9 Queries during the order process are resolved timeously by the SAMC

**Figure 4.29 Query resolution**

A collective of 84% suppliers agreed that queries during the order process are resolved timeously. Fifteen percent of respondents remained neutral and there were no respondents that disagreed. The noteworthy positive response rate can be attributed to the regular meetings between suppliers and buyers or between supplier and manufacturing department. However, these meetings are not cross functional therefore the potential exists for queries to reach a far quicker resolution if the buyer, the manufacturing department and supplier met together.

Monczka et al. (2010:114) state that cross functional teams in strategic sourcing bring together “knowledge, experience, skills and resources needed to work on joint problems”. The current approach by the SAMC has each business unit working independently. Procurement takes responsibility for the administration and commercial aspects with the supplier while manufacturing manage the technical requirements with supplier. Monczka et al. (2010:113) argue that the traditional approach to sourcing does not help cooperation and that the silo mentality does not create an environment for information sharing.
4.4.10 Key performance measures are tracked with regular feedback
Figure 4.30 Tracking key performance measures

A collective of 62% of suppliers agreed that key performance measures are tracked and regular feedback provided to the SAMC. Strategic suppliers are requested by the SAMC’s procurement department to provide feedback on delivery schedules, quantity and quality metrics prior to delivering to the SAMC. Twenty three percent of suppliers adopted a neutral attitude and a further 15% of suppliers disagreed with the question. The neutral responses and disagreement could signify that suppliers either do not track orders to provide the feedback or do not have the necessary information readily available prior to delivery.

These key measurements according to Spitzer (2007:83) assist the customer to become profitable and create “customer lifetime value”. Strategic sourcing is a long term approach to sourcing that creates value for the supplier and customer. Spitzer (2007:83) advances that the tangible key customer measurements are important to manage as this leads to intangible benefits such as becoming a value adding supplier over an extended period.

4.4.11 SAMC provides regular feedback to the supplier on its performance
Figure 4.31 Supplier performance feedback

The procurement department through quarterly meetings with strategic suppliers provides feedback to the suppliers on their performance. The 61% of suppliers that agreed to the statement is an indication that the current feedback is sufficient. 8% of respondents remained neutral. However, 31% of suppliers disagreed, demonstrating that the quarterly meetings may not be adequate or suppliers are not content with the measurement. O’Connor (2010:35) claims that in strategy development it’s important that customers draft a supplier scorecard for performance measurement that provides an objective view on the supplier’s performance.

Supplier input is vital when drafting scorecards so that when results are communicated on performance, there are no discussions on the criteria but rather on the outcomes (O’Connor, 2010:35). The intention in developing the report card is to continually communicate and reinforce strategic supplier goals and to compare performance against the goals (O’Connor, 2010:35). Although regular feedback is provided to the suppliers at the SAMC on their performance, these performance measures do not tie into long term goals of the SAMC.
4.4.12 Material quality supplied is according to the specified standard for every order
Figure 4.32 Quality of material supplied

The significant 92% agreement with statement that the quality of material supplied is according to the specified standard is attributed to the stringent quality requirements of the SAMC. Eight percent of respondents adopted a neutral viewpoint and no respondents disagreed. Suppliers are provided with a detailed specification of requirements before supplying the product. Ross (2015:552) contends that strategic sourcing ensures that reliable quality of material is delivered. Ross (2015:552) advances the claim by stating that strategic sourcing seeks to increase the availability of high quality materials by working closely with suppliers. The SAMC has won numerous awards with regards to the quality of the coins produced. In order to continuously manufacture a high quality product, high quality raw materials are required. The SAMC quality requirements make strategic sourcing a fundamental process in order to ensure the continued supply of good quality products and raw materials.

4.6 Conclusion
This chapter presented the analysis of the data collected through the self-administered questionnaires that were distributed to internal participants and suppliers. The responses were presented using descriptive statistics. The results of the study indicated that the manufacturing department, supporting departments and suppliers have an understanding of relationship management with suppliers and customers, supply risks, importance of process efficiency and costs. These aspects are fundamental in strategic sourcing therefore development and implementation of such a strategy is possible. However, the analysis also indicated that both internal and external respondents still operate at a transactional level. Strategic sourcing requires different people with different expertise to work together, therefore a change management approach is required to have manufacturing, supporting departments and suppliers align their goals and objectives over a long term. The next chapter presents the conclusions, recommendations and scope for further research.

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter summarises the findings of this study and offers possible recommendations to the executive managers of the SAMC. The areas of future research related to this study are identified and proposed. Further, in this chapter a summary and recommendations are linked to the research objectives of the study.

5.2 The Objectives of the Study:
- To explore the nature of the current sourcing process at the SAMC
- To explore the impact of strategic sourcing on the manufacturing of circulation coins
- To explore the effectiveness of the strategic sourcing process
- To offer recommendations to the executive of the SAMC and other relevant stakeholders

5.3. Findings from the Study
The findings from the research study are discussed under two headings namely; key findings from the literature review and key findings from the primary research.

5.3.1. Key Findings from the Literature Review
Sourcing activities at the SAMC must be aligned to the company’s goals and objective. Sollish (2011) argues that a strategic sourcing plan must be aligned to the organisational mission and vision statements. He further contends that the plan must take customer requirements and the overall
strategic business plan into consideration. The literature review in the study indicated that there are four chief aspects of strategic sourcing. These are: risk management, cost management, improved process efficiencies and supplier relationship management.

Payne and Dorn (2011) claim that understanding cost and managing risks are key to the strategic sourcing process. The SAMC continues to purchase raw materials and maintenance spares daily or weekly with no long term planning in place in the procurement department. The consequence of this approach results in poorly managed costs as the products are normally required for immediate use. This then places pressure on the procurement department to purchase the product at the cost stipulated by the supplier. The resultant outcome is that there is limited understanding of costs and inadequate opportunity for price negotiations.

Payne and Dorn (2011) further explain that strategic sourcing identifies risks in the supply chain. The risk management process at the SAMC is reactive. The SAMC does not fully engage with suppliers with regards to risk and does not complete any comprehensive analysis of the supply market to identify and mitigate risk. Payne and Dorn (2011) further states that risk management in strategic sourcing categorises products into critical, strategic, tactical and leverage products. Risks around products that fall into the critical and strategic categories have to be closely managed while tactical and leverage products do not require the same attention to risk management.

Payne and Dorn (2011) describe the traditional customer and supplier relationship as one which involves a contract to be signed and responsibilities of the buyer or procurement end. The work then becomes the sole responsibility of the supplier. They argue that this approach has been superseded by a performance managed relationship between supplier and customer. O’ Brien (2014:11) states that businesses that have a traditional purchasing approach, views suppliers as “foes”. The relationship with many suppliers at the SAMC can be regarded as antagonistic as the SAMC’s primary goal when purchasing is to extract the most competitive price from the supplier.

Coyle et al. (2013:560) contend that an extremely important phase in strategic sourcing is the measurement and improvement of suppliers. Supplier performance management at the SAMC is reactive with suppliers being measured only on three basic elements of supplier management; on time delivery, price and quality. Lambert (2008:11) argues that supplier relationship management provides the structure for how relationships with suppliers will be developed and maintained.

Kovács (2004:177) contends that procurement efficiency means increasing proficiency and prudence, while speeding up the procurement process by streamlining the process and removing bureaucracy. As a subsidiary of the SARB, the SAMC procurement process is viewed as bureaucratic. The procurement department is required to track and maintain documentation of all purchases. Poirier et al. (2010:117) argue that strategic sourcing employs leading edge processes to integrate inter-enterprise organisations systems to drive value for all involved partners. Presently the SAMC’s procurement systems do not integrate with that of the suppliers.

For the successful transitioning of the procurement process from transactional to strategic at the SAMC, Wilson (2014:32) contends that change management is pivotal for process change. Wilson (2014:32) further argues that when change is managed effectively, there is little overall impact on the process when certain risks are considered. The current procurement process at the SAMC has been in existence for the past 25 years. Employees are accustomed to the transactional process; therefore, a change management plan should be drafted prior to any changes being made to the procurement process.

5.3.2 Key Findings from the Primary Research

Of the internal respondents, 50% agreed that the sourcing process is of significant importance at the SAMC. Fifty three percent of suppliers indicated that there was collaboration between the supplier and SAMC on new product development. Procurement requires strategic focus in the business in order to assist with the overall strategic objectives of the SAMC.

Supplier relationships are adequately managed with 58% of internal respondents indicating that the process for the identification of critical supply categories is vigorous. Further, 74% of internal respondents agreed that suppliers are segmented according to the criticality of the product that is being supplied. 69% of suppliers agreed that there was close collaboration on the manufacturing requirements. In addition, 84% of suppliers agreed that queries during the order process are resolved timeously.
Fifty seven percent of internal respondents agreed that there is a comprehensive supplier evaluation process. However, agreement by internal respondents to whether the supplier evaluation criteria are adequate; decreases to 47%. Sixty two percent of suppliers agreed that key performance measures are tracked and regular feedback provided to the SAMC. However, 61% of suppliers agreed that the SAMC provides adequate feedback on supplier performance to the supplier.

Sixty three percent of the internal respondents agreed that the current sourcing process was ideal for the SAMC’s manufacturing department. Ninety two percent of suppliers agreed that there are mature systems to manage orders from the SAMC. However, there is a decrease to 84% agreement when the suppliers were asked if the order placement process was efficient.

The internal risk management process is not effectively linked to the manufacturing process with only half of respondents agreeing. Seventy seven percent of suppliers indicated that they have adequate contingencies in place to mitigate risk.

A meagre 26% of internal respondents indicated that costs from suppliers were visible. Further, only 42% of internal respondents agreed that the buyers understand manufacturing spend. 62% of suppliers agreed that costs were visible.

Fifty seven percent of internal respondents agreed that the current sourcing process is effective.

The results from the survey indicated that the SAMC and suppliers do focus on the key aspects of risk management, relationship and performance management, cost of purchase and efficiencies. However, the analysis indicates that these facets are not well implemented and add no significant value to the sourcing process. Further, the results indicate that sourcing needs to transform into a more strategic function at the SAMC.

Therefore, the manufacturing department at SAMC may not be vulnerable over the short term with regards to the manufacture and supply of coins. However, long term coin manufacture maybe exposed to increased costs of materials and services, risk of non-supply of raw materials, underperformance of the procurement department and poor relationship management.

5.4 Recommendations
5.4.1 Obtain Executive Management Support
Executive support is required to establish strategic sourcing as a key business function at the SAMC. Kirit and Marmanis (2008:48) state that strategic initiatives begin with executive management as they make a decision to leverage procurement in order to “improve enterprise performance, increase growth and improve customer satisfaction”. Kirit and Marmanis (2008:48) argue that securing executive support is critical to the success of implementation of the sourcing strategy.

A clear mandate has to be specified to the procurement department by the executive committee. It should direct procurement to develop and align its sourcing strategy to that of the overall objectives of the SAMC. Further, the mandate must request the establishment of quantifiable key performance indicators for the strategic sourcing function. Training plans for sourcing staff should be developed so that they grasp the fundamentals of strategic sourcing. In addition, the mandate must include analysis of the sourcing process in order to improve efficiencies. A quarterly report should be presented to the executive committee by the procurement department highlighting progress in the strategy and challenges.

5.4.2 Develop a Change Management Plan
Selig et al. (2010) contend that when implementing change in procurement, the major components of the plan should include establishing a communication programme, maintaining scope of control and implementing organisational structures that support the transition.

The researcher has indicated that the SAMC is steeped in deep-rooted business processes. For the successful implementation of the strategic sourcing process and its continued success, employees have to be communicated to on the new process on a regular basis. It is evitable that job functions may have to change to a certain degree. Therefore, the human resources department will be required to assist with change management.

Dominick and Lunney (2012:78) claim that all employees talk about the big picture and should relate to common goals during the transforming of the sourcing process.

5.4.3 Offer training to Strategic Sourcing Teams
Analysis of both the literature and primary research indicated that cross functional teams are required to work together to achieve the objective in strategic sourcing. The current sourcing process depicts a
silo mind-set with little team work leading to an inefficient process, minimum cost savings and possible risk exposure. Further, training on the technical aspects of the sourcing process should be administered as well.

According to Dominick and Lunney (2012:78), world class procurement organisations provide training for their strategic sourcing team members before they start the sourcing process. Dominick and Lunney (2012:78), assert that during training sessions it is important that the team members get used to working as a team and learnt to speak with one voice.

5.4.4 Improve Supplier Relationship Management

It is further recommended that procurement drive the buyer-supplier relationship from the SAMC perspective and provide input on the possible improvements in relationship building with suppliers. The sourcing team must explore what competitive advantages the supplier can gain from a partnership strategy. Further, analysis of the supply market by the sourcing team creates a competitive supply base.

The exploration can focus on suppliers willingness to collaborate and innovate to assist the SAMC establish a competitive advantage through the manufacturing process. A strategic supplier should be able to improve the SAMC’s ability to offer flexibility to customers. In addition, business to business systems must be integrated to improve efficiencies between the sourcing team and the suppliers. The integration of systems will assist suppliers to gain in-depth knowledge about the SAMC’s strategic sourcing initiatives for the manufacturing department.

Spend visibility is a critical underpinning for strategic sourcing. The SAMC should fully understand their current suppliers and supply market. The SAMC should conduct an analysis of current spending with its suppliers in order to identify and prioritise the relationships with suppliers. The further benefit is the possibility of cost reductions through well managed relationships.

Apart from evaluating supplier’s performance on the criteria of delivery date, quality and price only, the SAMC should focus on the evaluating criteria on innovation and strategic fit as well. These extended criteria are significant for the building of effective buyer-supplier relationships. An evaluation of a supplier’s ability to perform must be done prior to purchasing as well as after material has been received.

5.5 Areas for Future Research

The South African Bank Note Company is a subsidiary of the South African Reserve Bank. As the sole supplier of banknotes to the SARB, the SABNC faces similar business constraints as the SAMC. With the decreased demand for cash, the SABNC must explore the possibility of producing bank notes for other central banks and governments. Therefore, future research on the sourcing process at the SABNC must also be considered.

5.6 Conclusion

Strategic sourcing is a methodology to optimally source goods and services to meet business requirements. The study concludes that the sourcing process at the SAMC that supports the manufacture of circulation coins is transactional and requires strategic focus. The ability of the SAMC to continuously supply coins to the South African public and be able to compete in the global coin market make the implementation of a strategic process pivotal for the business.

The benefits of strategic sourcing are compelling. Through a well strategized sourcing process, risks of the non-supply of raw materials can be mitigated allowing the SAMC to fulfil its local and export orders commitment. A further benefit is that strategic sourcing will improve efficiencies enabling the SAMC to meet the required delivery schedules and possibly lead healthier customer relations.

The study discussed strategic sourcing through comprehensive understanding of costs of purchasing; cost reductions can be obtained for the manufacturing of coins. Finally, well managed supplier relationships can lead to trust, enabling both the SAMC and the supplier to transact in a transparent manner. Further, good relationship management can lead to better decision making and accountability through understanding internal and external stakeholder roles.

Primary research discovered that certain aspects of strategic sourcing are in place. However, the overall sourcing process is not entirely effective due to its transactional nature. Consequently, benefits are not realised to the maximum extent, therefore, presenting a solid reason for the improvement of the process.
Strategic sourcing requires different specialised employees to work together to achieve objectives. The study concluded that a change management strategy be developed and implemented in order to support the evolution of the process. In essence all employees must first buy into the SAMC’s company strategy to become commercially viable and then buy into the sourcing strategy that supports the company strategy.

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## Appendix A: Buyer and Internal Customer (Manufacturing) Questionnaire

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<td>2</td>
<td>The current procurement process works best for supporting manufacturing</td>
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<td>3</td>
<td>The process for identifying critical supply categories is vigorous</td>
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<td>4</td>
<td>The procurement department aligns sourcing activities with the overall goals of the SAMC</td>
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<td>5</td>
<td>The suppliers are segmented according to the critical nature of their product</td>
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<td>6</td>
<td>The risk management process is linked to the manufacturing processes</td>
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<td>7</td>
<td>The procurement department identifies, assesses and continuously monitors risks with critical suppliers</td>
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<tr>
<td>8</td>
<td>The roles and responsibilities to manage risks are clear</td>
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<td>9</td>
<td>There is collaboration between supplier and buyer during the sourcing process</td>
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<td>10</td>
<td>There is collaboration between manufacturing and buyer during the sourcing process</td>
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<tr>
<td>11</td>
<td>There is regular communication between supplier and buyer</td>
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<tr>
<td>12</td>
<td>There is regular communication between manufacturing and buyer</td>
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<tr>
<td>13</td>
<td>The queries arising during the procurement process are resolved timeously</td>
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<td>14</td>
<td>The buyers and manufacturing clearly understand their roles in the sourcing process</td>
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<td>15</td>
<td>The buyers are informed on manufacturing spend</td>
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<td>16</td>
<td>The cost drivers from the suppliers are visible</td>
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<td>17</td>
<td>Budgets are aligned with manufacturing spend</td>
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<td>18</td>
<td>There is a comprehensive supplier evaluation process</td>
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<td>19</td>
<td>Supplier evaluation criteria are adequate to manage the performance of suppliers</td>
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</table>
20. The current supplier sourcing process is effective

### Appendix B: Supplier Questionnaire

<p>| | | | | |</p>
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<tr>
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<tbody>
<tr>
<td>1</td>
<td>There is a well-developed system to manage orders from SAMC</td>
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<td>2</td>
<td>The system is linked to the SAMC so that the buyer is updated on the progress of the order</td>
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<td>3</td>
<td>The order placement process from SAMC to supplier is efficient</td>
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<td>4</td>
<td>The requirements of the SAMC manufacturing department are well understood</td>
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<td>5</td>
<td>There is a risk management process that is aligned to the supply of material to the SAMC</td>
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<tr>
<td>6</td>
<td>The cost drivers of material supplied to the SAMC are transparent</td>
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<td>7</td>
<td>The SAMC procurement department collaborates closely on manufacturing requirements of the SAMC</td>
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<td>8</td>
<td>The SAMC collaborates closely with regards to new product developments</td>
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<td>9</td>
<td>The queries arising during the order process are resolved timeously by the SAMC</td>
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<tr>
<td>10</td>
<td>Key performance measures are tracked and regular feedback is provided to the SAMC</td>
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<td>11</td>
<td>The SAMC provides regular feedback to the supplier on its performance</td>
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</table>
Annexure C: Covering Letter for Questionnaire

2 November 2015

Dear Sir/Madam,

Exploring the Impact of the Strategic Sourcing Process on the Production of Circulation Coins at the South African Mint Company

I am a student at Regent Business School. I am conducting research on the above mentioned topic for the dissertation component of the Master of Business Administration (MBA).

Kindly complete the attached questionnaire. Please return the questionnaire by the 15th November 2015. It should take approximately 15 minutes to complete.

Please note that all respondents will remain anonymous and no names have to be provided on the questionnaire. Respondents also have the opportunity to withdraw from the study if they do not feel comfortable. Alternatively you can contact me and I will explain and answer further questions.

All responses will remain confidential. Thank you for your assistance in this important endeavour.

Regards,

Virosh Koobair
0835302815
Annexure D – Internal Questionnaire Split half Reliability Spearman Brown Formula

| Respondents | Questions | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 1st Half Total | 2nd Half Total | X-Y | Y-Y | (X-Y) x (Y-Y) | (X-Y)^2 | (Y-Y)^2 |
|-------------|-----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----------------|----------------|----|----|-----------------|---------|---------|
| 1           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 2           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 3           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 4           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 5           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 6           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 7           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 8           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 9           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
| 10          | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |

<table>
<thead>
<tr>
<th>1st Half Total</th>
<th>X-Y</th>
<th>Y-Y</th>
<th>(X-Y) x (Y-Y)</th>
<th>(X-Y)^2</th>
<th>(Y-Y)^2</th>
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<tbody>
<tr>
<td>22.68</td>
<td>23.89</td>
<td></td>
<td>686.37</td>
<td>548296.96</td>
<td>740.47</td>
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</table>

Pearson’s correlation coefficient: 0.93

Spearman Brown Formular

\[ \gamma_{SB} = \frac{2 \gamma_{th} - 3 \gamma_{nh}}{1 + \gamma_{th}} \]

\[ \gamma_{SB} = 1.86 \]

\[ \gamma_{Wy} = 0.96 \]
## Annexure E – External Questionnaire Split half Reliability Spearman Brown Formula

| Respondents | Questions | 1st Half Total | 2nd Half Total | x-ŷ | ŷ-ӯ | (x-ӿ)² | (ƴ-ӯ)² | (x-ӿ) x (ŷ-ӯ) | |\(\text{Pearson's correlation coefficient} \ r_{xy} \) |
|-------------|-----------|----------------|----------------|-----|-----|--------|--------|----------------|--------|
| 1           | 1 1 1 1 1 1 1 1 1 1 | 6 | 6 | -5.77 | -7.38 | 42.58 | 33.29 | 54.46 |
| 2           | 1 1 1 1 1 1 1 1 1 1 | 6 | 6 | -5.77 | -7.38 | 42.58 | 33.29 | 54.46 |
| 3           | 1 1 1 1 1 1 1 1 1 1 | 6 | 10 | -5.77 | -3.38 | 19.50 | 33.29 | 11.42 |
| 4           | 2 2 2 2 2 2 2 2 2 2 | 12 | 9 | 0.23 | -4.38 | -1.01 | 0.05 | 19.18 |
| 5           | 1 1 1 1 1 1 1 1 1 1 | 12 | 12 | 0.23 | -1.38 | -0.32 | 0.05 | 1.90 |
| 6           | 1 1 1 1 1 1 1 1 1 1 | 14 | 19 | 2.23 | 5.62 | 12.53 | 4.97 | 31.58 |
| 7           | 1 1 1 1 1 1 1 1 1 1 | 12 | 15 | 0.23 | 1.62 | 0.37 | 0.05 | 2.62 |
| 8           | 2 2 2 2 2 2 2 2 2 2 | 10 | 12 | -1.77 | -1.38 | 2.44 | 3.13 | 1.90 |
| 9           | 2 2 2 2 2 2 2 2 2 2 | 13 | 18 | 1.23 | 4.62 | 5.68 | 1.51 | 21.34 |
| 10          | 2 2 2 2 2 2 2 2 2 2 | 21 | 18 | 9.23 | 4.62 | 42.64 | 85.19 | 21.34 |
| 11          | 1 1 1 1 1 1 1 1 1 1 | 12 | 19 | 0.23 | 5.62 | 1.29 | 0.05 | 31.58 |
| 12          | 2 2 2 2 2 2 2 2 2 2 | 16 | 15 | 4.23 | 1.62 | 6.85 | 17.89 | 2.62 |
| 13          | 2 2 2 2 2 2 2 2 2 2 | 13 | 15 | 1.23 | 1.62 | 1.99 | 1.51 | 2.62 |

| Pearson's correlation coefficient | 0.75 | 0.75 |

\[ r_{SB} = \frac{2r_{hh}}{1+r_{hh}} \]
\[ r_{SB} = \frac{2r_{0.75}}{1+0.75} \]
\[ r_{SB} = \frac{1.5}{1.75} \]
\[ r_{xy} = 0.86 \]
Annexure F – Authorisation Letter

South African Mint Company (RF) (Pty) Ltd
Reg. No. 1999/004217/07
Old Johannesburg Road, Gateway
CENTURION
EP O Box 494, Pretoria, 0001
SOUTH AFRICA
Tel: [+27 12] (012) 677 2650
Fax: [+27 12] (012) 677 2658
Website: www.s Amit.co.za

28 May 2015

Dear Reader,

This correspondence serves as notification that Viresh Koobair, ID number 7607075177084, who is registered with Regent Business School, student number MBA2110158F, has been granted permission by the South African Mint Company (RF) (Pty) Ltd to conduct research for his dissertation.

The research topic approved by the South African Mint Company is the following:

“Assess the effectiveness of the Strategic Sourcing Process on Production at the South African Mint Company”

We wish him well in the final phase of his studies.

Thank you,

[Signature]

Gerda Janse van Vuuren
Chief Financial Officer South African Mint Company (RF) (Pty) Ltd

Date: 28 May 2015