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Assessment of Target Costing Technique as a Profit Driver and Cost Management Tool. A Study of Steel Firms Operatinginnairobi, Kenya

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Abstract:
The purpose of this research study was to assess target costing as a profit driver and cost management tool for steel firms operating in Nairobi. Guided by three objectives, the study aimed to establish organizational challenges in the target costing implementation, to assess the effect of Target costing as a cost management tool and also to assess the contribution of target costing in profit growth. Key finding of this research study, which had a completion rate of (87.5%)indicated that (73.8%) of the respondents use target costing technique as a cost management tool and all adopters have implemented it for more than 5 years. Team and cross functional barriers emerged as the most outstanding organizational challenge to implementation caused by mandatory cost cutting which results to finger pointing in various departments. Lack of appropriate skills and training necessary to tackle emerging costing techniques was rated as the overall departmental challenges. As a cost planning tool, the research findings noted that Target costing identifies costs associated with a product with an aim of making very informed choices of options available. Providing firms with a rapid response mechanism to a product cost without compromising on the quality and having an all-inclusive cost management approach was identified as a way of effective cost management. Respondents across the steel industry reported a significant increase in profit levels a trend they attributed to successful implementation. From the research findings, the researcher recommends that the Topic of target costing be made broader with the inclusion of the same in textbooks and other publications from high school level and relevant training and skills be afforded to top level managers. The researcher further recommends that the Government should urgently invest in Steel industry in order to subsidize the cost steel products.

1. Introduction and Background

1.1. Introduction

Production and consumption of steel is one of the backbone economic activities of any country. It's acceptable by international standards that a country's per capita steel consumption is normally taken as an indicator of its level of industrialization (GOK, 2008). Development of the steel sector is one of the national priority areas of the National Economic and Social Council. The plan to build an integrated iron and steel plant is one of the country's long term development goals listed under Vision 2030 (KAM, 2013).

Feil (2004), points out that industrial progress and economic well-being of a country is usually reflected in such physical development as housing, transport facilities, water distribution, industrial premises, including warehouses and office space, agricultural mechanization, leisure facilities, healthcare facilities and many others.

1.2. Background to the Study

Albright (2006), observes that mergers, acquisitions, and consolidations continue to change the scope and size of many firms. While larger companies benefit from economies of scale and larger research and development departments, which leads to lower production costs, the consolidation and increased merger also brings disadvantages as well.

The key disadvantage is competition from both domestic and global players with differing production and delivery costs. Feil (2004) also notes that the dilemma and challenge for any manufacturer is to match the lower prices of the global competition and still offer the highest quality products that customers demand.

Chen(2002), agree that a solution is required when developing new products through minimizing costs through the optimal use of all resources along the entire supply value chain. The costing solution identified should reduce costs by involving all participating departments, including customers and suppliers in the product design process, thereby focusing the entire value chain toward the goal of eliminating costly waste, excess, and unevenness.

Baggaley (2003), defines Target Costing as a disciplined process for determining and achieving a full-stream cost at which a proposed product with specified functionality, performance, and quality must be produced in order to generate the desired profitability at the

product's anticipated selling price over a specified period of time in the future. According to Sakurai(2001),Target Costing originated in Japan in the 1960's as a response to difficult market conditions and is widely practiced in more than eighty percent of companies in motor assembly industries and more than sixty percent of companies in manufacturing and processing industries.

Target Costing was prompted by the proliferation of consumer and industrial products from western firms which were overcrowding the Asian markets. Also, Japanese companies were experiencing shortages of resources and skills needed for the development of new concepts, tools and techniques, which were required to achieve parity with the toughest western competitor in terms of quality, cost and productivity(Leedy, 2005)

Target Costing is not just a cost reduction technique or a control framework, but part of a comprehensive strategic profit management system, including value analysis and value engineering, asserts Sakurai, (2001).Implementing target costing within the supply chain requires substantially more effort and discipline than using other forms of costing e.g. standard costing. All supply chain partners must find ways to reduce costs as they design, manufacture, and distribute the product.

Any costing systems should be designed to help companies determine the cost of a product in relation to the revenue it generates. The two common costing systems used in business as described by Leedy (2005), or traditional costing and activity-based costing. Traditional costing assigns manufacturing overheads based on the volume of a cost driver, such as the amount of direct labor hours needed to produce an item. He defines a cost driver as a factor that causes cost to incur, such as machine hours, direct labor hours and direct material hours.

Baggaley (2003), further analyzing the costing methods notes that, activity-based costing allocates the costs of manufacturing a product according to the activities needed to produce the item. Many manufacturing companies use the traditional costing system to assign manufacturing overhead to units produced. Users of the traditional costing method make the assumption that the volume metric is the underlying driver of manufacturing overhead cost. Traditional accounting fails to allocate non-manufacturing costs that also are associated with the production of an item, such as administrative expenses.

Traditional cost accounting approaches have served well in many business enterprises in Table 1 below, illustrates the costing themes and how they relate to cost-plus and target costing processes.

Costing themes	Cost-plus costing	Target Costing
Starting point	Internal costs	External customer price
Spatial scope	Production	Design
Temporal scope	Immediate product costs	Life-cycle perspective

Table 1: Comparing cost-plus costing with target costing

Improving quality, upgrading technology and processes to reduce costs has to be initiated with active participation of the top management. Resources have to be provided, goals have to be set, and teamwork synergy has to create and nurtured among all departments in the company (Fernando, 2005).

1.3. Overview of Iron and Steel Sector in Kenya

The Iron and Steel Sector in Kenya forms 13 percent of the manufacturing sector, which in turn contributes around 9 percent of the Gross Domestic Product. The steel sector is heavily dependent on imported raw materials because no local sources have been developed to-date (Omondi, 2012). According to KAM, (2013) manufacturers' directory, metal and allied sector has seventy one industry, mainly located in Nairobi and Mombasa cities of which only twelve are steel specialists.

Local deposits of iron ore have been identified in several locations of Kwale and Machakos and Chinese exploration firms have been awarded contracts but are yet to have any commercial interest. Through imports of raw materials and local scrap collection, a sizeable and a growing local capacity have developed to cater for both export and domestic market (Kapchanga, 2013).

The Iron and Steel sector in Kenya is mainly controlled and owned by the private sector of Asians origin unlike in western countries where the Iron and Steel sector is publicly owned or government controlled. Experts say construction sector is the largest consumer, accounting for approximately 50 per cent of total steel consumption in Kenya (KAM, 2013).

According to the latest economic survey figures by the Kenya National Bureau of Statistics, the iron and steel imports have nearly doubled from Sh3.7 billion in 2003 to Sh5.2 billion as at 2009. The high growth in demand for steel products in the region has seen a proliferation of small steel mills in the past 10 years, according to Guru Raval, chairman of the Devki Group, which produces steel, cement and roofing materials (Kihara, 2012).

According to GOK (2008), from the basic iron and steel sector a diversified network of downstream industries has emerged. These downstream industries include motor vehicle and auto-ancillary, a range of fasteners, reinforcement bars for construction, furniture, agricultural tools, and kitchenware. Steel in very diverse in its products and is used practically in all aspects of our daily lives, including the most complicated as motor vehicle assembly to the less significance as wire products which includes nails, rivets, nuts, bolts, barbed wire, chicken wire mesh, fencing wire, iron sheets, steel drums, window louvers, wheelbarrows, gutters and water pipes.

Kapchanga (2013), notes that the sector has continued to face stiffer competition from imported steel products, mainly originating from Eastern European countries. Most of these industries receive a considerable amount of government support in the form of state subsidy, e.g. tax-free power, water and other utilities. "This is an aspect of 'dumping' that has led to the closure of many steel industries in Kenya including, Special Steel Mills, Emco Steel Works, and partial operation of others like Morris and Company Ltd" (KAM, 2013, Pg 125).

In such a challenging environment, a company's survival depends, among other things, on its capacity to produce and market innovative products that satisfy levels of quality and price expected by its market niche. The goals of becoming and remaining locally and internationally competitive in terms of price and quality are of utmost importance. The survival of any worthy business enterprise should concern the management of any company, observes (El-Kadi, 2008).

Nicolini (2000), notes that the financial success of any business in the long term depends on whether its prices exceed its cost to sufficiently finance growth, provide for reinvestment and yield satisfactory returns to its shareholders. Market forces influence prices significantly as competition increases and supply exceeds demand. To achieve a sufficient margin over its costs, a company must manage costs relative to the prices the market allows or the price the firm sets to achieve certain market penetration objectives (Broome & Perry 2002).

Many companies have little flexibility when setting a price due to intense competition. Reducing a firm's production costs may be the only source of increased earnings, where selling price and profit margin are fixed by competitive pressures and management policies. Many companies have been forced to reduce their costs in order to survive the intense competition and pressure from customers to reduce prices (Ellram, 2000).

1.4. Statement of the Problem

One of the most common characteristics of all companies is survival. Nowadays, competitive and technological progress is critical for both manufacturing and services industries as a result of short product life cycles and changing consumer needs. This requires organizations to stimulate a suitable business operation to achieve targeted growth and adopt suitable price policies (Albright, 2006).

The steel sector in Kenya despite its potential has not been dynamic enough to function as an engine for growth for our developing economy. The changing nature of the modern business environment, observes Albright (2006), have unveiled various shortcomings of the traditional costing approach and is no longer regarded as suitable to sustain profits for efficient business operations.

Sakurai (2001), argues that businesses have to be more vigilant and aggressive in their cost management approach, and evolution of broad based cost effective tools and techniques like Target Costing can't be ignored. Effective cost management tools are required in providing firms with a spectrum of products and services that can withstand the ever competitive prices in product and service markets.

Feil (2004), supporting Sakurai (2001),argument, observes that organizations in both manufacturing and service sectors often fails to recognize the significant contribution in fully implementing these tools and techniques. Accordingly, most firms implement half-baked costing techniques which don't yield the expected returns resulting in operational scale-down or ultimate closure. It's in this light that a research study was conducted targeting the steel sector for firms operating in Nairobi, Kenya to assess how fully implemented Target costing technique can be used as a profit driver and as a cost management tool.

1.5. Purpose of the Study

The purpose of this research study was to assess target costing technique as a profit driver and cost management tool for steel firms operating in Nairobi, Kenya.

1.6. Objectives of the Study

The main objectives of this research study were:

1. To establish organizational challenges in the implementation of target costing technique for steel firms operating in Nairobi, Kenya.
2. To assess the effect of Target costing technique as a cost management tool for steel firms operating in Nairobi, Kenya.
3. To assess the contribution of Target costing technique in profit growth or steel firms operating in Nairobi, Kenya.

1.7. Research Questions

1. What are the organizational challenges in the implementation of target costing technique for steel firms operating in Nairobi, Kenya?
2. What is the effect of Target costing technique as a cost management tool in Kenya's steel sector?
3. What is the contribution of Target costing technique in profit growth of Kenya's steel sector?

1.8. Justification of the Study

Target costing approach was developed in recognition of two important characteristics of markets and costs. Albright(2006), asserts that many companies have less control over price than they would like to think. The market, i.e. supply and demand, really determines prices and a company that attempts to ignore this does so at its peril. Therefore, the anticipated market price is taken as a given in target costing.

Another observation by Lockamy (2000),is that most of the cost of a product is determined at the design stage. Once a product has been designed and has gone into production, not much can be done to significantly reduce its cost. Most of the opportunities to reduce cost come from designing the product so that it is simple to make, uses inexpensive parts, robust and reliable.

Ismail (2002), asserts that if the company has little control over the market price and little control over cost once the product has gone into production, then it follows that the major opportunities for affecting profit come in the design stage where valuable features that customers are willing to pay for can be added and where most of the costs are determined.

Baggaley (2003), argues that the difference between Target Costing and other approaches to product development is profound in the sense that instead of designing the product and then finding out how much it costs, the target cost is set first and then the product is designed so that the target cost is attained.

This is particularly relevant to Kenya's steel sector, which is regarded as high costs, especially being the base for infrastructural, construction and manufacturing concerns(GOK, 2008).The issues affecting the steel and allied sector is the fact that most of the inputs are imported making them expensive. Other factors include shortage of scrap metal, stiff competition from imports, which tend to be cheaper, and high infrastructural costs, e.g. electricity costs, transport costs, and port charges.

Currently, Kenya has a very robust construction sector and it heavily depends on steel. Good quality products which are fairly priced will go a long way in ensuring affordable housing units in line with the Government's objective of housing its citizenry (KAM, 2013).

1.9. Significance of the Study

The research study is intended to benefit the following persons and organizations:

1.9.1. Finance Managers and Managements Accountants

Because Target Costing is a process of identifying causes of costs and taking a proactive approach to their management, Finance managers and Management accountants who are entrusted in costs management will greatly benefit from this research study.This process which is a complete departure from the traditional costing methods help the managers to be well schooled in the various aspects of costing, understanding the shifting dynamics of costs from the short-run to the long-run thus, providing valuable input in determining what information is relevant for optimal profitability of their organizations.

1.9.2. Organizations and their Management

The entire organizational management comprising of directors, production, procurement and marketing managers should regard cost management as a managerial issue and not simply a finance issue. Target Costing provides the management with a platform and ability to think cross-functionally, shifting perspectives by expanding understanding and linking profit planning, market surveys, value analysis, management accounting, budgetary control and financial management.

1.9.3. The Consumer: End User

Because Target Costing is a process which identifies the price the end user of products and services are able and willing to pay, then its turns out that they are the ultimate beneficiaries of this process. Also, when companies earn handsome profits from efficient operations, the end user or the consumer is the biggest beneficiary. Friendly prices of quality steel products will enhance the living standards of many Kenyan public who can afford decent housing and provision of basic infrastructure, related steel assets and implements.

1.9.4. Government

When business prospers, the Governments usually leap big in terms of tax revenue. In this regards, when company profits steeps upwards, the Government is able to collect more taxes which in turn is used to fund public infrastructural projects for the benefit of its citizenly. In this regards, a vibrant steel Sector means better infrastructural development and more taxes to the Government.

1.9.5. Scope of the Study

The scope of this research study were firms operating in the metal and allied sector of our economy with special emphasis of steel sector companies operating in Nairobi region. The target population was senior managers and employees working in research and development, production, finance and sales and marketing departments of these companies. The researcher target this group of employees because they are the initiators and implementers of company polices.

1.9.6. Assumptions of the Study

The researcher made the assumption that the participants were cooperative, honest, provides credible and reliable data while answering the questionnaire and that the chosen sample was representative of the population the researcher wished to make inferences to. The researcher further assumed that most steel firms operating in Nairobi, Kenya use Target Costing technique in their costing operations and that the responses obtained from the respondents represented the actual and not the ideal situation in their respective firms.

1.9.7. Limitations of the Study

These are the shortcomings, conditions or influences that cannot be controlled by the researcher (Albright, 2006).One of the limitations expected in this research study was due to the nature of management structure of these companies, which despite their large size remains fairly family controlled, accessibility of vital information remains fairly caged. Another limitation expected was none or low response to questionnaires especially those disseminated over the web within the stipulated timeframe.

1.9.8. Delimitations of the Study

Delimitations are choices made by the researcher which describes the boundaries set for the study. They expound on the methods the researcher used to overcome the limitation identified (Albright, 2006). In this case, the management of participating firms was assured that information obtained was handled in confidence, and was only used for research purposes only. They were also assured that participation was voluntary and may withdraw from the study at any time and with no ramifications. The head of departments who answered the questionnaires were also assured that the findings of the research study will be made available to them for review and possible implementation in the company.

1.9.9. Definition of Terms

- Target cost : Is the allowable amount of cost that can be incurred on a product and still earn the required profit from that product (Fernando, 2005).
- Profits: In accounting, usually refers to the difference between the purchase and the component costs of delivered goods and or services and any other operating expenses (Fernando, 2005).
- Budgeted cost: Is a predetermined cost after a product is in production (Fernando, 2005).
- Target costing: Is a cost management tool for reducing the overall cost of a product over its entire life-cycle with the help of production, engineering, research and design (Fernando, 2005).
- ABCcosting: Is a costing technique that allocates the costs of manufacturing a product according to the activities needed to produce the item (Fernando, 2005).
- Traditional or standard costing: Is a costing technique that allocates manufacturing overhead (indirect manufacturing costs) to products on the basis of a volume metric such as direct labor hours or production machine hours(Fernando, 2005).
- Value engineering: Is a systematic method to improve the value of goods or products and services by using an examination of function (Fernando, 2005).
- Value chain: Is a chain of activities that a firm operating in a specific Sector performs in order to deliver a valuable product or service for the market (Fernando, 2005).
- Allowable cost: Is the maximum amount that can be spent on a product (Fernando, 2005).
- Overhead cost: Refers to ongoing expenses of operating a business (Fernando, 2005).
- Fixed cost: Are the costs that are not dependent on the level of goods or services produced by the company (Fernando, 2005).
- Direct cost: Are the costs that can be directly allocated to a cost object (Fernando, 2005).
- Indirect cost: Are not directly accountable to a cost object (Fernando, 2005).
- Variable cost: Are expenses that change in proportion to the activity of a business (Fernando, 2005).
- Concurrent engineering: Is a work methodology based on the parallelization of tasks, i.e. performing tasks concurrently (Fernando, 2005).
- Cost driver: Is the unit of an activity that causes the change in activity's cost (Fernando, 2005).
- Profit driver: Is the unit of an activity that causes the change in profit levels (Fernando, 2005).
- Strategy: A pattern in a stream of decisions geared towards shaping the future, an attempt to get to desirable ends with available resources (Fernando, 2005).

1.10. Summary

This chapter has expounded on the introductory and background notes of this research study. The state of the steel industry in Kenya, a statement of the problem, research questions, objectives, justification, limitation, delimitations and scope of the study have also been well explored. Key terms as used in the research have also been defined.

2. Literature Review

2.1. Introduction

Target Costing began in Japan in the 1960s. The Japanese sector took a simple American idea called Value Engineering and transformed it into a dynamic cost reduction and profit planning system. Value engineering is defined as a systematic method to improve the value of goods or products and services by using an examination of function (Albright, 2006).

Tanaka(1993), points out that Target Costing has not only impacted on how to cost products, but has rather influenced the way in which available costing information is used in the approach to products and their profitability. Similarly Albright (2006), states that by influencing products and processes, Target Costing is concerned with shaping the foundations of the organization and can be regarded as the most proactive of all casting techniques.

2.2. The Concept of Target Costing

Leedy (2005), observes that the concept of target costing is based on the logic that a company should manufacture products that yield desired profits. In the event of a product not yielding adequate profits, the primary alternative will be to change the design of the product. Lockamy (2000), cautions that costs and the manner in which costs influence pricing and the profit margin should be closely

monitored. Awareness of the cost structure and cost behaviour together with information about the market enables firms to deal more effectively with competitive pressures than merely lowering its prices.

2.3. Target Costing Process

Just as there is no single definition of target costing, Welfle (2000),asserts that there is no single clear cut process of target costing but with a common objective though, companies have evolved their own organizational procedures and practices. Nevertheless, all companies share a series of general steps which includes: Establishing the target price in the context of market needs and competition after which the target profit margin is ascertained. The cost that must be achieved is also determined while calculating the probable cost of current products and processes. At last the target cost, i.e. the amount by which costs must be reduced is established.

Lockamy (2000), notes that after the target cost has been calculated, companies establish a cross-functional team, which is involved in the implementation process from the earliest design stages using tools such as value engineering in the design process and pursuing cost reductions using kaizen costing once production has started. Having management accountants involved in the target costing process also gives credibility to the financial implications of the various tradeoffs and decisions made during the Target Costing process (Chen, 2002).

2.4. Target Costing and Theory of Knowledge Creation

Knowledge creation enables each individual to become motivated to work together as a team to create ideas that would contribute to attain the tight cost target. In this situation, target cost information itself acts as a common shared objective (Broome &Perry 2002). Leedy (2005), explains how information sharing is amplified to create sympathized knowledge, conceptual knowledge, systemic knowledge and operational knowledge through socialization, externalization, combination, and internalization, respectively.

El-Kadi (2008), also presented an ideal model for creating new knowledge for possible cost reduction, that is, shared information lead to the cooperative efforts among different functions, then, collection of expertise and professional experience and knowledge turn into unique solutions.

2.5. Target Costing and the Theory of the Dynamic Capability Approach

Dekkerand Smidt (2003), developed the concept of dynamic capabilities, which are the ability of an organization to learn, adapt, change and renew over time. This involves search, problem finding, and problem solving at the organizational level. Capabilities are the mechanism and process, which enable firms to develop new competence.

Welfle (2000), presents a similar definition of core competence, which are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies.

Ellram (2000), asserts that core competences in successfully Target Costing implementation are communication, involvement, and a deep commitment to working across organizational boundaries. Target Costing activities are corporate-wide and use various types of information from all levels of organizational hierarchy, functional departments, and even from outside suppliers. In this sense, the dynamic capability approach seems more suitable for exploring Target Costing practices.

2.6. Profitability and Target Costing

Costs and the manner in which costs influence pricing and the profit margin should be closely monitored. Awareness of the cost structure and cost behaviour, together with information about the market, enables firms to deal more effectively with competitive pressures than merely to lower its prices (Lockamy, 2000).

Hergeth (2002), presents ways in which Target Costing improves profitability. These includes: First: It places such a detailed continuing emphasis on product costs throughout the life cycle of every product that it is unlikely that a company will experience runway costs; also, the management team is completely aware of costing issues since it receives regular reports from the cost accounting members of all design teams.

Second: It improves profitability through precise targeting of the correct prices at which the company feels it can field a profitable product in the marketplace that will sell in a robust manner. Target Costing results not only in better cost control, but also in better price control (Hergeth (2002).

2.7. Target Costing Versus Traditional Cost Management

The traditional approach to profit planning is a cost plus approach notes (Tanaka, 1993). This approach estimates production costs and then adds a profit margin in order to obtain a market price. Should the market be unwilling to pay the price, the firm will then attempt to find cost reductions. On the contrary,Cooper, (1999)explains that Target Costing commences with a market price and a planned profit margin for a product and establishes an allowable cost for the product. Product and process design is used to reduce product cost in order that it is equal to this allowable cost.

2.8. Intellectual Foundation of Target Costing

According to Ellram, (2000) a traditional cost plus approach is depicted as a “closed systems” approach, while Target Costing represents an “open systems” approach.

Systems Theory Concept	Traditional Cost Management (Closed Systems)	Target Costing (Open Systems)
Relations with external Environment	Ignores external environment; cost system focuses on internal measures of efficiency.	Interacts with external environment to respond to customer needs and competitive threats
Number of variables Considered	No consideration of cross- functional or extra-organizational impact of cost system.	Considers many complex relationships among functions and across the entire value chain.
Form of regulation	After the fact, based on cost incurred and correction of error using variance information.	Before the fact, by anticipating and designing costs out of a product before production.
Purpose of regulation or Control	Keep costs to a pre-specified limit set by standards or budgets	Continuous improvement of cost for both customers and Producers over a product's life.

Table 2: Comparison of intellectual foundations of cost management
Source (Ellram, 2000): Cases of successful application of Target Costing

Lockamy (2000), identify several success stories of firms implementing Target Costing. In 1990 American car manufacturer, Chrysler Corporation found itself in a very unhappy financial situation. Profits were down, cash flow was tight, and the stock was trading at a low price of $10 per share. The Japanese auto Sector posed a serious threat. Despite a strong Yen, they had captured and continued to preserve a healthy share of the U.S. auto market. Chrysler management decided it was time to change their approach to new car design.

They adopted a competitive weapon that the Japanese auto Sector had used for many years called Target Costing. Target Costing was applied to all product development efforts in the Company including the NEON, a new small car developed for the lower price range. A price and profit target was set for the car and it was then designed to meet that profit without sacrificing major customer requirements. The results of using Target Costing on the NEON were impressive. Since the introduction of Target Costing, Chrysler's profits increased significantly. Its share price went up from $10 per share in 1990 to $54 per share in 1995 (Nicolini (2000).

Other companies and organizations which have successfully adopted Target Costing includes Toyota, Nissan, Sony, Mitsubishi, Daihatsu, Canon, Olympus Optical, and Komatsu and also non-Japanese companies which includes Mercedes, Goodyear tyres, Rockwell, Texas Instrument, DaimlerChrysler, and the North Sea oil sector (Tanaka, 1993). Nicolini (2000), added the UK construction sector and included the semiconductor, automotive, and electronic equipment Sector as well as the computer peripheral, consumer products, and aerospace original equipment Sector as participating in successful Target Costing processes.

2.9. Principles of Target Costing

Best practice companies employ a cross-functional organizational structure, listens to the "voice of the customer," focus on cost reduction during the new product development stage, and are effective at removing costs throughout the supply chain (Kulmala, 2002).

The six key principles of Target Costing are:

2.9.1. Price-Led Costing

Target costs are calculated by subtracting the required profit margin from the competitive market price, which is summarized in the following equation:

$C = P - \pi$

Where C = target cost, P = competitive market price, π = target profit

2.9.2. Focus on Customers

Chen, (2002) argues that since Target Costing is market driven, the views of the customers are of utmost importance and should therefore be taken into account throughout the entire process. Understanding the needs of customers and what competitors are currently doing or might do to meet those needs is essential. Quality, cost and time requirements of customers are thus incorporated in product and process decisions and guide cost analysis.

2.9.3. Focus on Design

Since Target Costing systems spend more time at the design stage, it eliminates costly and time consuming changes needed later, resulting in time to market being effectively reduced. This is in contrast to traditional cost reduction methods which focus on economies of scale, learning curves, waste reduction, and yield improvement to manage costs (Ellram, 2000).

2.9.4. Cross-Functional Involvement

Accountants (2005), observes that Target Costing uses cross-functional product and process teams representing design and manufacturing engineering, production, sales and marketing, purchasing, cost accounting, service and support. It's important that outside participants, including suppliers, customers, dealers, distributors, service providers, and recyclers are included in these cross-functional teams to successfully implement the process.

2.9.5. Value-Chain Involvement

Hergeth (2002), contributing to cross functional involvement states that all members of the value chain, such as suppliers, dealers, distributors, and service providers, are involved in the Target Costing process. Developing a cooperative relationship with all members of the "extended enterprise" maximizes cost reduction efforts throughout the value chain. Long-term and mutually beneficial relationships with suppliers and other members of the value chain form the basis of a Target Costing system.

2.9.6. Life-Cycle Orientation

According to Nicolini (2000), substantial costs involved in the product design phase may not be taken into account in costing the product; rather these costs may have been capitalized or treated as an expense in prior years. In addition, the costs of discontinuance are rarely included as part of the product cost when the product is discontinued. Life-cycle costing overcomes the above shortcomings by including all costs over its entire life cycle, from inception to abandonment.

2.10. Target Costing Challenges or Barriers

Both organizational and departmental barriers often impede the implementation of such a team orientated cost strategy like Target Costing as employees are organized according to functions in most companies and people tend to build fences around their responsibilities because that's what they believe they are measured on. According to Ellram (2000), some of the key organization challenges include:

2.11. Lack of Understanding

In a culture that has previously embraced a cost-plus approach to pricing, it is difficult to implement Target Costing. This is due to the cost-plus approach often being quicker and does not involve an iterative, inclusive approach to reducing the gap between current costs and target costs. Whilst the term is seen to be restricted to that of the accounting domain, accountants have not been involved in implementing production changes, despite having access to the cost data.

2.12. Team and Cross Functional Barriers

Although the logic of Target Costing is easy to understand, the prevailing cost-plus approach continues to be used by a number of industries. This is usually the result of a lack of understanding of costs in the departments of the organization.

2.13. Irrelevance or Fear of the Effects

Many managers regard Target Costing as just another accounting term with little relevance to manufacturing or marketing. They fail to recognize that the concept of Target Costing is identical to other cost management concepts implemented in manufacturing and similar departments with similar objectives of attempting to achieve similar goals of reducing non-value adding and irrelevant activities that fail to contribute to a product's value and profits.

2.14. Production Detail

The design process must be broken down into its lowest level components. This requires the involvement of production, design, finance, and marketing. Therefore, whilst the concept of Target Costing is simple and straightforward, the execution is extremely difficult.

2.15. Conceptual Framework

Nicolini (2000), views, conceptual framework is a visual or written product that explains, either graphically or in narrative form, the main things to be studied, the key factors, concepts, or variables and the presumed relationships among them. A conceptual framework enables the researcher to find links between the existing literature and his own research goals. Ellram (2000), notes that the situation in the marketplace controls price, while the financial requirements of a firm and its sector determine the target profit. The basic concept of target cost is totally different from traditional after-the-fact treatment as applied in the conventional cost control.

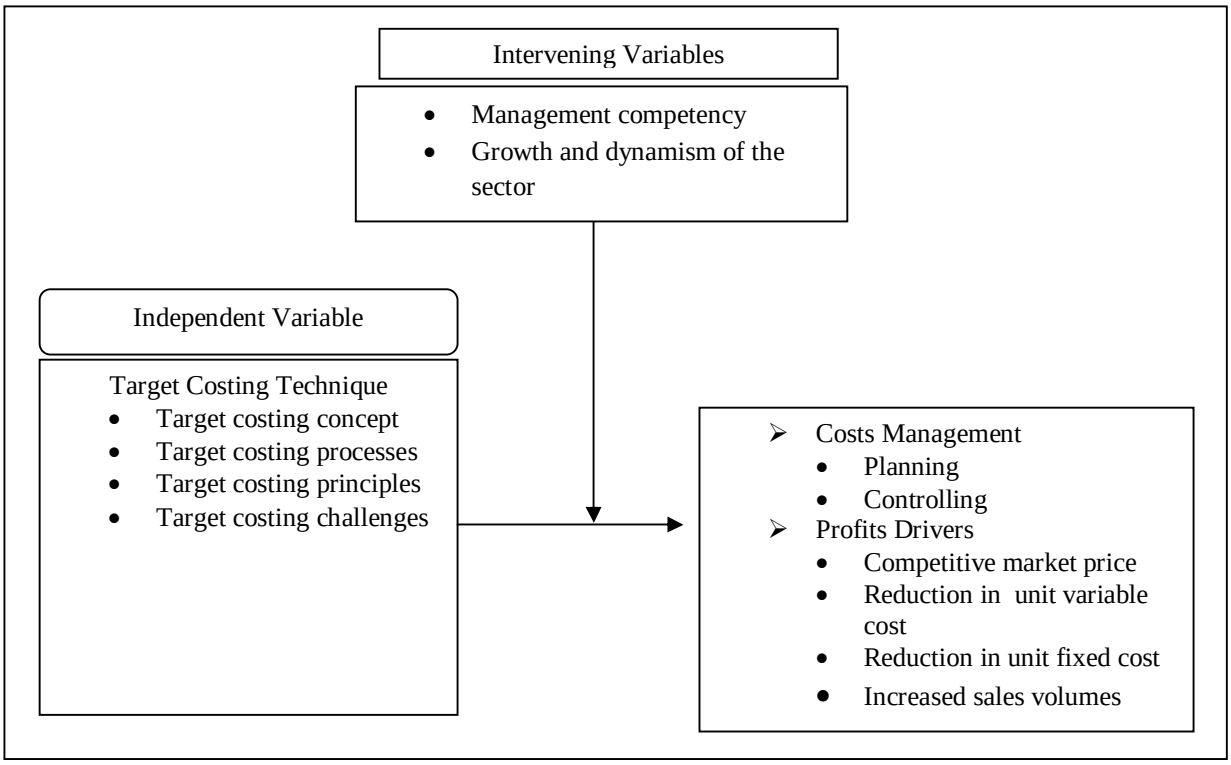

Figure 1: Conceptual framework

According to Baggaley (2003), the popular well-known formula of target cost computation is (Target Cost = Target Price - Target Profit). This formula clearly demonstrates the basic concept of Target Costing and introduces the variables in this research study. In the above conceptual framework illustration, profits and costs management taking the dependent variables relies on the understanding of concepts, processes, principle and challenges which all constitutes the level of implementation of target costing technique and taking the independent variables. A dependent variable represents the output or effect while the independent variable represents the input or causes.

Target Costing inverts the income statement by instead of looking at cost as an independent variable; it makes cost to be a dependent variable (Lockamy, 2000). The traditional method is to estimate the cost of design and production, add in profit, and that becomes the product's price. The Target Costing method determines the market price requirement, the price required to win the customer's business, then subtracts the target profit to arrive at the target cost.

Accountants (2004), note that the idea that prices drive allowable costs has a marked behavioral and business impact. It is a key to long-term business survival, growth, and prosperity in a competitive and rapidly changing environment. Thus, Target Costing can be said to be a cost management tool that integrates economic objectives and technological knowledge(Hergeth, 2002). It is also a response to the revolution in business environment, which has become more competitive, rapidly changing, unforgiving of mistakes or delays, and demanding a paradigm shift from ‘cost plus’ to ‘price minus’ which calls for a system of strategic cost management and profit planning (Sabir, 2011).

The intervening variables include the competency of the management and growth and dynamism in the steel sector. Competency of the management revolves around the ability of top management to communicate and apply technological innovations in order to reduce costs while dynamism is the rate at which the sector is able to adopt and absorb new ideas in their costing techniques.

2.16. Summary

This chapter explores introduction, the concept and process of Target Costing, theories of target costing, cases on successful target costing, intellectual and practical foundations of Target Costing systems, literature review and the conceptual framework in Target Costing.

3. Research Methodology

3.1. Introduction

This chapter presents a systematic description of the research, an overview of research methods in general and outlines the specific methodology that was followed for this research study. Further the population, determination of the sample, the target population, instruments of data collection and analysis techniques. Ethical considerations are also covered in this chapter.

3.2. Research

According to Shank (1999), research is defined as a process of seeking, by means of methodical enquiry, to solve problems and to add to one's own body of knowledge and that of others by the discovery of significant facts and insights. Similarly Creswell (2012), describe research as a systematic process of collecting, analyzing, and interpreting information or data, in order to increase our understanding of the phenomenon about which we are interested or concerned.

3.3. Research Design

A research design typically include how data was to be collected, what instruments were employed, how the instruments were used and the intended means for analyzing the collected data(Mugenda & Mugenda, 2003).

In this research study, descriptive research design was identified as the most appropriate type of research design to use. This type of research design according to Saiful (2011), attempts to describe and explain conditions of the present by using many subjects and questionnaires to fully describe a phenomenon and is one of the most popular methodologies for many social research studies.

3.4. Population

A research population is generally a large collection of individuals or objects that is the main focus of a scientific query (Mugenda & Mugenda, 2003). It is for the benefit of the population that researches are done. The population in this research study was seventy one firms listed by the 2013 Kenya Association of Manufacturer's directory as operating in the Metal and Steel sector in the country.

3.5. Target Population

Target population refers to the entire group of people or objects to which the researcher wishes to generalize the study findings (Mugenda & Mugenda, 2003). In the context of this research study, the target population was 12 steel firms as listed by the 2013 Kenya Association of manufacturer's directory as operating in Nairobi, with four senior managers from each of the firm participating.

3.6. Determination of Sample Size

Determination of sample size is the act of choosing the number of observations to include in a statistical sample (Mugenda & Mugenda, 2003). The sample size in this research study was equal to the target population, thus the researcher resorted to conducting a census for major steel firms operating in Nairobi, Kenya.

Department	Target Population	Percentage	Sample Size
Research & Development	12	100%	12
Production	12	100%	12
Finance & Accounting	12	100%	12
Sales & Marketing	12	100%	12
Total	48		48

Table 3: Tabulation of senior management staff of steel firms operating in Nairobi, Kenya

3.7. Data Collection Instruments

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes (Mugenda & Mugenda, 2003). The researcher in this research study relied on a self-administered questionnaire with both closed and open ended questions designed to be completed by a respondent without intervention as the primary data collection tool. The questionnaires contained a biographical section and three other sections, each designed to answer a specific research question.

3.8. Data Collection Procedures

Data collection started once the researcher obtained an introduction letter from Daystar University, School of Business and Economics and the research permit from Kenya National Council of Science Technology upon payment of the stipulated fees of one thousand Kenya Shillings. Steel firms operating in Nairobi were approached telephonically and via e-mail in order to make contact with the respondents. The questionnaires were personally delivered to the respondents by the researcher and the research assistants.

The covering letter provided the respondents with the details of the researcher, purpose, background and potential benefits of the research study. Further, the respondents were requested to return the completed questionnaire by a specified date.

3.9. Quality Control and Pre-Testing

Pre-testing is the opportunity to see what questions work well, what questions sound strange, what questions can be eliminated and what needs to be added. Is the survey too long? Are respondents losing interest? Do they understand the questions? (Soy ,2006).

To ensure validity, consistency and reliability of data collection instruments, a questionnaire pretest was conducted by distribution six questionnaires to three steel related companies. The six questionnaires were distributed to the Research and Development, Production, Finance, Sales and Marketing managers or equivalent of the related firms located in Nairobi. The researcher received four out of six questionnaires distributed from the pretest exercise and none raised any issue of ambiguity, irrelevance, length or any notable short-comings in the questionnaire.

3.10. Data Analysis Tools

Successful research necessitates good planning on gathering the data for analysis. The researcher used Statistical Package Social for Social Sciences (SPSS) which is an application for data entry using data editor or tables built-in in the software for analyzing the research findings. Soy (2006), recons that, SPSS is among the most widely used software for statistical analysis to derive measures of central tendency in statistics which includes the mean, mode, median and standard deviation.

The original SPSS manual has been described as one of sociology's most influential books (Broome & Perry 2002) because it allows ordinary researchers to do their own statistical analysis. In addition to statistical analysis, data management and data documentation are features of the base software of SPSS. Descriptive statistics were used infrequency tables, charts and graphs that are easy to understand to interpret the research findings. Qualitative data analysis was identified, examined, and interpreted in patterns and themes in textual or narrative. Content analysis was used to analyze qualitative data in reference to the meaning, context and intention contained in the respondent's narrative in view of the question asked.

3.11. Ethical Considerations

Ethics is what is morally right, honorable, virtuous or decent. It's an integral part to our everyday lives. It's a guide that helps us identify the core ethical principles relevant to research with human participants, and to translate these principles into specific guidance to support the researcher (Broome & Perry 2002).

Approval of this research study was duly endorsed by Daystar University, School of Business and Economics and a Research permit was obtained from National Council for Science & Technology upon payment of the stipulated fees. All information obtained in the course of this research study was given the confidentiality it deserves while properly acknowledging all secondary information and data obtained and referred to in this research study to avoid plagiarism.

All respondents' participation was voluntary and no coercion was exerted upon any respondent and benefits and useful findings derived from this research study will be communicated to Iron and Steel Sector players. This research study avoided any physical and psychological harm to any respondent or entity and the researcher and or his assistants will ensure children and vulnerable groups are not misused. This research project is self-funded and thus no misappropriation of research funds was anticipated and no fraud or deception of any nature was tolerated by the researcher.

3.12. Summary

This chapter outlined the introduction, definition and the concept of research design. The researcher implored the significance and understanding of a case study. Research population and the target population were also detailed. Sampling in its various forms and techniques and determination of sample sizes was also covered. Data collection instruments and procedures for analysis was expounded including pilot or pre testing of data collection instruments. Data analysis tools and procedures were also captured. Ethical consideration in conducting the research study closed chapter three.

4. Data Presentation, Analysis and Interpretation

4.1. Introduction

In this chapter, the biographical details of the respondents and the findings of the research study objectives are presented. To address the research objectives stated in chaperone, a survey was conducted using self-administered questionnaires in order to assess target costing techniques as cost management tool and profit driver for steel firms operating in Nairobi. The empirical findings of the study derived by the use of SPSS analytical tools are presented with the aid of tables and figures and are based on response summaries of 42 out of the total 48 administered questionnaires representing 87.5% response rate.

4.2. Data Analysis and Interpretation

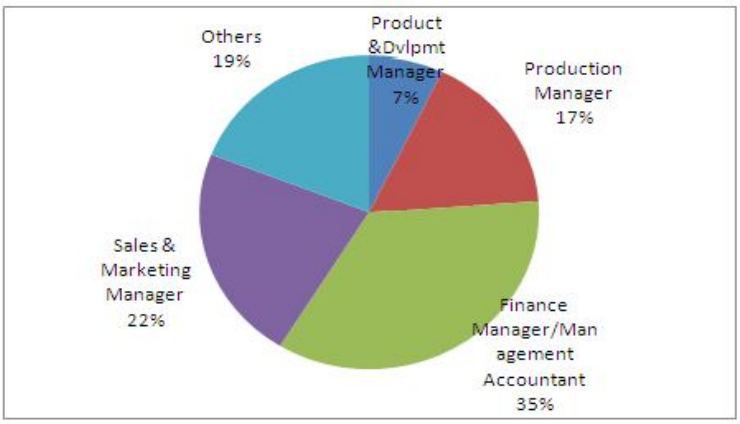

Figure 2: Biographical Details

The chart above reflects a wide variety of job titles. Finance at 35% and sales managers 22% while others job titles which included top management and accounts assistants followed with 19%, production and product development followed with 17% and 7% respectively. The researcher received the highest response from the finance department. This analysis agrees with Chen (2002), who stated that the finance office is a key player in target costing process and that the presence of management accountant in the team gives financial credibility to the various tradeoffs and decisions taken.

Figure 3: Years of work experience in steel or related sector

From the analysis above, over a half i.e. 57.2% of the respondents indicated that they have business experience of more than six years in steel or related industry which is a commendable period for the respondent to be able to understand the costing structures and process in their respective companies. While 19% have 1-2 years and the least 4.8% had 4-6 years of work experience. This, according to Ellram (2000), presents the team with core competences in target costing implementation which includes commitment and involvement.

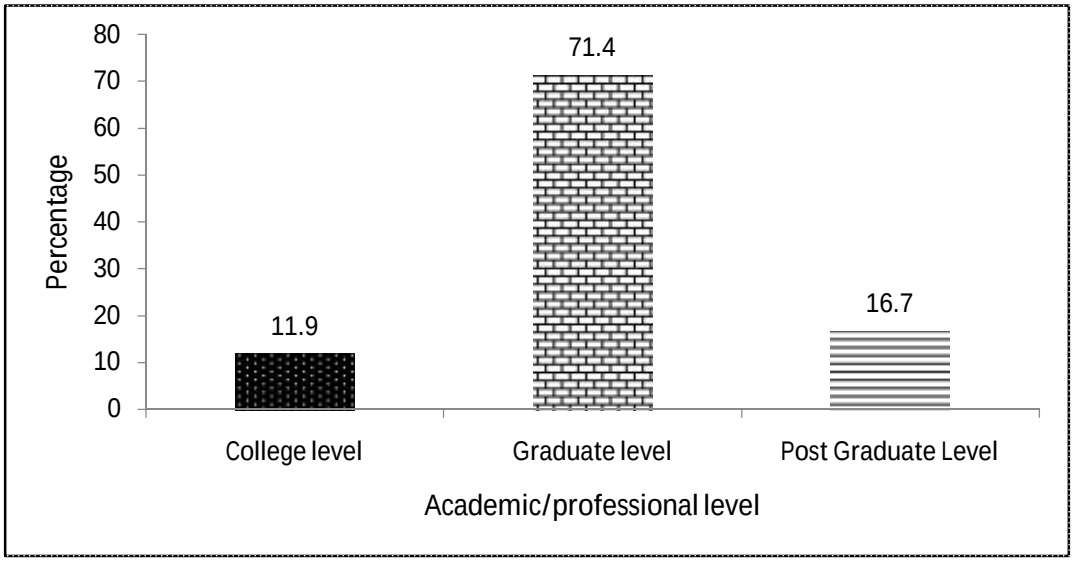

Figure 4: Academic and/professional qualifications

Majority of respondents comprising 71.4% hold graduate level academic qualifications, while 16.7% had post graduate qualification and the remaining 11.9% had college level qualifications. No respondent indicated that they have high school education qualification. Good academic and professional qualifications are ideal to understanding target costing technique process as noted by Welfle (2000).

4.3. Section A: Establishing Organizational Challenges in Target Costing Implementation

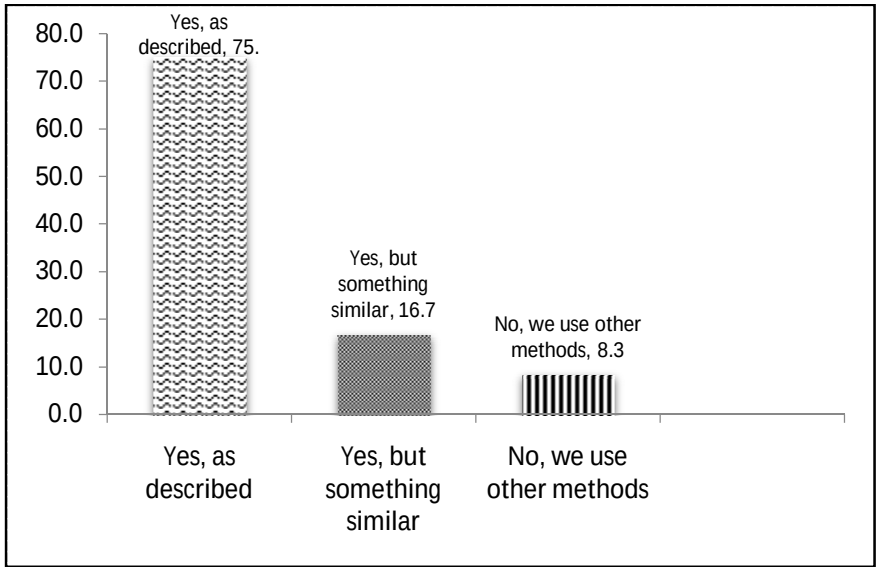

Figure 5: Use of Target costing technique.

In answering the above question, majority of the respondents 75% representing nine of the sampled companies indicated that they use target costing technique in product design and development as described while 16.7% of the respondents uses something similar whereas a minimal 8.3% indicated that they use other costing techniques. The response to this question confirm the researchers assumption that majority of the steel firms operating in Nairobi use target costing technique in their costing operations.

	Frequency	Percent
Standard costing	2	40.0
Marginal costing	6	60.0
Total	8	100.0

Table 4: Name given to your technique

The table above shows the distribution of respondents who use target costing but gives the costing technique a different name with 60% indicating that they give the name marginal costing and 40% of the respondent calling terming the process as standard costing technique.

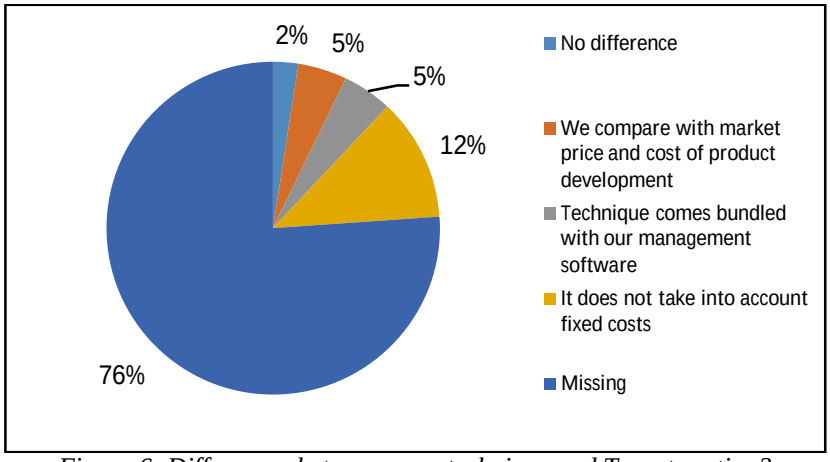

Figure 6: Differences between your technique and Target costing?

The chart above shows that a larger percentage 76% of the respondents who use target costing but give it another name could not establish any fundamental difference between the two costing systems but a few noted some differences which includes that target costing don't take into account the fixed cost and its usually bundled with their management system software.

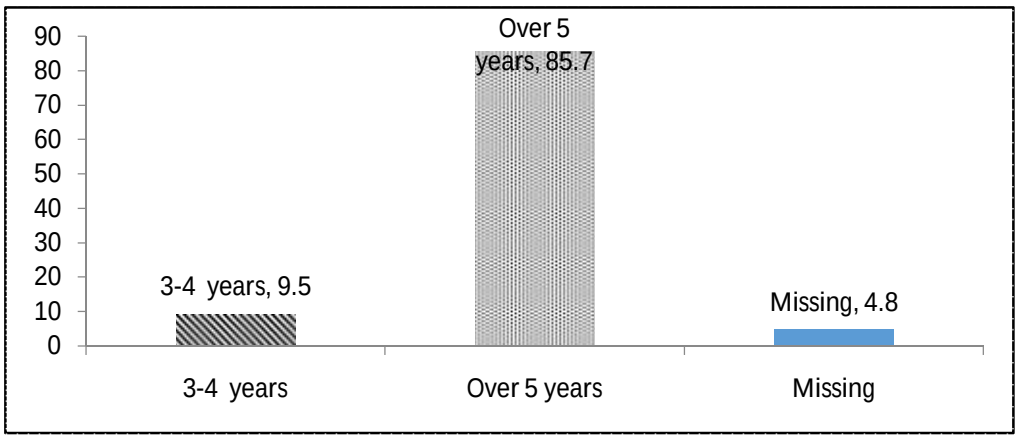

Figure 7: How long have you been using this technique?

For those that are using target costing as described, (85.7%) indicated that they have been using the technique for more than five years while a minimal (9.5%) indicated that the technique have been in use for 3-4 years period. This shows a well-established system of implementation and shaping the foundation of the organizations cost structure, an attribute supported by (Albright, 2006).

	Frequency	Percent
Method unknown	3	7.1
Too costly in time and money to collect and analyze reports	2	4.8
No response	37	88.1
Total	42	100.0

Table 5: Likely reason for not using Target costing

From the table above the respondents who don't use target costing in their organizations, indicted that the technique was costly to fund and needed a lot of time to use while some claimed that the technique was unknown to them.

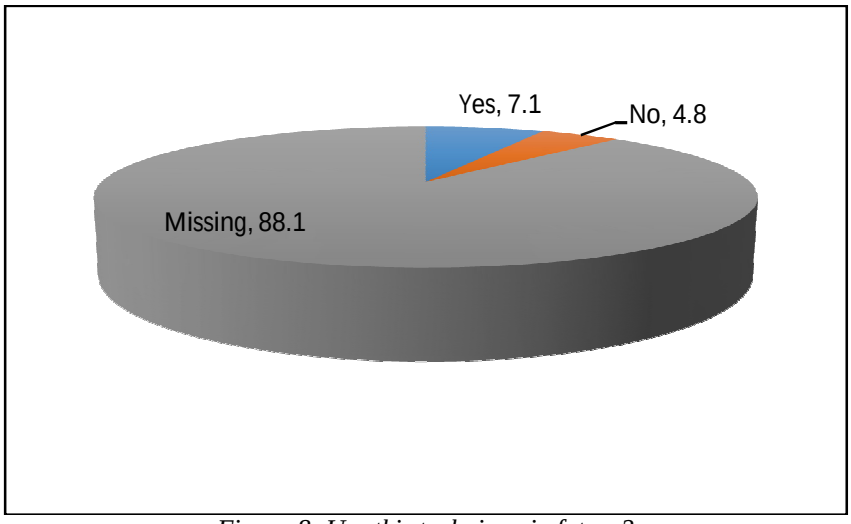

Figure 8: Use this technique in future?

When asked is if their company will consider using target costing technique in the future, (7.1%) of the respondent who don't use target costing responded affirmatively.

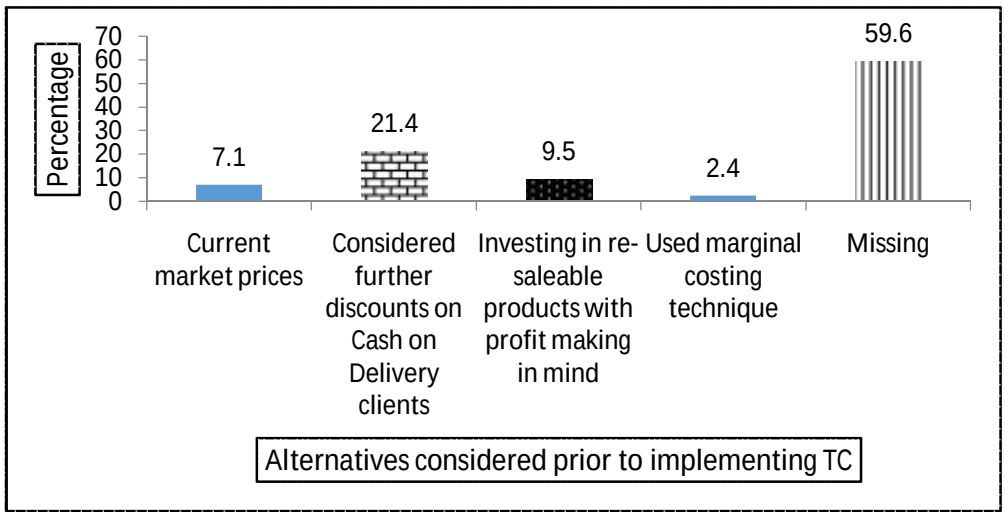

Figure 9: Alternatives considered prior to implementing Target costing.

Respondents were asked of the alternative costing option they considered prior to implementing target costing technique and some respondents indicated that discount on cash delivery clients was the preferred alternative while the rest gave diverse reason of the alternatives their company considered, while others considered marginal costing.

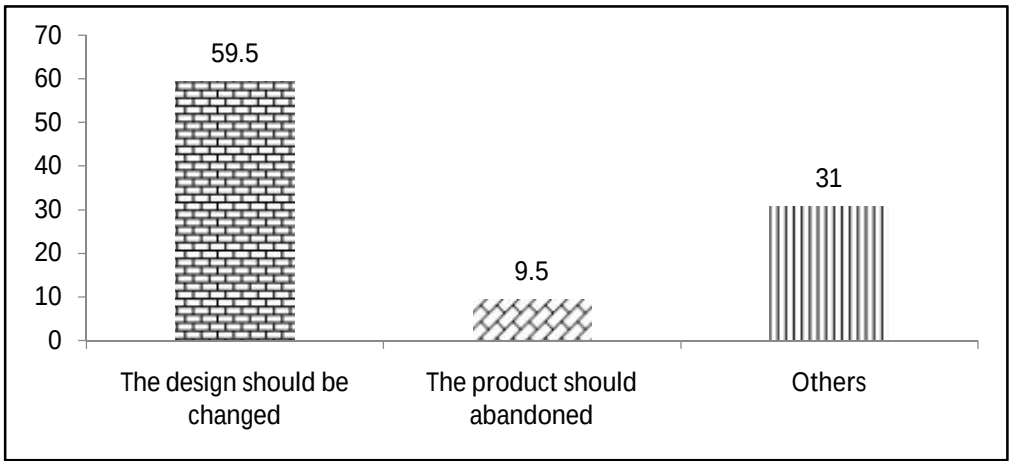

Figure 10: If company doesn't manufacture products that yield desired profits?

In the event that the product doesn't yield the desired profits, (61.9%) feels that the product design should be changed while (9.5%) indicated that the product should be abandoned while the rest (28.6%) had other reason to support their argument. This response supports Leedy (2005), argument of changing the design rather than abandoning the product in the event that profits are not realized.
The respondents also gave other options the company has at its disposal in the event that the product doesn't yield the expected profits. Some respondents indicated that the concept of continuous improvements which goes by the Japanese name of Kaizen concept was an option while others felt that the company should manufacture in small quantities as demand dictates. Value engineering as stated by Albright (2006), was also an option in improving target costing process.

4.4. Universal Target Costing Process

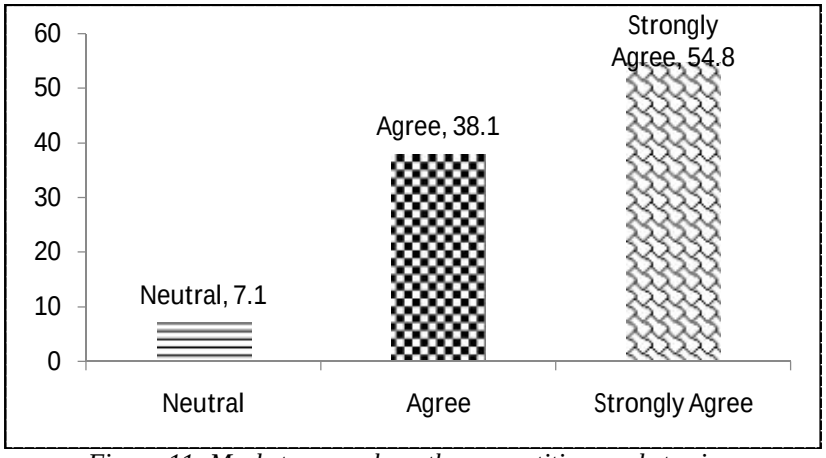

Figure 11: Market research on the competitive market price.

From the responses obtaineda combined (92.9%) either strongly or agree with the concept of market research on the competitive product price which collates with Lockamy, (2000) statement that the first process in target costing aims at getting a price that the market is able and willing to pay when the product hits the market.

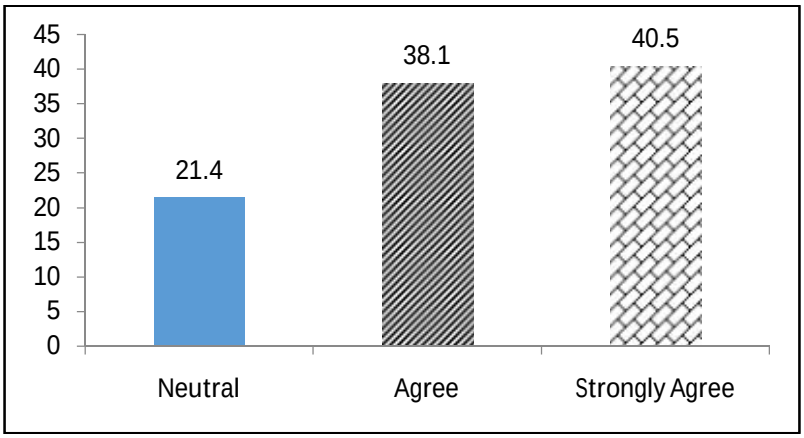

Figure 12: Determine the required profit margin by the company

The primary existence of the company is to make profits which are the returns to the shareholder for investing their funds in the company. For this reason, the shareholders expect adequate profits from the operations of the company. The respondents agreed with this process of target costing with (78.6%) in agreement and (21%) being neutral, a view shared by Hergeth (2002), when the scholar presented the various ways that target costing improves profitability of a firm.

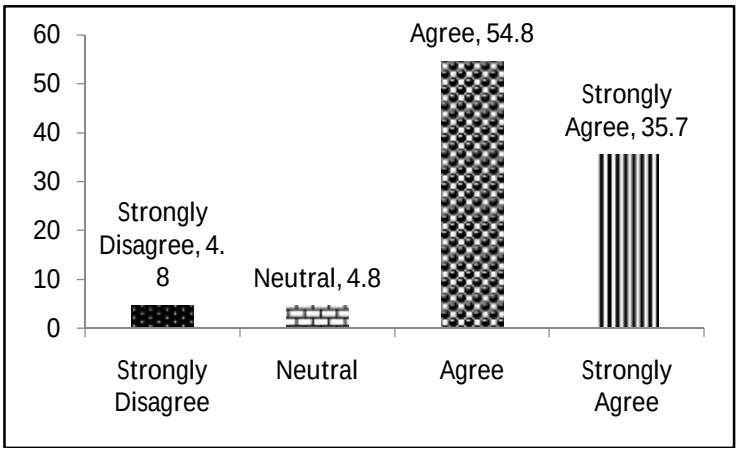

Figure 13: Establish the allowable cost of the product

After establishing the competitive market price and noting the required company's profit margin, target costing process now moves to establish the allowable cost in which the product will have to be manufactured. Cooper (1999), notes that product and process design is used to reduce product cost in order that it's equal to this allowable cost. This is a very important aspect of the process in that the product cost is not allowed to exceed this cost otherwise the expected profits will not be realized. The respondents were in agreement with this process with (90.5%) being affirmative.

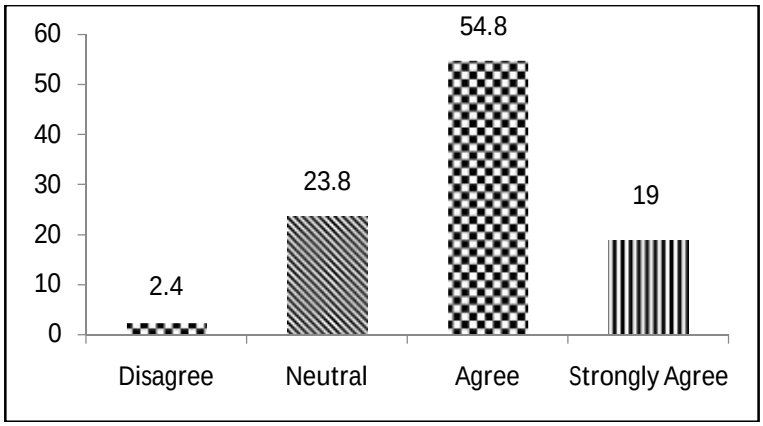

Figure 14: Establish a cross-functional team

Target costing unlike the traditional costing technique involves multiple department of the organization in order to successfully implement. In this regards, (73.8%) of the respondents were in agreement and a minimal (2.4%) disagreed with this process. Lockamy (2000), notes that after target cost or allowable cost has been calculated, companies establish a cross-functional team, which will be involved in the implementation process from the earliest design stages.

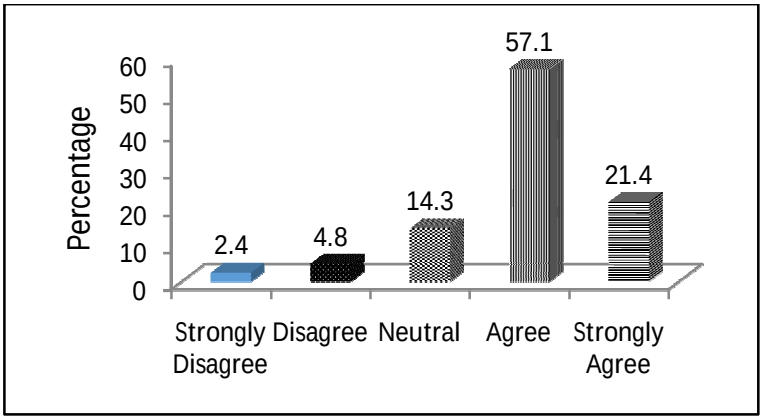

Figure 15: Commence production if the target cost is met

If all the above process are accomplished, then, commencement of production begins because the company is assured of fielding a profitable product in the market a process supported by (78.5%) of the respondents with (4.8%) being neutral and a further (2.4%) in disagreement.

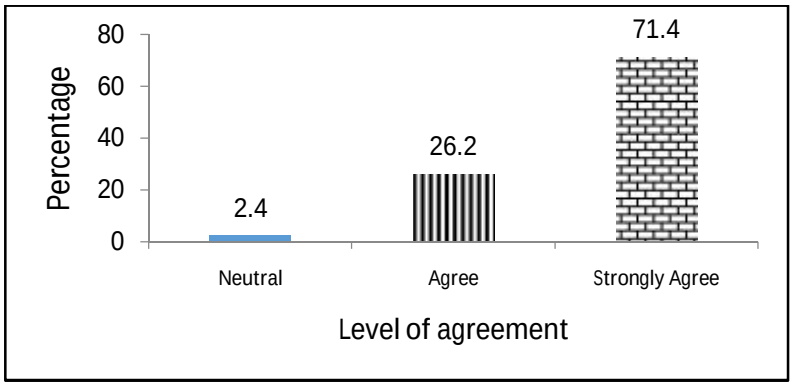

Figure 16: Continuously improving the product

Continuously improvement and evaluating the suitability of the product cost for the benefit of both the customers and producers' over the entire life is a very important aspect of target costing process notes (Ellram, 2000). The concept of continuously improving the product was supported by an overwhelming (97.6%) of the respondents. In summary, from the responses the researcher obtained from the respondents regarding the extent of agreement with the universal Target Costing process, majority of the respondents were in agreement with all of them.

4.5. Target Costing Principles

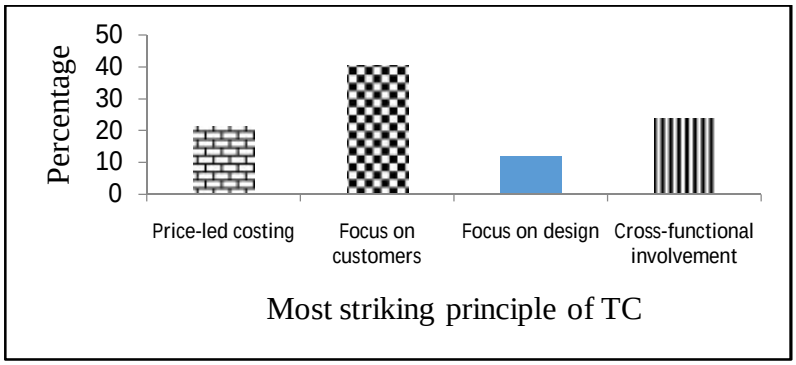

Figure 17: Most striking principle of Target costing

By observing the bar graph above, it is noted that (40.5%) of the respondents agreed that customers should always be the focus as a target costing principle closely followed by cross functional involvement at (23.8%). The least striking target costing principle according to the respondents is life-cycle orientation with (2.4%). It was noted that target costing is mainly implemented with a focus on customers since they are the reason for all the innovations and production in general. Cross-functional involvement shows the strength and importance of team work. Those who felt that design was the most striking principle stood at (21.4%).

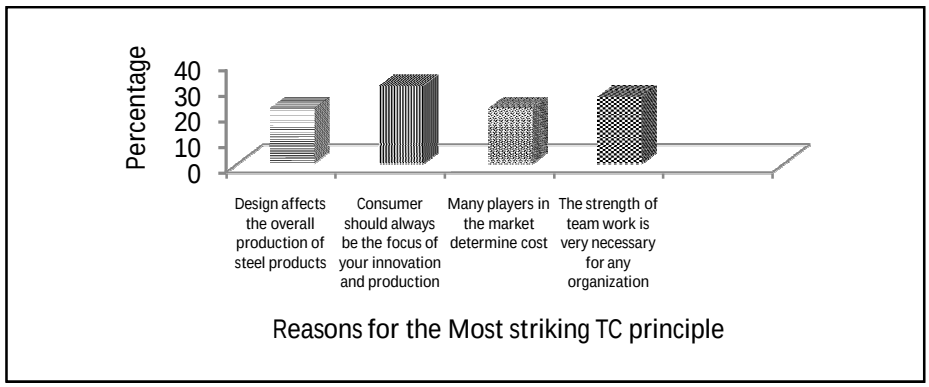

Figure 18: Reasons for the most striking Target costing principle

Asked why they chose the respective principle to be the most striking target costing principles (30.4%) of the respondents noted that the consumer should be the core consideration in any product innovation while (26.1%) noting that team work synergy is of paramount importance in the implementation of any task. These findings agree with Kulmala (2002), who notes that target costing as applied by best practice companies, listens to the voice of the customer in order to focus on cost reduction while maintaining all needed functionalities and quality.

4.6. Departments Involved in the Target Costing Process

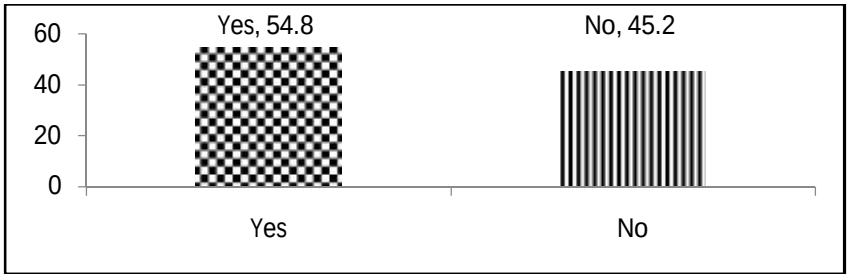

Figure 19: Design & product development

Since target costing system spends more time at the design stage, it eliminates costly and time consuming changes needed later, resulting in time to market being effectively reduced notes (Ellram, 2000). In this regard, (54.8%) of the respondent's confirmed that it's a key department in the implementation of the target costing process. This department is key in the product design in order for it to have the necessary functionalities and the quality that the customers are willing to pay for.

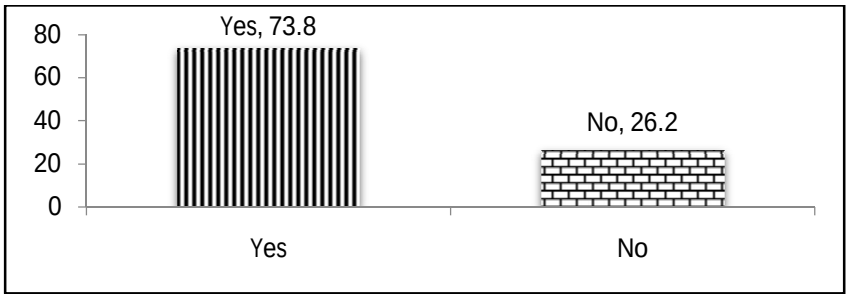

Figure 20: Production department

The respondents gave the production a (74%) acknowledgement as a department which is necessary and involved in the target costing process. After design has done its work, production department is entrusted with the transformation of the design works into a viable product which can appeal to the market. Sourcing for the relevant raw materials for optimal product quality and following the right production process with aid the whole target costing process.

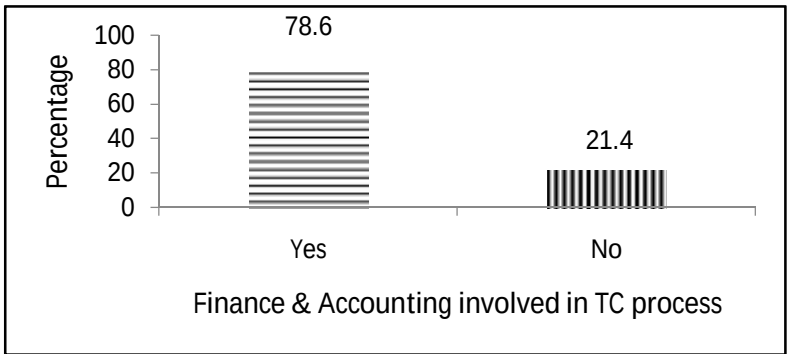

Figure 21: Finance and accounting

Having management accountant involved in the target costing process, notes Chen (2002), gives the process credibility to the financial implications and various tradeoffs and decision made. The finance department received a (78.6%) affirmation as a department necessary in the target costing process. Traditionally, the finance department was the only department entrusted with all the costing works of the organization but, target costing has changed that with the involvement of other departments.

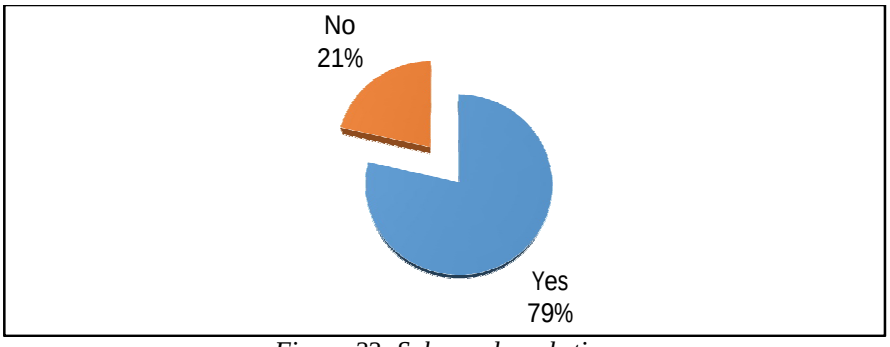

Figure 22: Sales and marketing

Being the department which will be responsible to deliver the product to the market and convince the consumer to buy, sales department received a (79%) confirmation rates as a necessary department in the target costing process. These findings are supported by Lockamy (2000), who argues that target costing is a complete departure from the traditional costing method which estimates the cost of design and production, add profits and derives a selling price. The scholar notes that targets costing determine the price based on the customer's requirements. The general notion is that it's the marketing department responsibility for the market success of the product irrespective of its design.

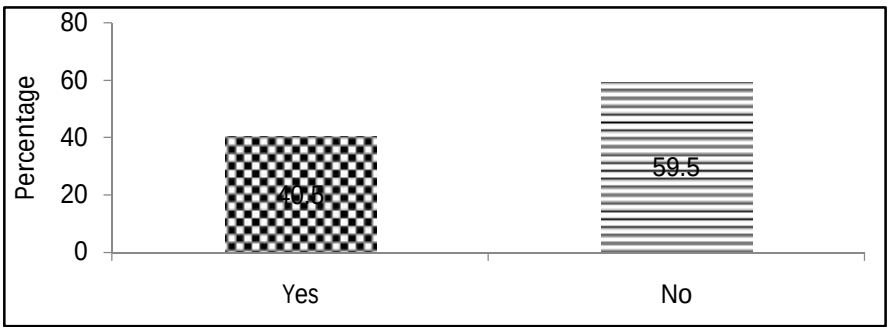

Figure 23: Distribution and logistics

The researcher would have expected that distribution and logistics department traditionally viewed as part of sales which received a large percentage of acknowledgement as a department relevant in the target costing process would also receive a nod with a large percentage. On the contrary (59.5%) of the respondents disagreed that it was a necessary department in target costing implementation. Other departments of the organization which are involved in the target costing process but not listed above includes the executives management comprising of the directors, chief executives officers and general manager who the respondents mentioned as part of the target costing process team.

4.7. Drivers of Target Costing

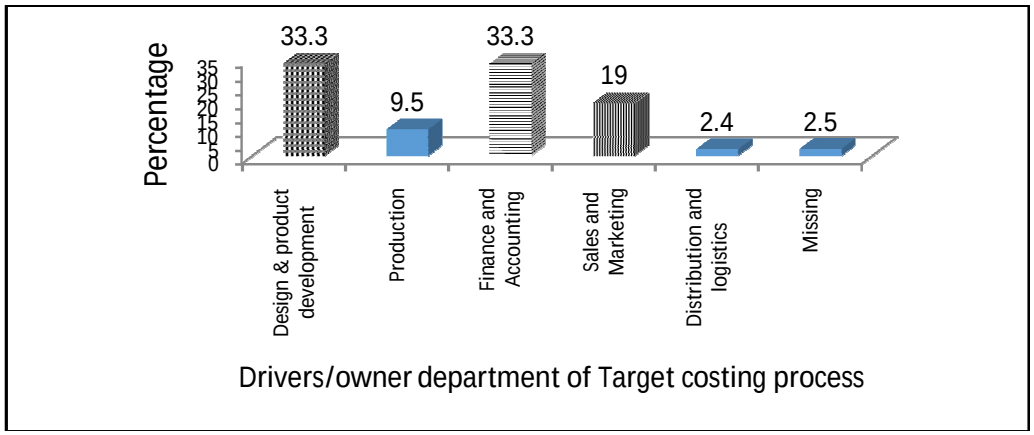

Figure 24: Departments that drives target costing

The finance department and product design and development departments were picked as the drivers of target costing process with (33.3%) of the respondents in favour. This confirms the literature of many scholars as noted in the literature review including Ellram (2000), who notes that proper and well thought of product design makes the product more marketable and Hergeth (2002), who enumerates the various ways that target costing improves profits of a firm. Sales and production department followed with (19%) and (9.5%) respectively.

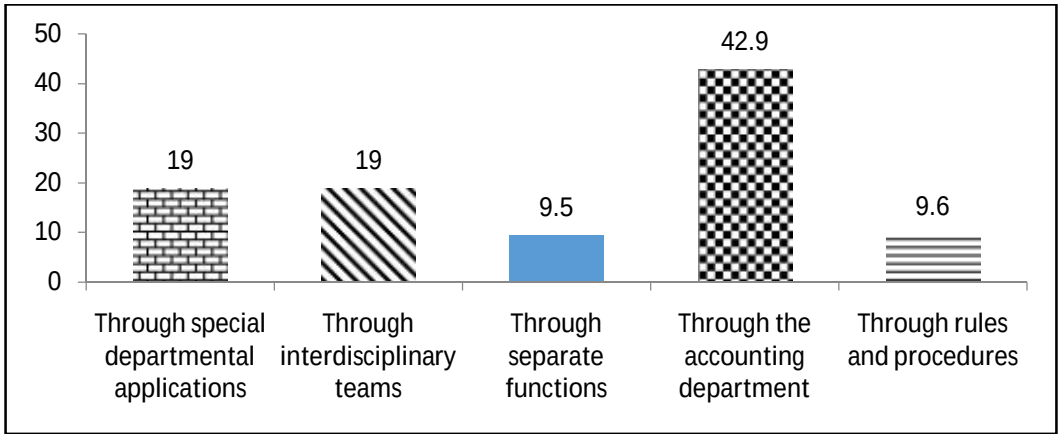

Figure 25: Activities for implementing target costing

Accountant (2004), noted that the idea that prices drives allowable cost has a remarkable behavior and business impact. Similarly, Lockamy (2000), notes that target costing inverts the income statement by instead of looking at cost as an independent variable; it makes the cost a dependent variable. From the illustration of the bar graph above, (42.9%) of the respondents indicated that target costing process was implemented through the accounts departments followed by departmental application and inter-disciplinary teams each receiving a (19%) responses.

Other approaches

Through logistics and or procurement and sourcing department and market forces and product mix were identified as other approaches in implementing target costing.

4.8. Key Organization Challenges Affecting Target Costing

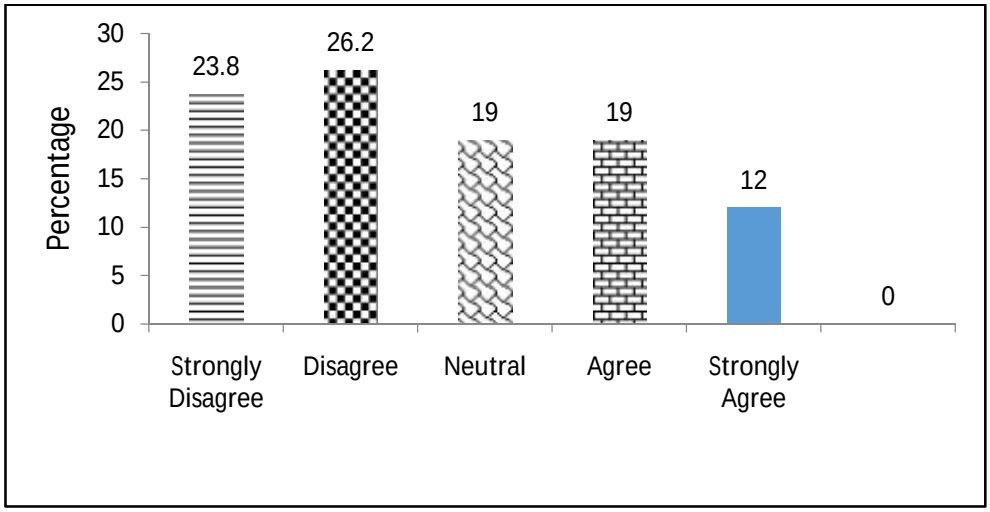

Figure 26: Lack of understanding

Nicolini (2000), have enumerated various organizational challenges affecting target costing among them being lack of understanding among cross-functional team but from the analysis above, the respondents were almost equally divided this as a key challenge with (50%) of the respondents disagreeing and the other half was either being neutral at (19%) or the balance in agreement.

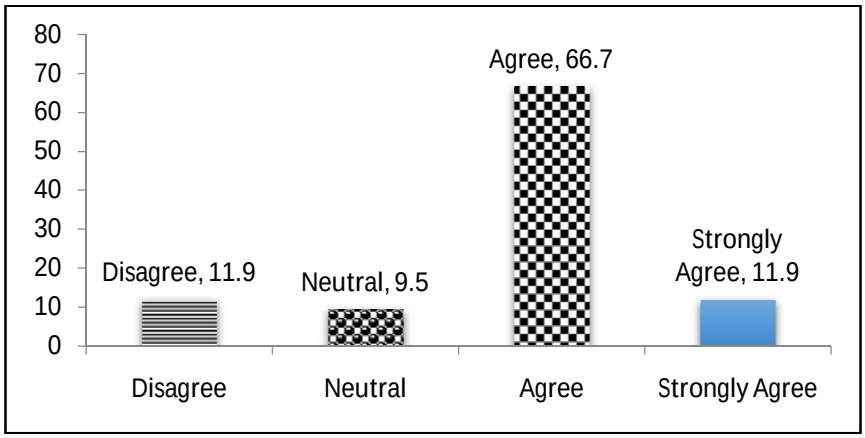

Figure 27: Team and cross-functional barriers

Human beings are naturally complicated and agreeing two diverse opinions is most of the time a hard task. This is reflected from the responses received where a combined (78.6%) of the respondents felt that team and cross function barrier was a key challenge in the implementation of target costing process. These findings agrees with Hergeth (2002), who, while contributing to team and cross-functional barrier as a challenge noted that agreeing the extended enterprise of the firm which includes members of the entire value chain is a very difficult assignment.

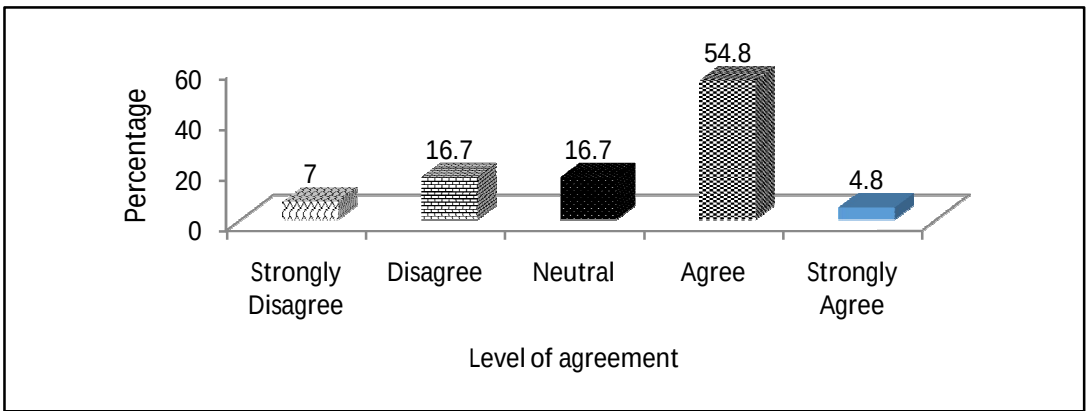

Figure 28: Irrelevance or fear of the effects

This challenge is based on the premise that many managers fails to recognize the importance of target costing and consider the technique as any other costing tool. Irrelevance or fear of effect had (59.6%) of the respondents in agreement that it's a key organizational challenge to target cost implementation. This can also be attributed to the human nature which always resists changes and the status quo is usually preferred to adventures to unknown future with unknown systems.

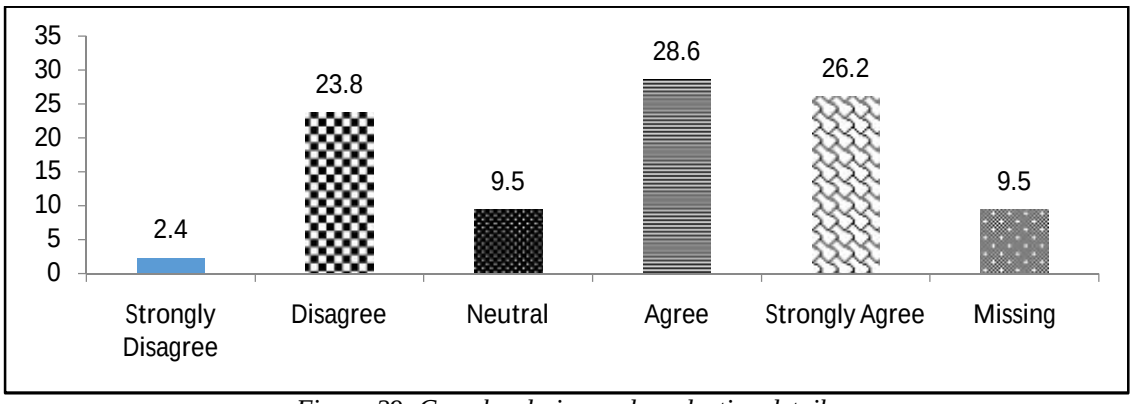

Figure 29: Complex design and production details

In contrast to traditional cost reduction methods which according to Ellram (2000), focus on economies of scale and yield improvement, target costing put more emphasis and time on design stage of a product. In support of this argument, (54.8%) of the respondents were in agreement that target costing technique has a complex design and production details with a (26.3%) in disagreement. This may be due to the fact that the design stage of the process is very elaborate.

4.9. Other Organizational Challenges

The respondents noted rapid fluctuation in market prices, logistical nightmares in port clearance and the private nature of the players in the steel sectoras other challenges in target costing implementation.

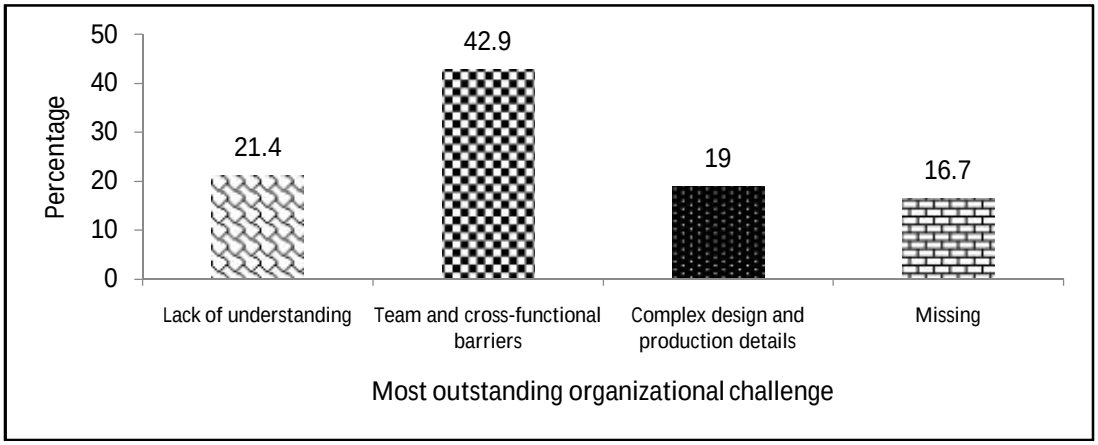

Figure 30: The most outstanding organizational challenge

Teams and cross-functional barriers and as noted by Nicolini (2000),in the literature was picked by (42.9%) of the respondents as the most outstanding key organizational challenge closely followed by the lack of outstanding at (21.4%) and complex design ranked last at (19%). Teams and cross functional barrier is mainly caused by inadequate communication skills between managers which results to the lack of understanding among team members.

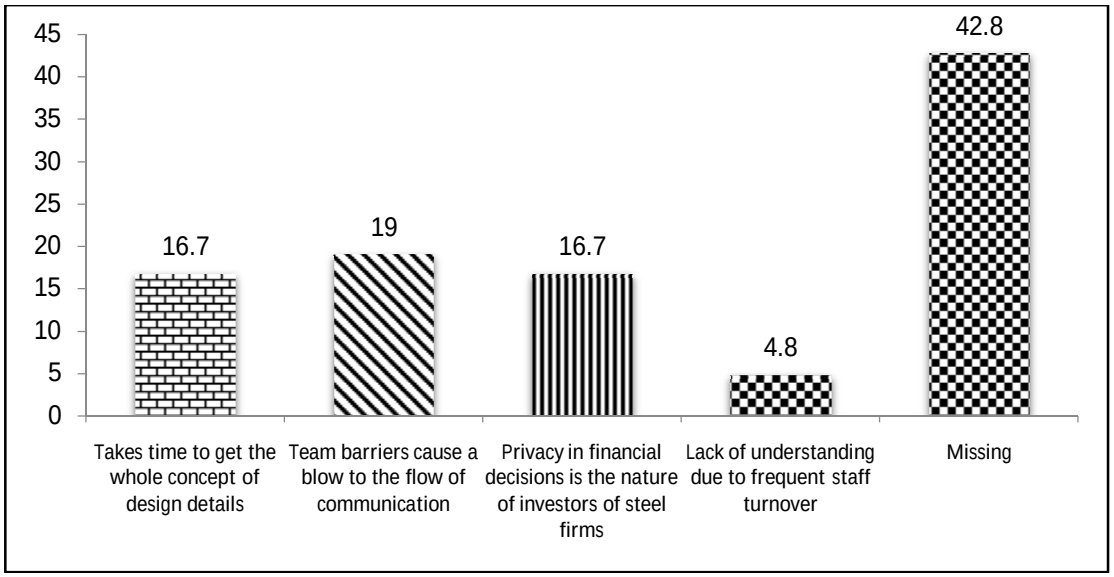

Figure 31: Whyteam and cross functional barrier is key Organizational challenge

The respondents identifies the following reason why team and cross functional challenge the most outstanding key organizational challenge in target cost implementation which includes: Lack of understanding due to frequent staff turnover, concept takes time to get to all design details and privacy in financial decisions as is the nature in the steel sector.

Key departmental challenges:

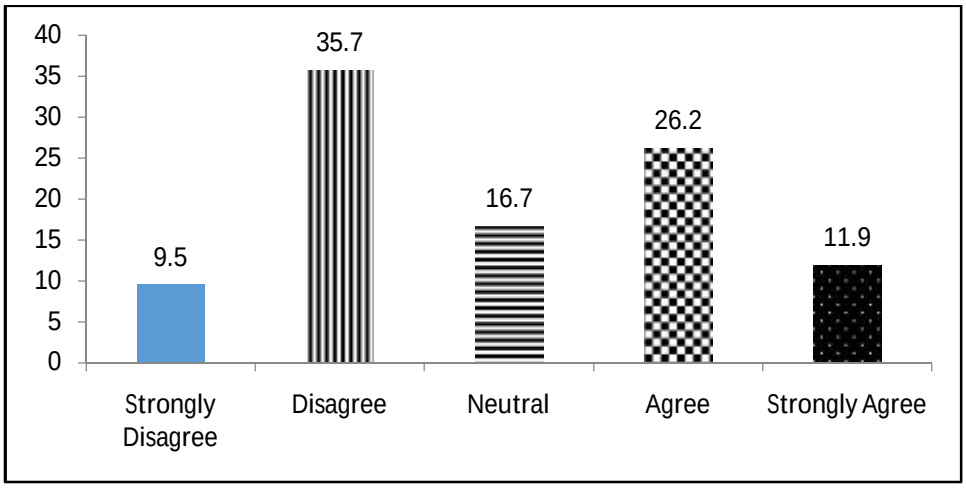

Figure 32: Development process is long

From the analysis of the bar graph above, (38.1%) of the respondents agree that the length development process is a challenge to the implementation of the target costing process. This is due to the fact that a research will have to be conducted in order to ascertain a competitive market price of a product and the whole target costing process is very consultative. However, (45.2%) of the respondents disagrees with this notion thus agreeing to Dekker and Smidt (2003), literature on the length of the development process.

The respondents agreed to large extent that large amount of mandatory cost cutting most often result to finger pointing in various parts of the organization with (71.5%) of the respondents being affirmative on the same. As an open costing system according to Ellram (2000), target costing anticipates costs and proactively manages the same a complete departure to the traditional closed system costing approach.

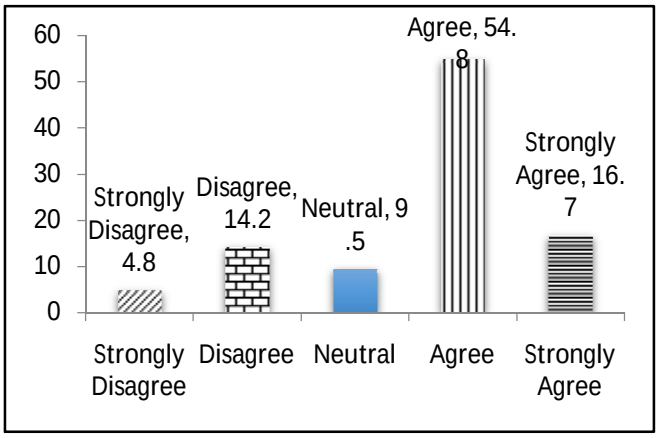

Figure 33: Large amount of mandatory cost cutting

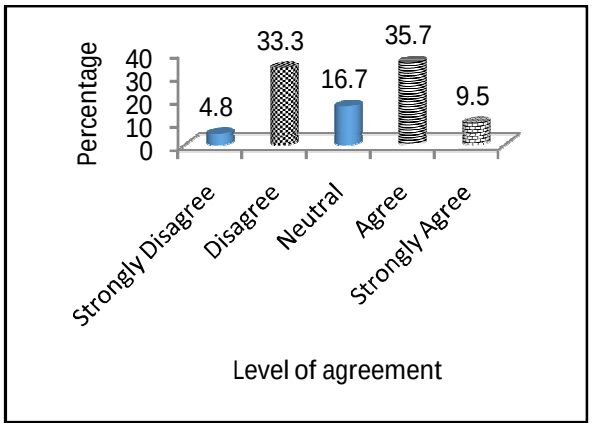

Figure 34: Representatives from a number of departments in design.

The presence of representative from various departments on the design team attracted a (45.2%) agreement from the respondents as a key departmental challenge with (38.1%) in disagreement and (16.7%) being neutral on the same. This in a way agrees with El-Kadi (2008), assertion that shared information leads to cooperative efforts among different functions which collectively leads to knowledge with unique solution. Though this challenge has some similarities with the organizational challenge on cross functional barrier, the two have varying responses with cross functional barrier being voted as a key organizational challenge and this challenge attracting mixed reactions.

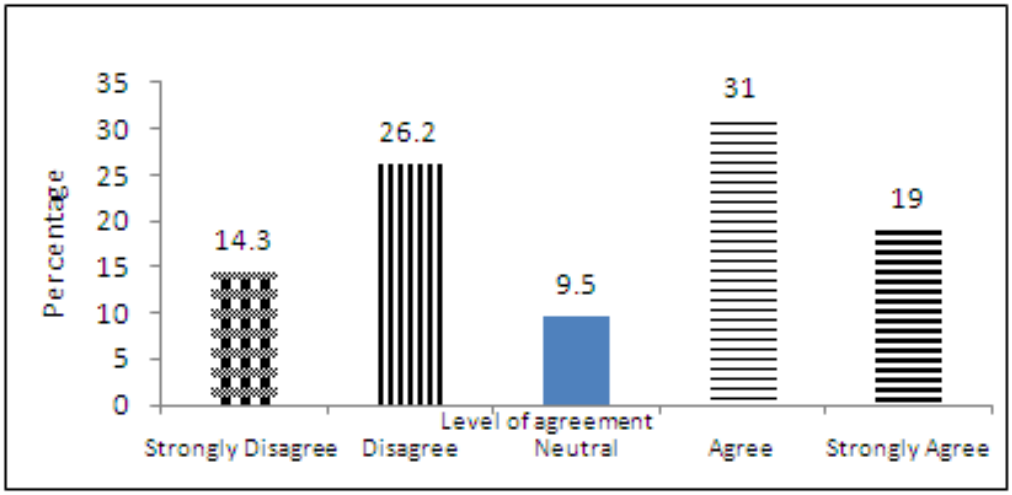

Figure 35: Lack of appropriate skills and training

Half of the respondents (50%) agree that lack of appropriate training and skills necessary to tackle merging costing technique is a key challenge to target costing implementation while (40.5%) disagree with this statement. The findings confirms Sakurai (2001), argument that lack of skills and training hinders the pro-activeness required by firms in developing and adopting vigilant and aggressive costing management techniques. Proper orientations to new and emerging costing technique is necessary a successful implementation.

Frequent staff turnover in a company and lack of representation in other key sections of the company were cited as some of the other department challenges which could affect the successful implementation of target costing technique.

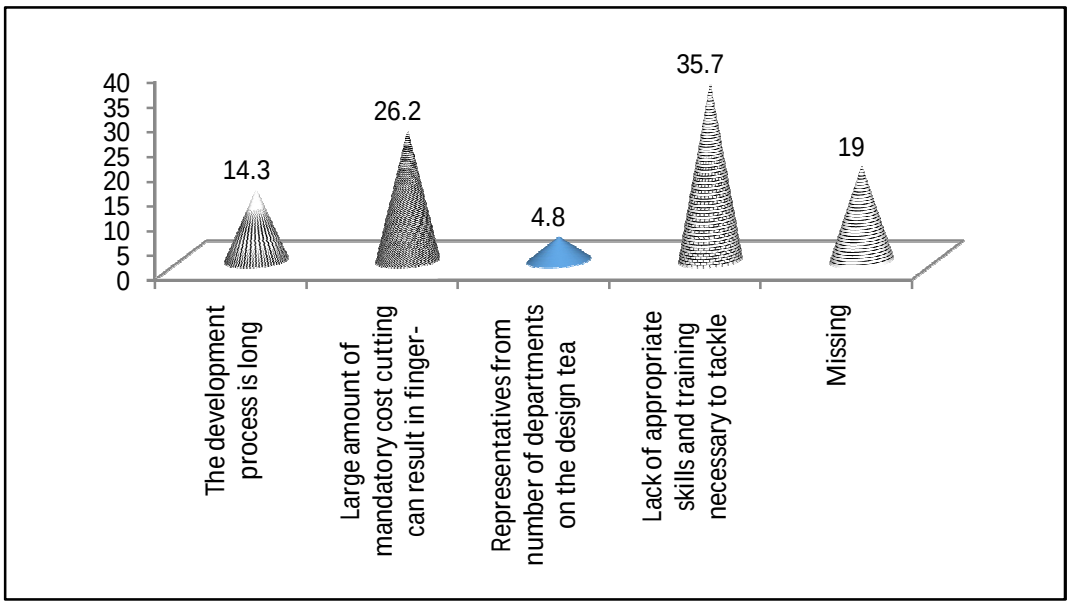

Figure 36: Outstanding departmental key challenges

Lack of appropriate skill and training to tackle emerging costing technique emerged as the most outstanding challenge with (37.5%) of the respondents. This could be attributed to costing systems being introduced to the organization by the management without proper involvement of the affected staff who end up working with the system mechanically without understanding its basic concepts and objectives.

4.10. Overall Drawbacks in Target Costing Implementation

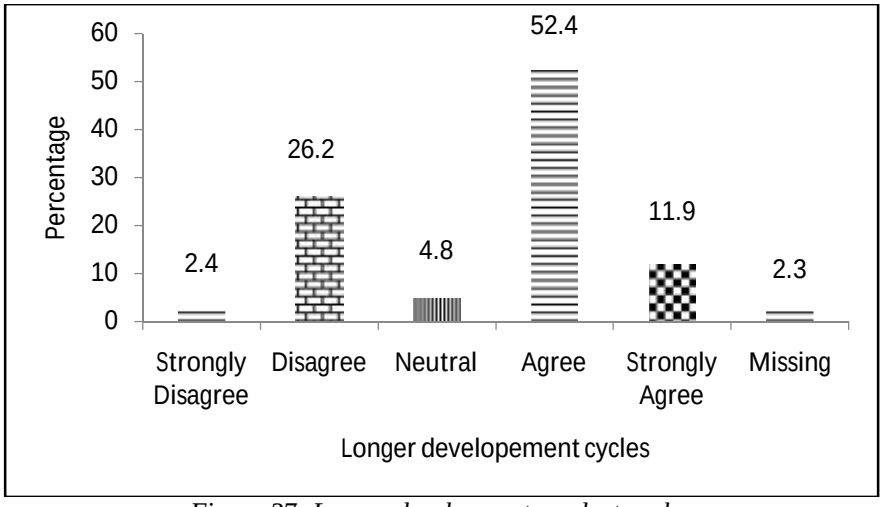

Figure 37: Longer development product cycles

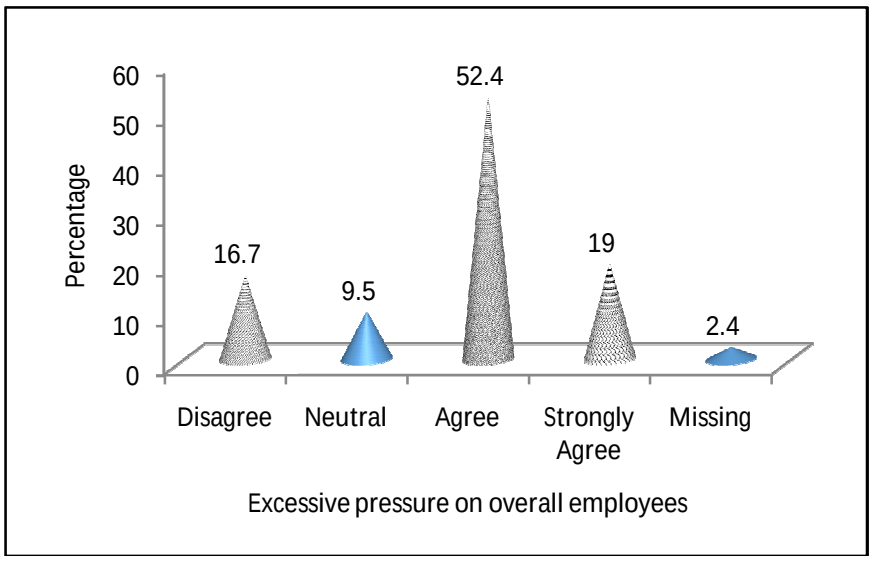

Figure 38: Excessive pressure on overall employees

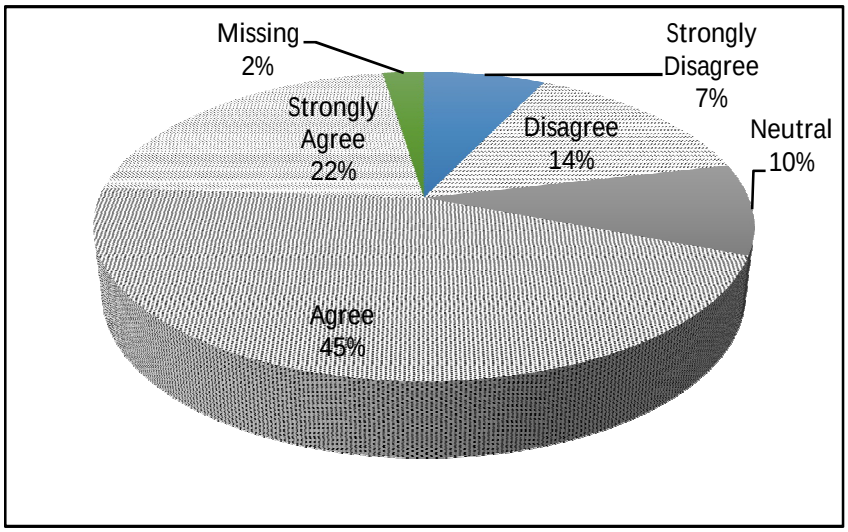

Figure 39: Organizational conflict e.g. between designers and marketers

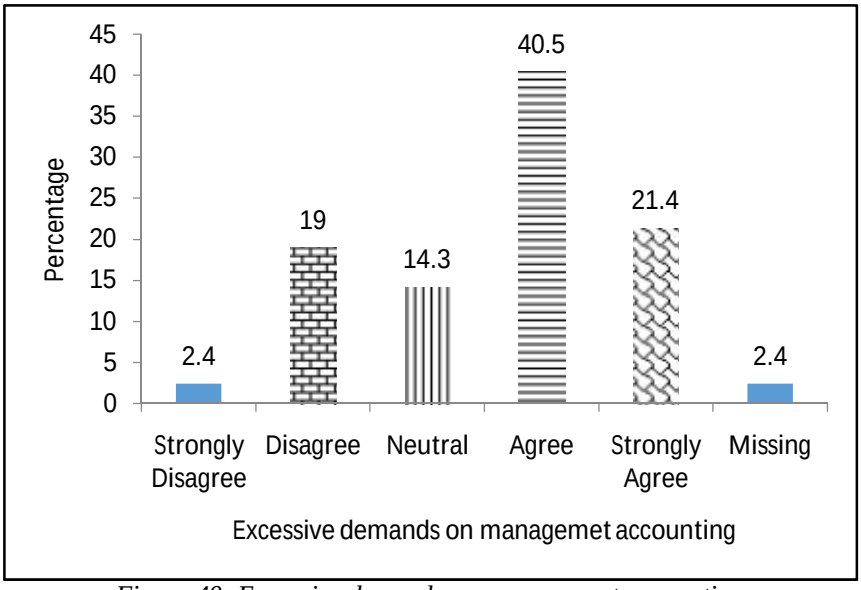

Figure 40: Excessive demands on management accounting

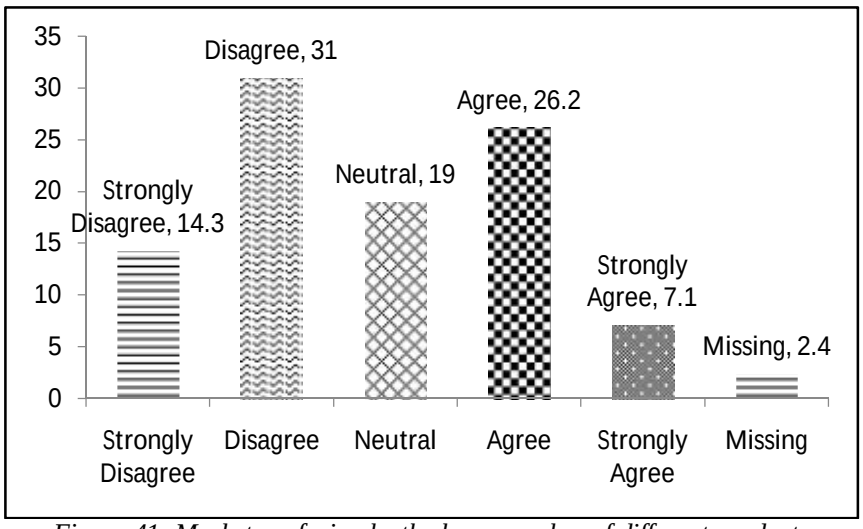

Figure 41: Market confusion by the large number of different products

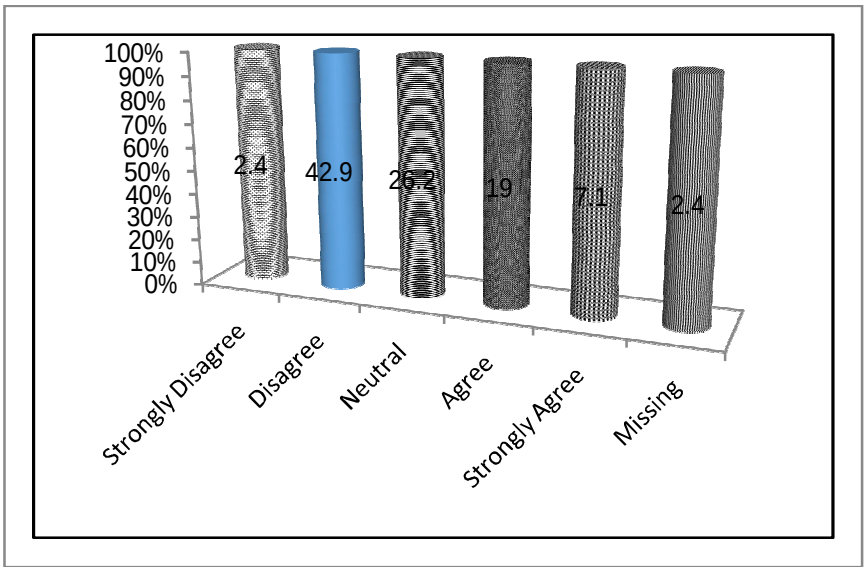

Figure 42: Method is complex

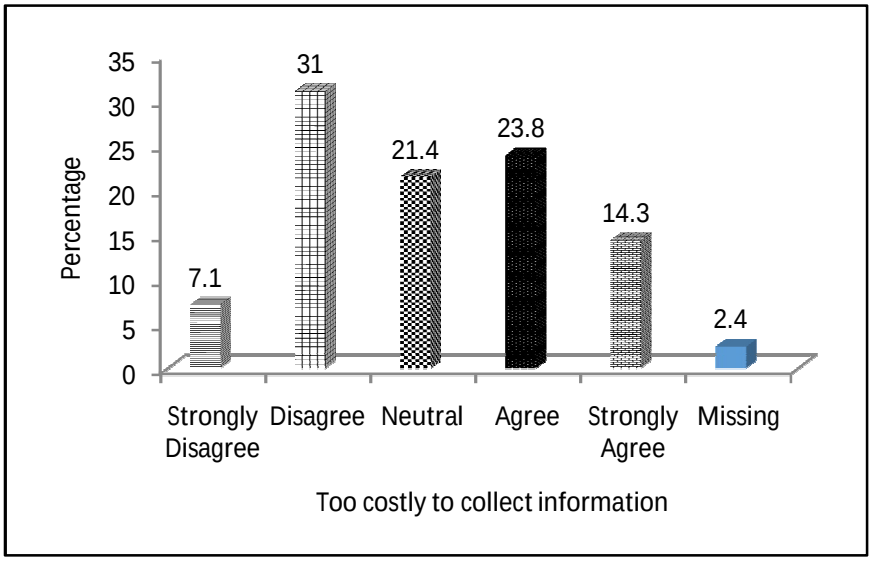

Figure 43: Too costly to collect information (time and money)

As noted by Leedy (2005), employees are under pressure in target costing implementation because unlike the traditional costing method, they have to work with new concepts, tools and techniques in order to achieve parity with the best in the industry in terms of price and quality. This is supported by the researchers finding where on the overall drawbacks for target costing implementation, the respondents rated excessive pressure on the employees as a key drawback with (71.4%) in agreement closely followed by organization conflict between designers and marketer with. Longer development product cycle and excessive demand on the accounting department.(45.3%) of the respondent whoever disagree that market confusion caused by a large number of different products is a drawback and the complexity of the technique draws almost half of the respondents who also felt that it was not a drawback. Surprisingly, on the cost in terms of money and time, (38.1%) in equal percentage agreed and disagreed on this notion and (21.4%) were neutral on the cost.

4.11. Section B: The Effect of Target Costing as a Cost Management Tool

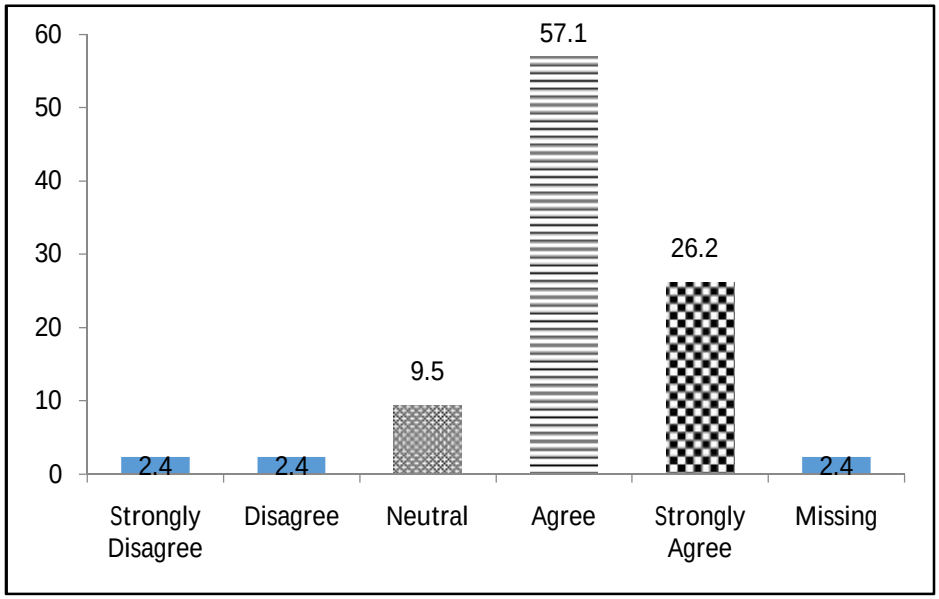

Figure 44: It's easy to understand and apply

Contrary to popular believe, and as noted by Baggaley (2003),majority of the respondents (83.3%) either agrees or strongly agrees with the fact that target costing is easy to understand and apply as compared to other costing techniques.

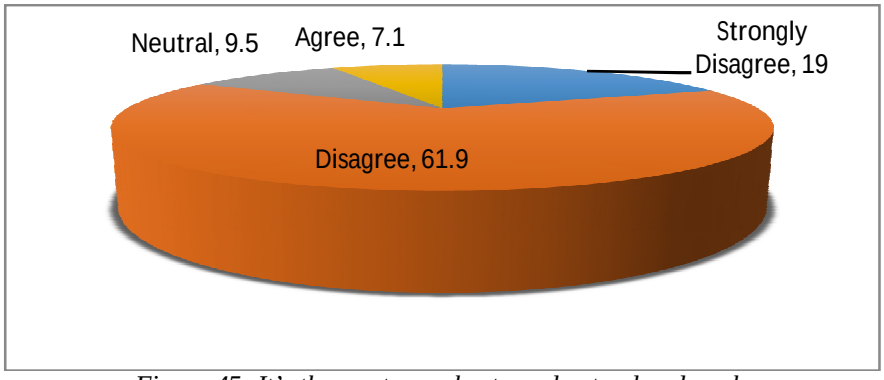

Figure 45: It's the most complex to understand and apply

In affirming the response to the question above, (80.9%) of the respondents reaffirmed that target costing is not the most complex to understand and apply compared to other costing techniques. However, a minority (7.1%) of the respondents agreed with the statement. Which also confirm Baggaley (2003), literature that target costing is easy to understand and apply because it's a disciplined process of achieving full steam coat of a product.

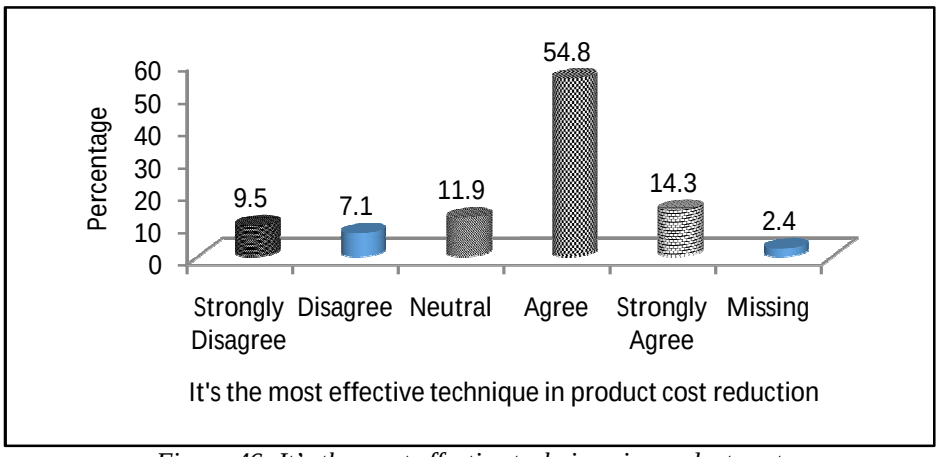

Figure 46: It's the most effective technique in product cost

On its effectiveness in product cost reduction (69.1%) of the respondents agreed to this sentiment. This comes from the fact that target costing trim costs right from the source i.e. the design stage which according to Ismail (2002),literature, this is the most appropriate stage because over 90% of the product cost is determined at this stage.

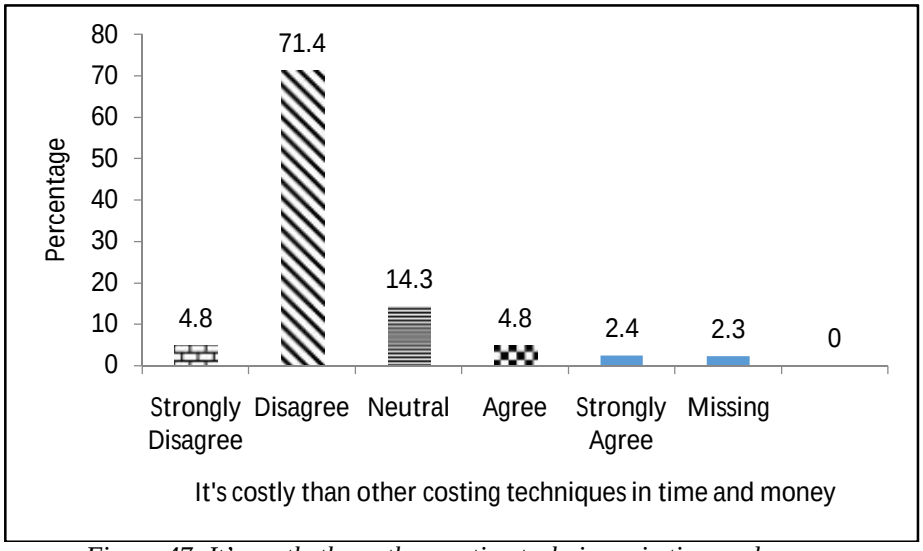

Figure 47: It's costly than other costing techniques in time and money

On the notion that target costing is a costly process in time and money than other costing techniques, Lockamy (2000), noted that target costing reduces the cost of a product by using inexpensive parts without compromising on the quality and functionalities. These findings were supported by (76.2%) of the respondents while (7.2%) were in agreement and (14.3%) of the respondent were neutral on the same.

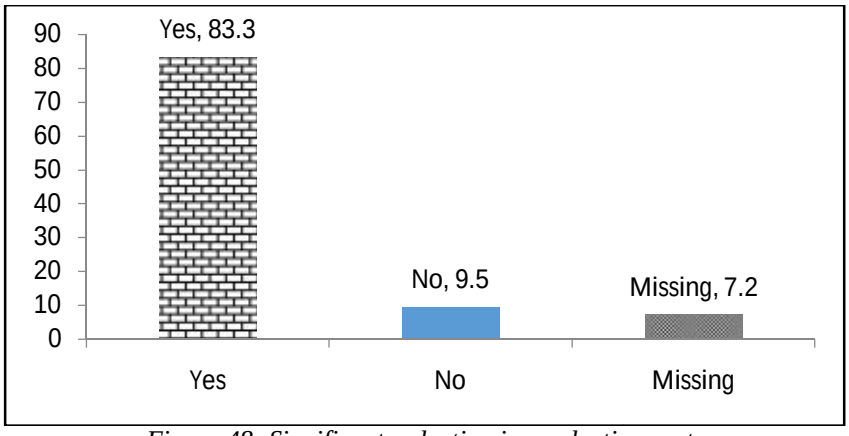

Figure 48: Significant reduction in production costs

When asked the question to confirm whether they have witnessed a significant reduction in product cost in their respective company from the period of target cost adoption, an overwhelming (83%) of the respondents were positive and a minimal (9.5%) of the respondents thought otherwise. These findings confirms Fernando (2005), literature that target costing improves quality, upgrades costing technology and processes required for a company to manage its production costs.

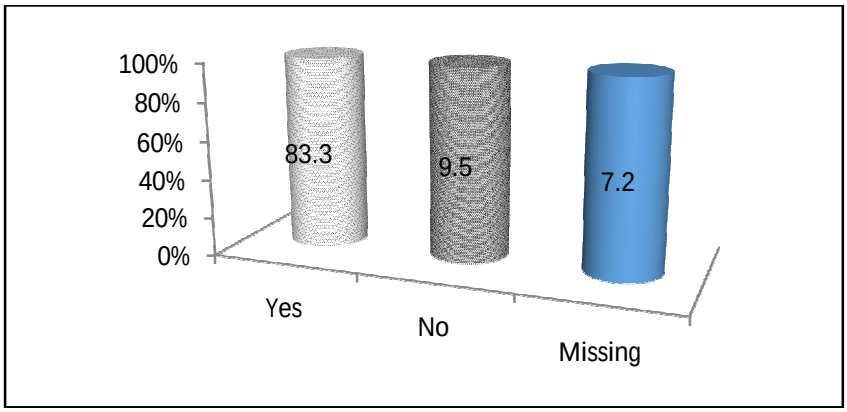

Figure 49: Attributed to use of target costing technique

Also on being asked a confirmation question if they attracted this cost reduction to the use and implemented of target costing technique (83.3%) of the respondents were affirmative.

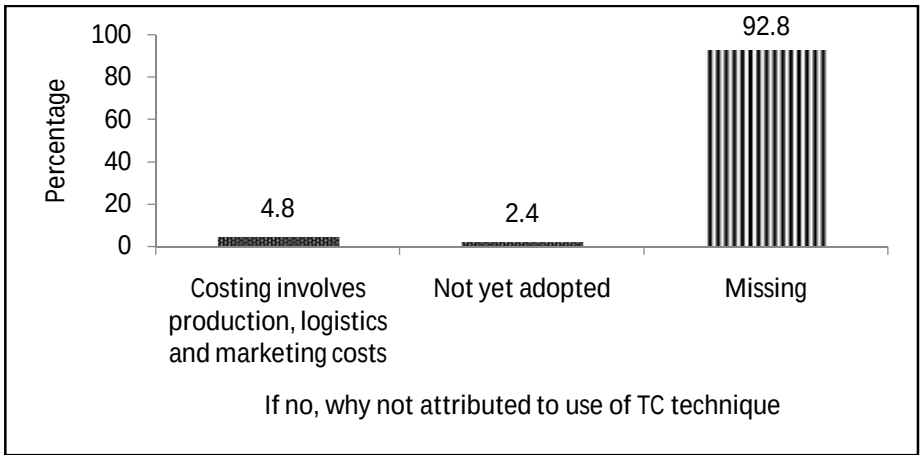

Figure 50: Why is it not attributed to the use of target costing technique

Those that didn't attribute the product cost reduction to target costing stood at (4.8%) of the respondents and the reason given was that costing involves production, logistics and marketing costs.

4.12. Cost Planning Extent of Agreement

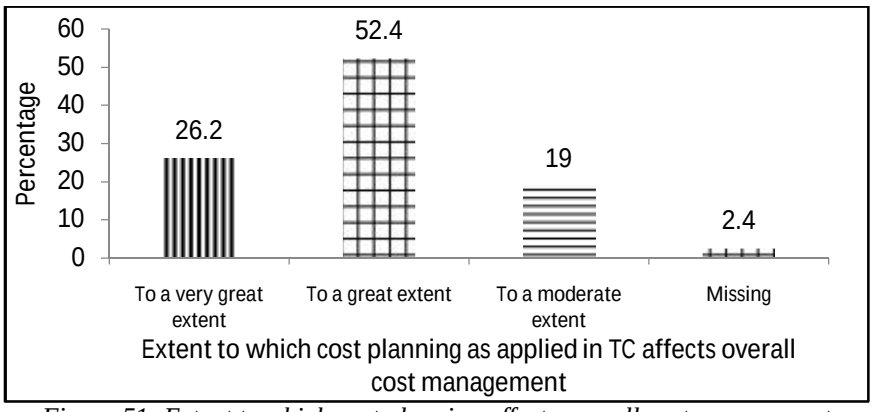

Figure 51: Extent to which cost planning affects overall cost management

As noted by Baggaley (2003), definition, target costing is a disciplined process for determining a full-stream cost at which a proposed product with specified functionalities, performance and quality must be produced. This is an important aspect of cost planning and the bar graph above illustrates the extent of agreement with the statement that cost planning as applied in target costing affects the overall cost management with (78.6%) of the respondents indicating that it does either to very great or great extent.

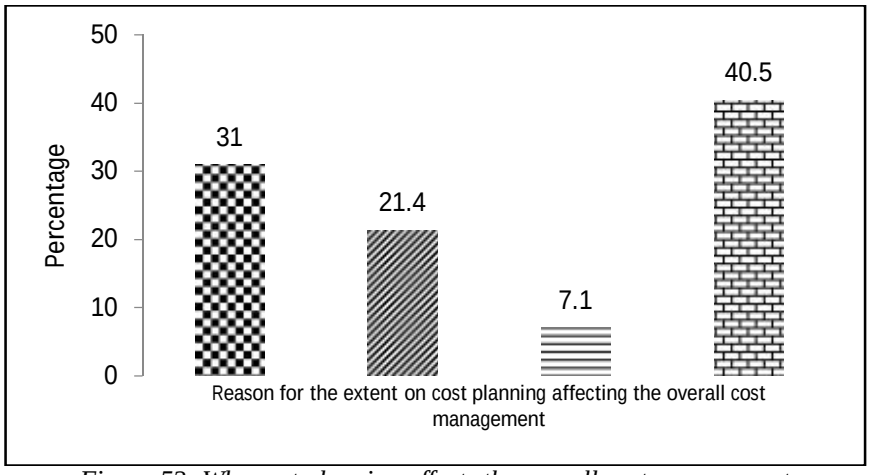

Figure 52: Why cost planning affects the overall cost management

A sizeable number of (31%) of the respondents picked out unnecessary production and (21.4%) the actual cost guides as the reason why cost planning is affected to a very great, and great extent by target costing technique.

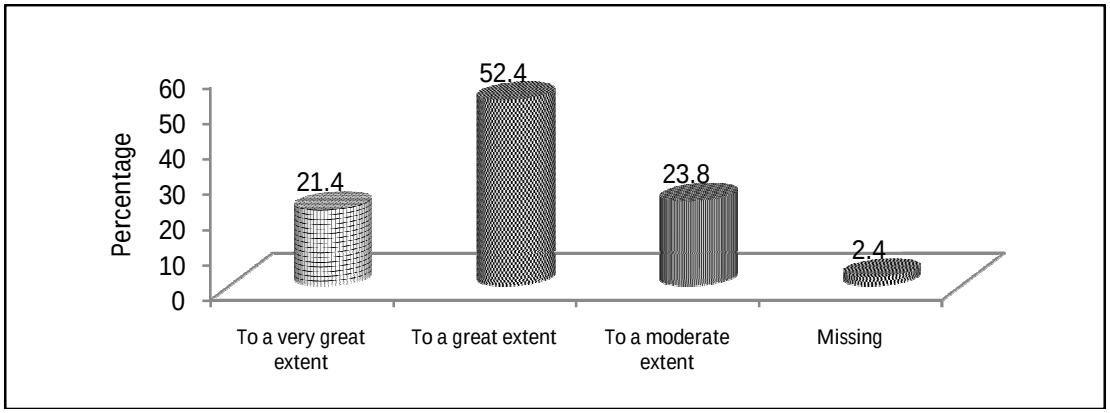

Figure 53: Cost control as applied in Target costing technique affects overall cost management

Sakurai (2001), notes that target costing is not just a cost reduction technique or control framework, but rather a part of a comprehensive profit management strategy. On cost control (73.8%) of the respondents were in agreement either in very or great extent that cost controls as applied in target costing technique affects the overall cost management. A further (23.8%) of the respondents was in moderate agreement. From the analysis of these two question on cost planning and cost controls, it's evident that they positively affect the overall cost management of a firm.

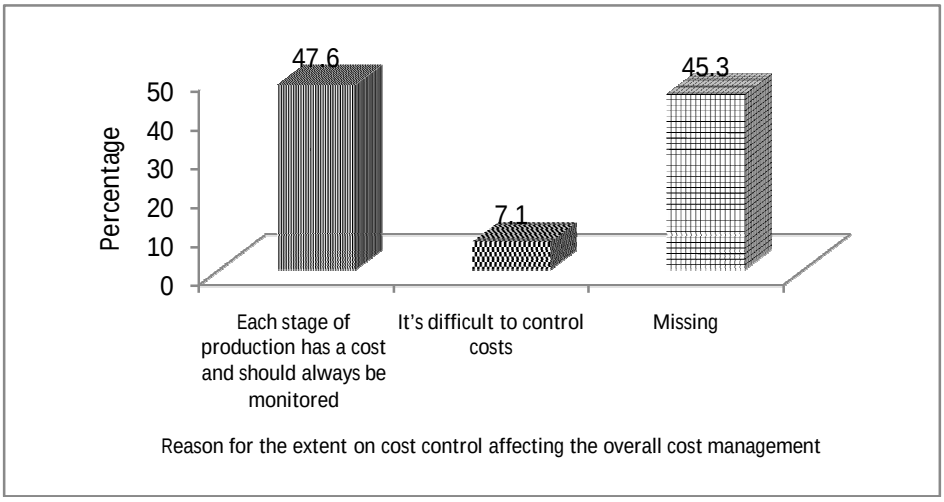

Figure 54: Explanation as to why the stated extent

Asked why the stated extent of agreement to both cost planning and control (47.6%) of the respondent indicated that each stage of production has a cost and should be monitored always and whereas (7.1%) of the respondents indicated that it's difficult to control costs.

4.13. Key Cost Management Merits

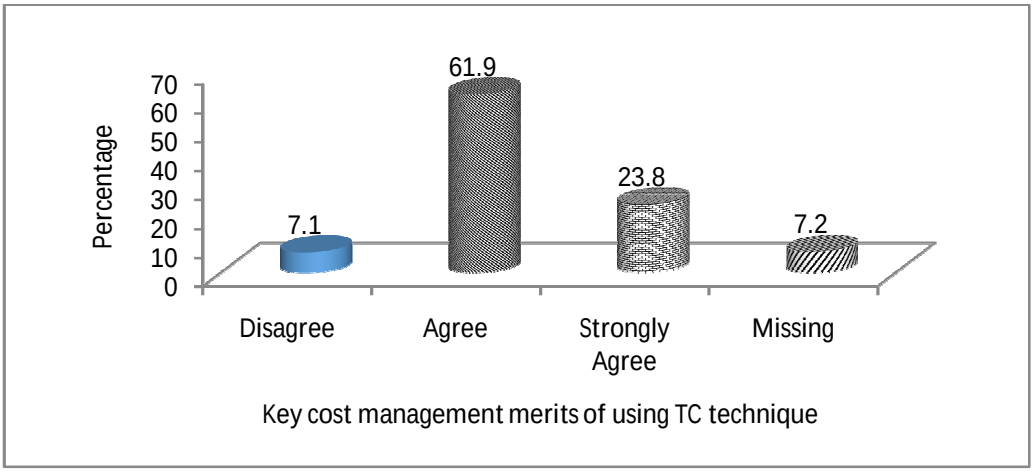

Figure 55: It provides the firm with a rapid response mechanism

As noted by Sakurai (2001), target costing originated in Japan in the 1960's a response to difficult market conditions. In this regard, a combined (85.7%) of the respondents either agree or strongly agree that target costing provides their firm with a rapid response mechanism to a product cost without compromising on the product quality. While a minimal (7.1%) disagrees with the statement.

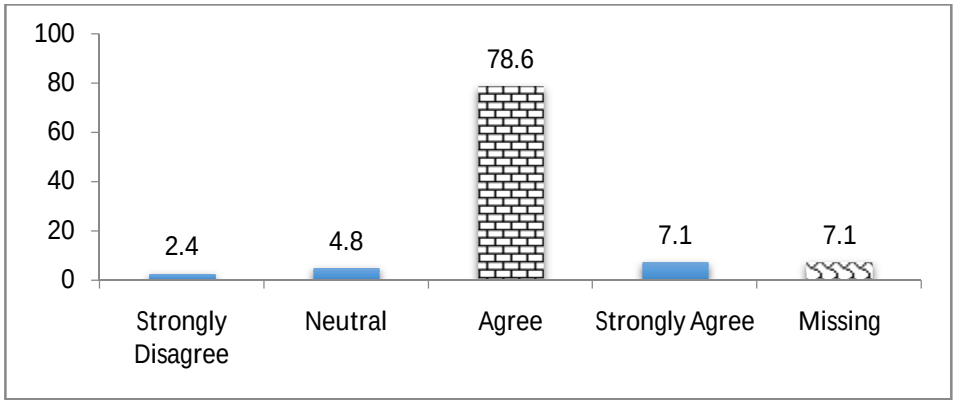

Figure 56: Provide the firm with an all-inclusive cost management

In respect to providing firms with an all-inclusive cost management approach, (78.6%) and (7.1%) agrees and strongly agree with this statement because of involvement of multiple departments. These findings affirms Chen (2002), literature that target costing provides firms with a solution to new products through cost minimizations through the optimal use of all resources along the entire supply value chain.

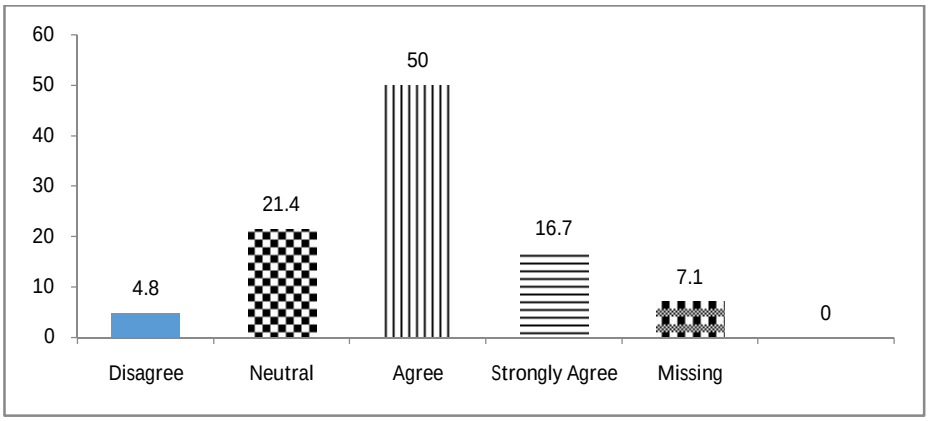

Figure 57: Helps the firm to consider all cost elements

Target costing helps firms to consider all cost elements related to producing a new product. This is according to (50%) and (16.7%) of the respondents who agree and strongly agreed with this statement. (21.4%) and (4.8%) of the respondents were neutral and disagreed respectively. These findings confirms Sakurai (2001), literature that the scope of target costing involves the entire life cycle of the product unlike the traditional costing methods whose scope is limited to the immediate product costs.

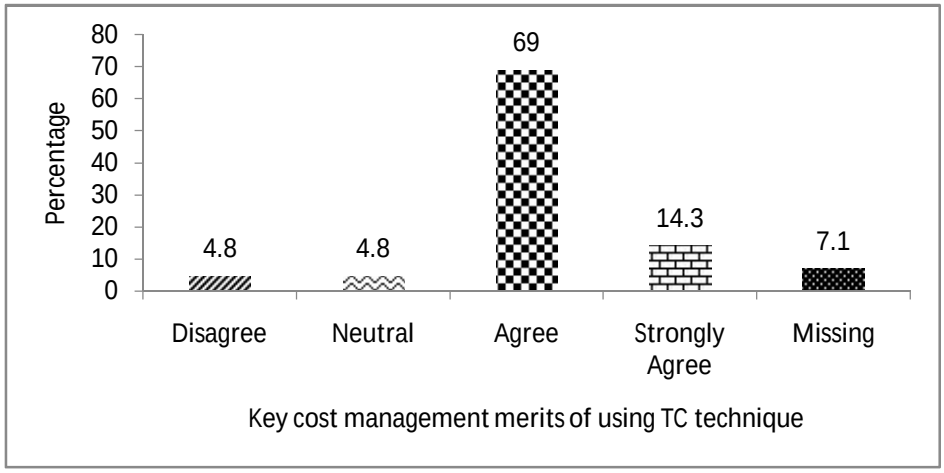

Figure 58: Helps the firm to adopt the cost of developing a new product

Ellram (2000), notes that many companies have been forced to reduce their costs in order to survive the intense competition and pressure from customers to reduce prices, but target costing helps firms to adapt to costs of developing a new product to achieve reasonable profits. These above statement is supported by (69%) and (14.3%) of the respondents who either agreed or strongly agreed.

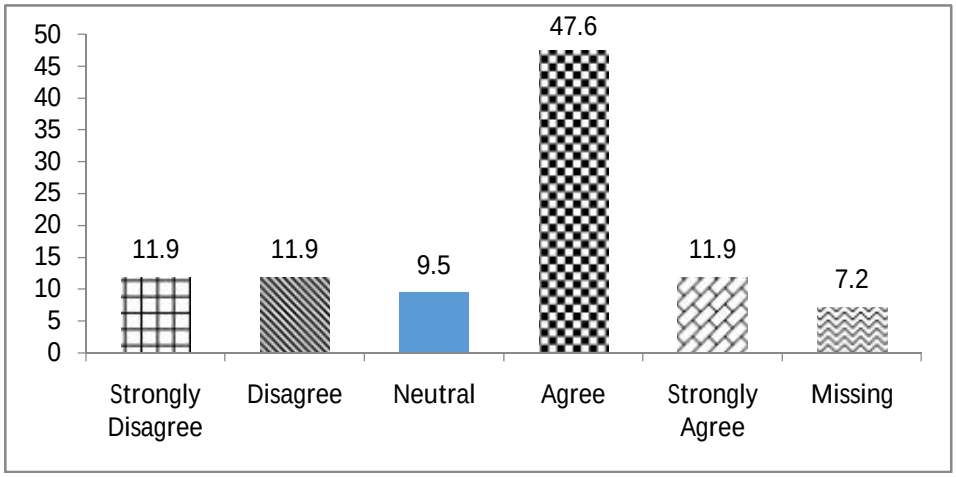

Figure 59: Helps the firm to establish the cost of disposal

In normal business transaction, cost of disposal in usually not factored in production. But over (60%) of the respondents agreed that target costing help firms to establish disposal cost thus costing a product for the whole life cycle. Sakurai (2001), literature confirms these findings because target costing involves the entire life cycle of the product unlike the traditional costing methods whose scope is limited to the immediate product costs.

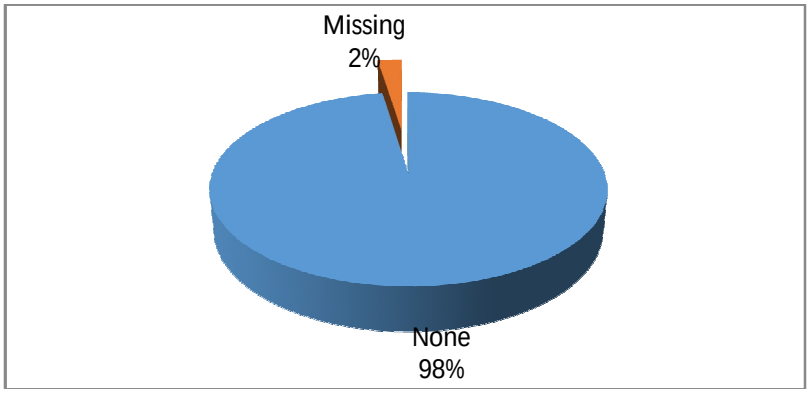

Figure 60: Other cost management merits

Almost all the respondent (97.6%) indicated that they are not aware of any other merits of target costing as a cost management tool apart from the five listed above.

4.14. Question 2.1 No Data to this Question as Affirmed in Question 2.0

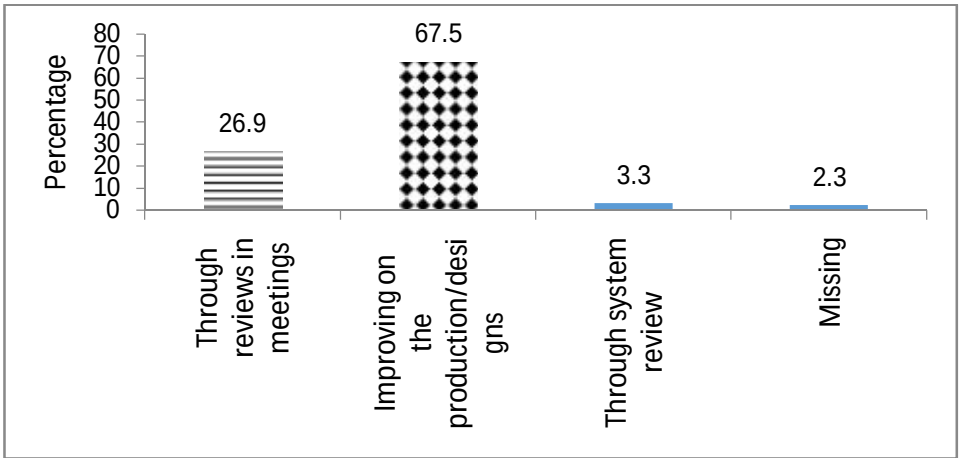

Figure 61: If target costs are not achieved?

Lockamy (2000), notes that over 90% of the product cost is determined at the design stage and nothing much can be done once the product goes into production. The respondents were asked what ought to be done incase target cost is not achieved and (67.5%) of the respondents indicated that the situation should be addressed by improving the product design while (26.9%) said that the situation can be remedied through review meetings.

	Frequency	Percent
No	30	71.4
Yes	9	21.4
No response	3	7.1
Total	42	100.0

Table 6: Company delivers products to the market if target costs cannot be achieved

According to Leedy (2005), target costing is a costing technique that is designed to help companies determine the cost of a product in relation to the revenue it generates and thus there is no need to deliver a product to the market if it will make losses to the company. From the analysis of the table above, (71.4%) of the respondents confirmed this statement and indicated that they will not deliver the product to the market even if the target cost is not achieved.

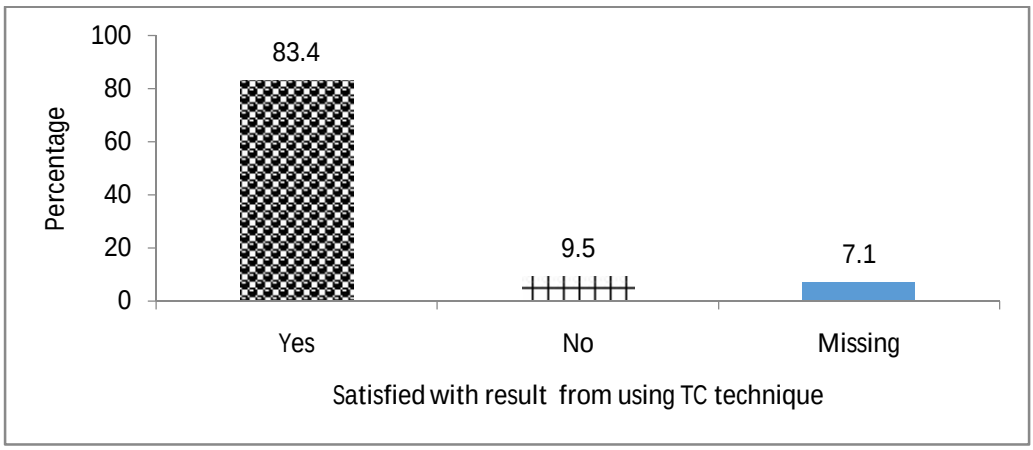

Figure 62: Satisfied with use of Target Costing

Lockamy (2000), highlighted successful cases in the literature review of successful implementation of target costing which includes the America motor vehicle manufacturer, Chrysler Corporation, where the company shares went up and profits increase significantly. This is evident from the above bar graph, where majority of the respondents (83.3%) are satisfied with the result achieved so far in their respective companies in the application of target costing as a cost management tool.

	Frequency	Percent
Because in business you keep growing every day	3	7.1
No response	39	92.9
Total	42	100.0

Table 7: Not satisfied with Target Costing as a cost management tool

Asked the question why not satisfied with Target Costing as a cost management tool, (7.1%) of the respondents cited dynamism in busies on a daily basis as the reason of their dissatisfaction.

4.15. Section C: The Contribution of Target Costing in Profit Growth

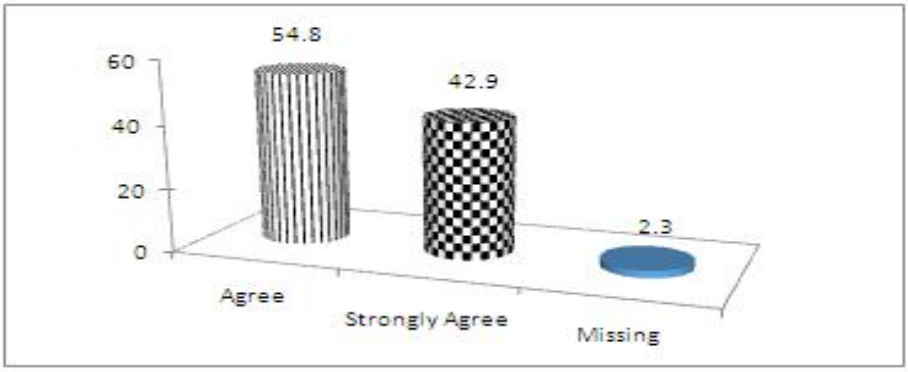

Figure 63: Competitive selling price

From the responses received on asking if competitive selling price is a profit driver (54.8%) of the respondents agreed with the statement in respect to their respect organization while (42.9%) of the respondents strongly agree, thus giving a combined (97.7%) of those in agreement an indication a very solid support to this argument. These findings confirm Ellram (2000), literature that the situation in the market place controls price, a very key element in any product while the financial requirements of a firm and its sector determines the profits.

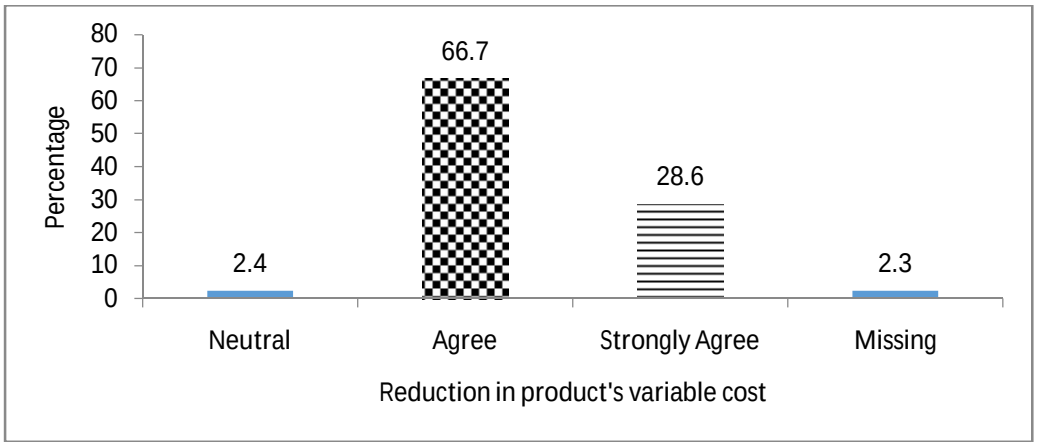

Figure 64: Reduction in a product's variable cost

As noted by Lockamy (2000), in target costing, cost is treated as a dependent variable unlike in the traditional methods where it's an independent variable, which means that the firm has to contain all allowable costs in order to produce a profitable product. Agreeing with this statement, a combined (95.3%) of the respondents either strongly agree or agree that reduction in a products variable cost is a profit driver in their organization while a minimal (2.4%) were neutral in this respect.

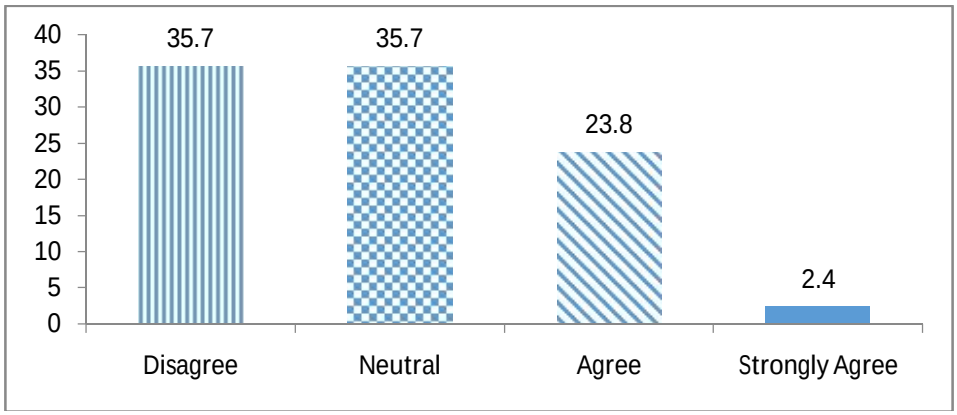

Figure 65: Reduction in a products unit fixed cost

Unit fixed costs are inversely proportional to sales volumes. Since fixed costs or overheads are business related expenses that are not dependent on the level of goods produced by the business unlike variable costs, which are volume-related, the respondents were not

convinced that reduction of a product fixed cost is a driver to a company's profits with (35.7%) disagreeing and an equal percentage being neutral on the same.

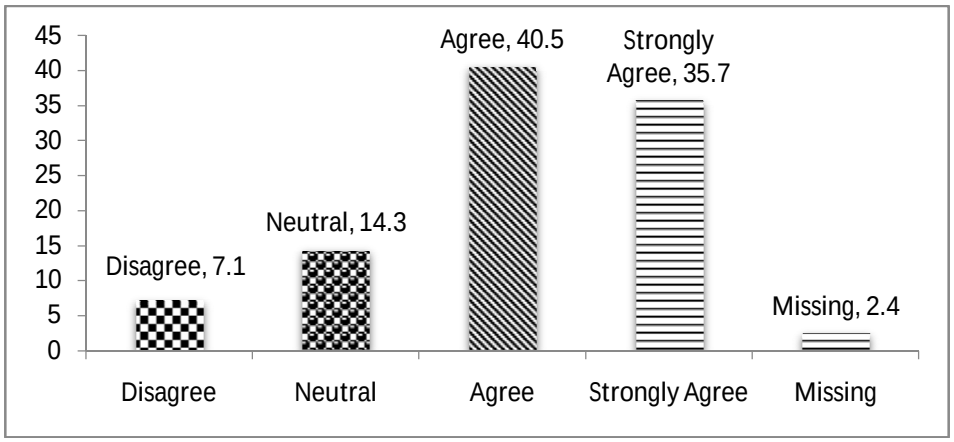

Figure 66: Increased sales volumes as a profit driver

As explained by Cooper (1999), target costing commences with a market price and a planned profit margin for a product to establish the allowable cost for the product. This has the effect of increasing sales volumes tremendously. Increasing sales volumes had a combined (76.2%) of those that agreed and strongly agree with the statement. The neutral respondents were (14.3%).

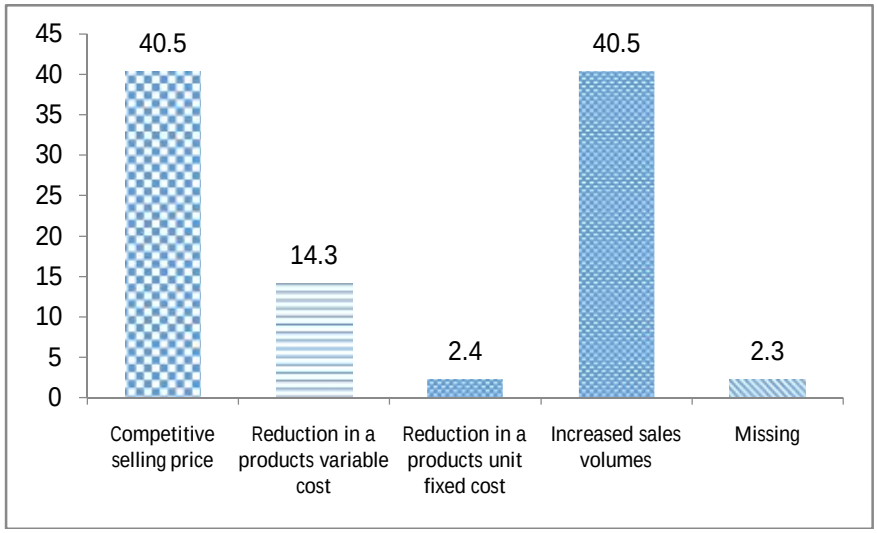

Figure 67: Perceived single most important profit driver

Profits depend on growing sales and managing costs, which includes both variable and fixed costs. Also price variations affect consumer demand and subsequently sales volume and therefore, a competitive price positively affects sales volumes. Tanaka (1999), notes that targets costing, particularly a competitive price gives a firm advantage in its product profitability. According to the respondents, increase in sales volumes and competitive selling prices each at (40.5%) were singled out as the key profit drivers.

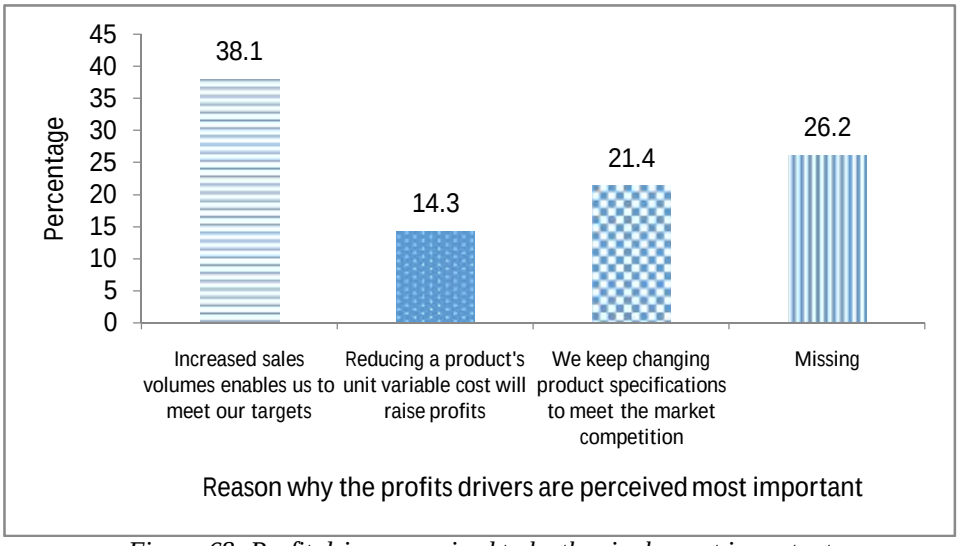

Figure 68: Profit driver perceived to be the single most important

As to why the above two were singled out as the main profit drivers, increased sales volumes enabled the company meet its sales target (38.1%) and thus building customer confidence and loyalty.

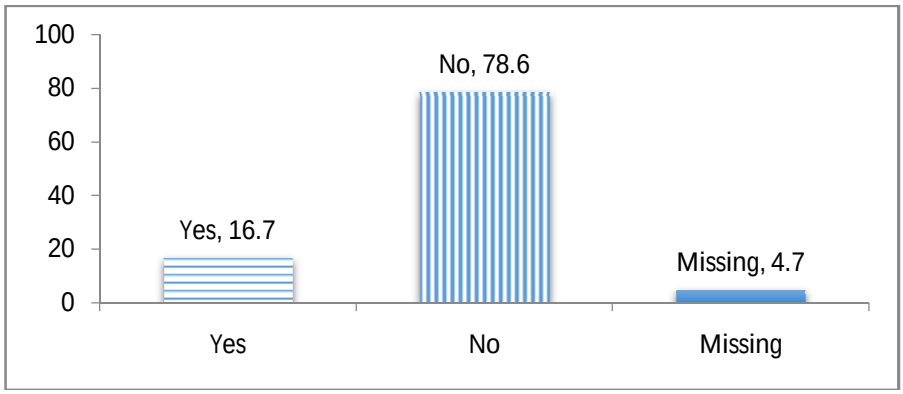

Figure 69: Are there other profit drivers used in your firm

A large percentage (78.6%) of the respondents indicated that they don't know of any other profit driver apart from the four listed.

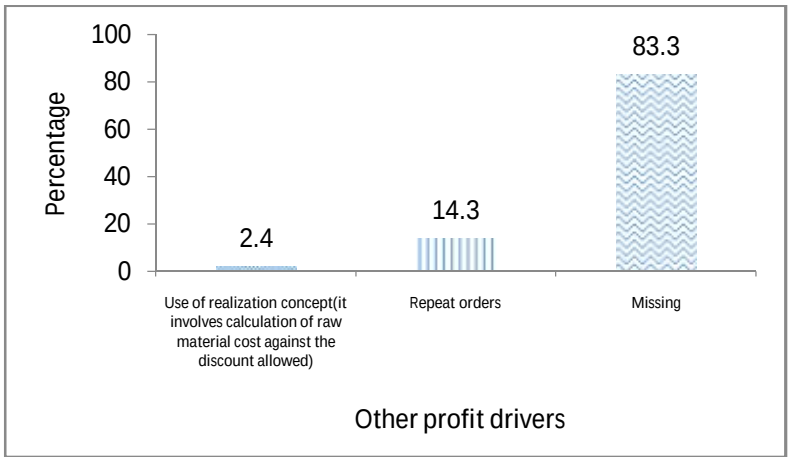

Figure 70: Other profit drivers

Of those who indicated that they are aware of other profit drivers in their organization which were not listed (14.3%) indicated that repeat orders could be added in the lost of profit drivers in their company, which ideally is a duplication of increased sales volumes.

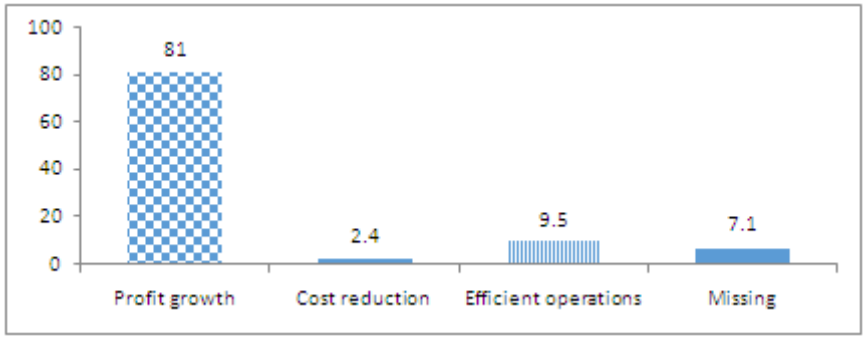

Figure 71: Main goal your company aimed to achieve through the use of target costing

El-Kadi (2008), noted that target costing is a costing model that creates new knowledge for cost reduction and the shared information leads to unique solutions and increased profitability of a firm. In this respect, profit growth at (81%) was picked up by the respondents as the main goal which their company intended to achieve through the use of target costing technique following at a distance by efficient operations at (9.5%).

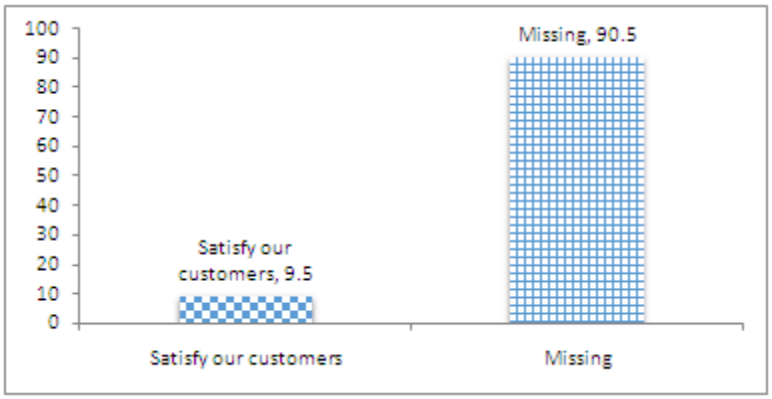

Figure 72: Other goal aimed to achieve through use of target costing

The respondents (9.5%) noted that customer satisfactions another goal that target costing aims to achieve.

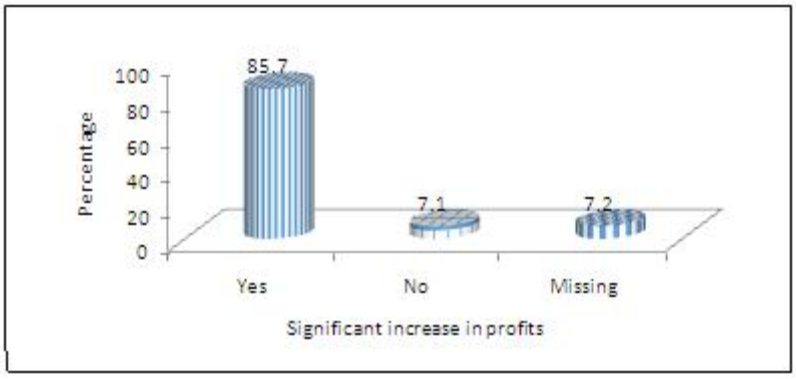

Figure 73: Significant increase in profits from using target costing

Increased sales volumes and managed costs mean that the firm is making profits. In this regard, a large percentage of the respondents (85.7%) noted a substantial increase in profits figures in their company on adopting target costing technique. This confirms Hergeth (2002), literature that target costing improves profitability through precise targeting of the correct process at which a company can filed a profitable product in the marketplace and sell in a robust manner.

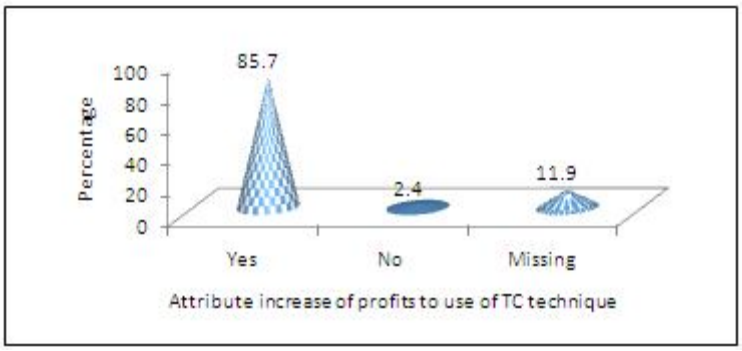

Figure 74: Attribute the increase in profits to the use of Target costing

Since target costing according to Hergeth (2002), places such a detailed continuing emphasis on the product cost throughout the life cycle, and the management team is completely aware of all costing issues, a huge percentage of (85.7%) of the respondents indicated that they can attribute the profit growth in their company to the use and application of target costing technique.

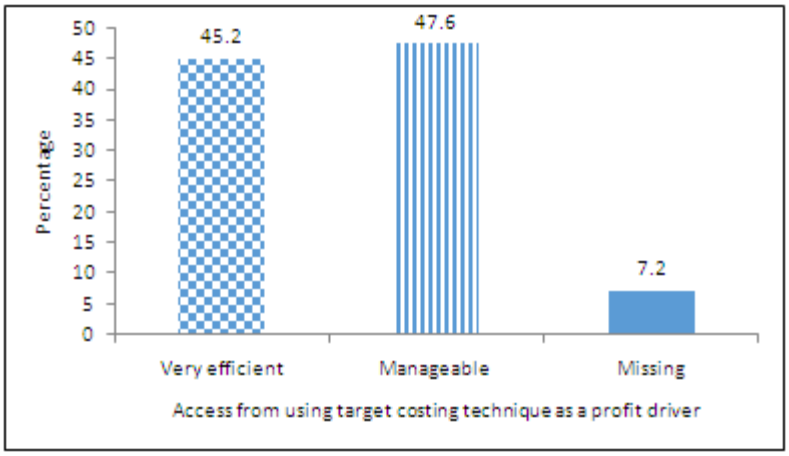

Figure 75: Assessment from using Target costing technique as a profit driver

From the above figure, the overall verdict of the respondents regarding the technique as a profit driver is that (45.2%) thinks that target costing technique is very efficient whereas an equally high percentage of (47.6%) indicated that the technique is manageable.

4.16. Summary

The analysis of the data in this chapter showed that most of the respondents were already using or have been using Target costing technique in their operations. They were unanimous on the benefits that come with using Target costing as a profit driver and cost management tool. Chapter five will follow and will provide discussion, recommendation sand a conclusion. This chapter will also link all the concepts discussed in this research and will provide an answer to the statement of the problem and the research objectives as outlined in chapter one.

5. Discussions, Conclusions and Recommendations

5.1. Introduction

As stated in Chapter one, and expounded by El-Kadi(2008),the goals of a firm are to remain locally and internationally competitive in terms of price and quality which are of utmost importance for their survival. Many firms face the difficulty of having to match the lower prices of global competitors and still offer the highest quality products customers demand.

As noted by Ellram (2000), reducing a firm's production costs may be the only source of increased earnings where selling price and profit margin are fixed by competitive pressures and management policies. Many companies have been forced to reduce their costs in order to survive the intense competition and pressure from customers to reduce prices.

Against the knowledge of the importance of target costing technique as a strategic cost management tool, the main purpose of this research was to establish whether target costing technique is being used as a cost management tool and a profit driver for steel firms in Nairobi, Kenya. In support of this, the research study focused on achieving the following objectives:

1. To establish organizational challenges in the implementation of target costing technique for steel firms operating in Nairobi, Kenya.
2. To assess the effect of Target costing technique as a cost management tool for steel firms operating in Nairobi, Kenya.

3. To assess the contribution of Target costing technique in profit growth for steel firms operating in Nairobi, Kenya.

The objectives of the study were achieved by performing an in-depth study on target costing as presented in literature. The empirical survey entailed forty eight self-administered questionnaires administered to a target population of twelve steel firms operating in Nairobi and as listed by the Association of Kenya Manufacturers 2013 official directory. The data obtained was analyzed using SPSS and the significant empirical findings that emerged from this study are summarized below.

5.2. Discussions of Findings

5.2.1. Objective One

The goal of the first objective was to establish organizational challenges in the implementation of target costing technique. In this regard, respondent were required to answer questions in Section A of the questionnaire which ranged from the number of years they have applied the technique, their understanding of the universal target costing process and principles, identifying the departments that drives the implementation, organizational and departmental challenges, and the overall drawback of the technique.

An analysis of the responses indicated that(73.8%) of the respondents indicated that they use Target costing technique as a cost management tool and all Target costing adopters indicated that they have implemented it for more than 5 years, which is indication of a well-established and successful implementation system.

Ellram(2002), noted that the core competences in successful targets costing implementation is communication, involvement and deep commitment across the board. Achieving the necessary degree of agreement and compromise between any of the functions of a firm is a difficult challenge which requires a lot of communication. According to the research findings, Team and Cross functional barriers emerged as a top organization challenges to target costing implementation especially with mandatory cost cutting resulting to finger pointing in various department. These findings further support the statement by Fernando(2005), who noted that although resources are provided and goals set, team work synergy has to be created and nurtured among all departments in the department for successful implementation of target costing. As reported in the research findings and noted by KAM (2013), frequent fluctuations in market prices caused by unplanned and unpredictable legislation by government introducing hefty levies like port charges for raw materials imports and the private nature of steel industry in term of information accessibility were also cited as other notable challenges. Lack of appropriate skills and training necessary to tackle emerging costing techniques were rated as the overall departmental challenges in Target costing implementation. Welfle (2000),in support of skills and training findings further notes that training for relevant skills are core competences especially useful in coordinating diverse design and production activities which integrates multiple streams of technologies.

5.2.2. Objective Two

The second objective of the research study sort to assess the effect of Target costing technique as a cost management tool especially in cost planning and control. The respondents confirmed that significant reduction in product cost has been witnessed in their respective companies which they attributed to the use and application of Target costing technique. These findings support Albright (2006), and Tanaka (1993), who noted that target costing is concerned with shaping the cost foundation of a product by being proactive and has not only impacted on how to cost products but also influenced the way available costing information is used in the approach to product and their profitability. As a cost planning tool the respondents agreed to a very great that Target costing technique identifies cost associated with a product with a aid of making very informed choices on options available to deliver the best value to the market. These finding collates with Lockamy (2000), who notes that the awareness of the cost structure and cost behavior together with information about the market enable firms to deal more effectively with competing pressures than merely lowering the product price. Equally, as a cost control tool the respondents were in agreement that Target costing technique to a great extent protects the cost plan by estimating the cost of each element of a product against the set cost targets. Contributing on cost planning and control, Hergeth (2002), noted that developing a cooperative relationship with the organizations'members of the extended enterprise i.e. suppliers, dealers etc. maximizes cost reduction throughout value chain. Providing firms with a rapid response mechanism to a product cost without compromising on the quality and having an all-inclusive cost management approach because of involvement of multiple departments was identified by the respondents a way of effective cost management tool.

5.2.3. Objective Three

The third and final objective of this research study was toassess the contribution of Target costing technique has in profit growth of a firm. Increase in sales volume and competitive selling prices were singled out as the key drivers in organizations profits. These findings confirms Hergeth (2002),assertion that target costing improves a firms profitability through precise targeting of the correct prices which the organization feels it can field a profitable product in the market place. Target costing results not only in better cost control but also in better price control. Since competitive prices is all about the satisfaction of the customer, Chen (2002), notes that since target costing is market driven, customer input are of utmost importance in terms of quality and functionality requirement. This in turn creates loyalty to the product and thus increases sales volumes. Respondents across the steel industry responded affirmatively with a majority of them noticing a significant increase in profit levels of their firms a trend they attributed to the adoption and implementation of target costing technique.

5.3. Conclusion

The main conclusions that emerge from this research study are:

1. Majority of the top managers who are the policy makers in the steel industry has over six years of work experience and have graduate level education. The significance of this fact is that experienced and qualified personnel are in charge of the operations of these companies which as noted by Broome and Perry (2002), is essential for knowledge creation and effective sharing of common objectives.
2. The steel sector has embraced the use Target costing technique as a cost management tool and most of them have implemented it for more than 5 years, an indication of a well-established and successful implementation system.
3. From the research findings, majority concurs that changing the design of a product in case target costing objectives are not meet is preferred to productabandonment with some suggesting that Kaizen, which is continuous improvement of a product for the better, was an alternative.These key finding is supported by Lockamy (2000), who notes that other cost reduction designs like value engineering and kaizen concept helps to pursue continuously cost reduction once production starts.
4. Though other departments are involved in target costing implementation, Finance and product design departmentsstood out as the as the overall drivers of target costing process. Chen (2002), noted that having the finance team involved in target costing gives credibility to the financial implications of the various tradeoffs and decisions made.
5. As noted by Accountant (2005), team and cross functional barriers results from mandatory cost cutting leads to finger pointing in various department and was rated as a big organizational and departmental challenge to Target costing implementation coupled by the lack of appropriate skills and training necessary to tackle emerging costing techniques.
6. Further, the research finding confirms that Target costing is used both as a cost planning and control tool by identifying cost associated with a product with the aim of making informed choices on options available and estimating the cost of each element of a product against the set cost targets. On cost planning and control El-Kadi (2008), presented an ideal model for creating new knowledge for cost reduction, i.e. shared information leading to the cooperative efforts among different functions, then collection of expertise and professional experience and knowledge turn into unique solutions.
7. The research finding also notes that firms are provided with a rapid response mechanism to a product cost without compromising on the quality and having an all-inclusive cost management approach because of involvement of multiple departments.
8. From the overall analysis of finding derived from this research study, Target costing is regarded as a valuable cost management tool and also a profit driver. Firms which have already implemented this costing tool puts greater emphasis and focus in improving cost competitiveness, increase sales volumes in line with increased competition from local, regional and global markets which collates with Leedy (2005), assertion that the logic of any company is to manufacture products that yield the desired profits.

5.4. Recommendation Derived From the Research Study

From the research findings, the researcher recommends the following:

1. In the academic arena, the topic of Target costing needs broader coverage in textbooks, particularly in cost accounting, production and operations management, design and project management. Local researched cases of successful implementation should be brought forth for discussion and inclusion in textbooks and other educational materials from high school level in order to better train the next generation of managers.
2. As noted by Dekker and Smidt (2003), in the theory of dynamic capabilities, companies that have already implemented Target costing as a cost management tool should continually train their managers for learning, adapting to new change, relevance and skills. These were noted as challenges in the research findings. Knowledge from a country like Japan where this technique started would greatly enhance our local capacity and develop new competences.
3. The Government should urgently invest in the local Steel industry as envisioned in its economic blueprint of vision 2030, GOK (2008),in order to lower the cost of Steel products because currently this industry is in private hands of Kenyan of Asian origin. Unstable prices due to unplanned taxes impact heavily of the industry.

5.5. Recommendation for Further Research Study

The researcher identifies the following areas where further research study on target costing technique can be conducted.

1. First, an empirical study can be performed on firms across various manufacturing industries to determine whether target costing is more suitable in some industries than others. This will increase the sample size, which will serve to highlight and strengthen the significance of the current research objectives.
2. Secondly, research can be undertaken in service industries to ascertain whether target costing can be applied in a non-manufacturing environment. This research will enable a comparison to be made between manufacturing industries and service industries.

6. Acknowledgements

I thank the almighty God for giving me knowledge, courage, determination, as well as guidance in conducting this research study, despite all the challenges.

I wish to extend my utmost gratitude to all research participants and respondents for their wonderful participation, cooperation and for providing the empirical data.

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Finally, to my fellow students, colleagues, and all those who assisted in one way or the other during my research, be assured that the Lord will bless you for all the contributions you made.

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APPENDICES

Strictly Confidential Questionnaire

Dear Respondent,

My name is Francis Ihugo, a final year Masters of Business Administration (MBA) student at Daystar University. As part of my course work, am required to conduct a research in my area of study. My research topic is on the assessment of Target Costing Technique as a profit driver and a cost management tool in steel firms operating in Nairobi, Kenya.

The research outcome will provide very important information on the extent of implementation of target costing technique and how it affects performance of firms in terms of profitability and costs management. Your feedback counts and your response will enhance the understanding of Target costing technique and shape important decision firms make on costing techniques to adopt.

Participation in this survey is highly valued, but voluntary. Your response will be treated with utmost confidentiality and the data provided in this survey will be used for research purposes only.

This questionnaire is made up of a brief background information part and three short sections (A-C) each designed to answer a specific research question. Kindly fill in your response by ticking (√) in the appropriate box or writing a short answer in the space provided. The survey should take around 10 minutes to complete.

Thank you.

BIOGRAPHICAL DETAILS:

a) What is your job title?
   1. Research & Development Manager
   2. Production Manager
   3. Finance Manager / Management Accountant
   4. Sales and Marketing Manager
   5. Others……..

b) How many years of work experience do you have in steel or related sector?
   1. Less than 1 year
   2. 1-2 years
   3. 2-4 years
   4. 4-6 years
   5. Over 6 years

c) What are your academic and/or professional qualifications?
   1. High School / Middle Level College
   2. Graduate Level
   3. Post Graduate level
   4. Others…….

SECTION A:

ESTABLISHING ORGANIZATIONAL CHALLENGES IN TARGET COSTING TECHNIQUE IMPLEMENTATION.

Target costing…a brief description,

It is a cost management technique used in the beginning of the life cycle of a product. Research shows that most product cost is fixed in the development and design phase. The starting point of target costing is the price that seems attainable in the market. A required profit margin is then subtracted from the market price, which results in the maximum allowable cost.

1.1 Does your company use the above-described method in its product design and development phase?
   1. Yes, as described
   2. Yes, but something similar
   3. No, we use other methods.

1.2 If "yes" but something similar, what name does your company give this technique?

……..

1.3 What are the differences between your technique and target costing?

……

1.4 If "yes" how long has your company been using this technique?
   1. Less than 1 year
   2. 1-2 years
   3. 2-3 years

4. 3-4 years
5. 4-5 years
6. Over 5 years

1.5 If "no" what do you think are the likely reason for not using it?

1. Method unknown
2. Method too complex
3. Too expensive to collect information
4. Too costly in time and money to collect and analysis reports
5. Not applicable to the company
6. It put too much pressure on workers
7. Other reasons:……..

1.6 Follow up on question 1.5 above; do you think your company might one day use this technique?

1. Maybe
2. Yes
3. No

1.7 Prior to implementing target costing, did you consider any alternatives? if yes, please specify such alternatives.
……

1.8 Which of the following statement correctly capture the Target Costing Concept, in the event that a company doesn't manufacture products that yield desired profits?

1. The design should be changed.
2. The product should be abandoned.

Others, explain:……...

1.9 To what extent do you agree with the following universal Target costing process?

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a	Market research on the competitive market price					
b	Determine the required profit margin by the company					
c	Establish the allowable cost of the product					
d	Establish a cross functional team to commenceimplementation					
e	Commence production if the target cost is met					
f	Continuously improve the product					

2.0 Which of the following Target Costing principles is most striking and why?

1. Price-led costing
2. Focus on customers
3. Focus on design
4. Cross-functional involvement
5. Value-chain involvement
6. Life-cycle orientation

……..

2.1Which departments are involved in the target costing process?

	YES	NO
Design & Product Development		
Production		
Finance and Accounting		
Sales and Marketing		
Distribution and Logistics		

2.2 Are there any other departments in your organization that are involved in the target costing process?
……

2.3 Which department is the driver / owner of the target costing process? (Please tick one)

	YES	NO
Design & Product Development		
Production		
Finance and Accounting		
Sales and Marketing		
Distribution and Logistics		

Others (specify):……..

2.4In which form does the activities for implementing target costing take place in your organization?

1. Through special departmental applications
2. Through interdisciplinary teams
3. Through separate functions
4. Through the accounting department
5. Through rules and procedures
6. Others…….…..…..

2.5 Please indicate other approaches (not listed above) that your company uses to implement target costing
……..

2.6 The following are perceived as key organizational challenges / barriers affecting target costing technique implementation. Kindly rate them on a scale of 1 -5 where 1 is strongly disagree and 5 strongly agree.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a	Lack of understanding					
b	Team and cross-functional barriers					
c	Irrelevance or fear of the effects					
d	Complex design and production details					

2.7 Any other challenges not listed above (Please, describe briefly)
……

2.8 Which one of the above listed challenges do you perceive to be the most outstanding and why?
……

2.9 The following are perceived as key departmental challenges of target costing technique implementation. Kindly rate them on a scale of 1 -5 where 1 is strongly disagree and 5 strongly agree.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a	The development process is long					
b	Large amount of mandatory cost cutting can result in finger-pointing in various parts of the company,					
c	Representatives from number of departments on the design team can sometimes make it more difficult					
d	Lack of appropriate skills and training necessary to tackle emerging costing techniques					

3.0 Any other challenges not listed above (Please, describe briefly)
……

3.1 Which one of the above listed challenges do you perceive to be the most outstanding and why?
……

3.2 The following are considered to be the biggest overall drawbacks of target costing technique implementation? Kindly rate them on a scale of 1 -5 where 1 is strongly disagree and 5 strongly agree.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a	Longer development product cycles					
b	Excessive pressure on overall employees					
c	Organizational conflict e.g. between designers and marketers					
e	Excessive demands on management accounting department					
f	Market confusion by the large number of different products					
g	Method is complex					
h	Too costly to collect information (time & money)					

SECTION B:
ASSESSING THE EFFECT OF TARGET COSTING TECHNIQUE AS A COST MANAGEMENT TOOL.

1.1 Comparing target costing technique to other costing techniques as used in your organization. Kindly rate the following attributes on a scale of 1 -5 where 1 is strongly disagree and 5 strongly agree.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a	It's easy to understand and apply					
b	It's the most complex to understand and apply					
c	It's the most effective technique in product cost reduction					
d	Its costly than other costing technique in time and money					

1.2 Is there a significant reduction in product costs from when your company adopted target costing technique?
1. Yes
2. No

1.3 If 'yes' can you attribute this reduction to product cost to the use of target costing technique?

1. Yes
2. No

1.4 If 'no' briefly explain

……

1.5 Cost planning is a process for identifying the costs associated with a product or service which aids in making informed choices on options available to deliver the best value and ensure minimum fluctuation during the design and pre-production stages. Please indicate the extent to which cost planning as applied in target costing technique affects overall cost management.

1. To a very great extent
2. To a great extent
3. To a moderate extent
4. To a little extent
5. To no extent

1.6 Kindly explain your response above

……

1.7 Cost control is the techniques for "protecting" the cost plan. It's the process of cost checking required to estimate cost of each element of a product to be checked against the target set in the cost plan. Please indicate the extent to which cost planning as applied in target costing technique affects overall cost management.

1. To a very great extent
2. To a great extent
3. To a moderate extent
4. To a little extent
5. To no extent

1.8 Kindly explain your response above

……

1.9 The following are the key cost management merits derived from the use of Target costing technique. Kindly rate them on a scale of 1 -5 where 1 is strongly disagree and 5 strongly agree.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a	It provides the firm with a rapid response mechanism to a product cost without compromising on the quality.					
b	It provides the firm with an all-inclusive cost management approach because of involvement of multiple departments					
c	Its helps the firm to consider all cost elements related to producing a new product through all stages of their life cycle					
e	It helps the firm to adopt the cost of developing a new product to achieve a reasonable profit margins within a reasonable time					
d	It helps the firm to establish the cost of disposal of a product at the end of their life cycle					

2.0 Is there any other merit not listed above:

1. Yes
2. No

2.1 If 'yes' briefly explain

……

2.2 In the event of cost targets not being achieved, how is the situation addressed?
……

2.3 Does your company deliver products to the market if target costs cannot be achieved?
1. Yes
2. No

2.4 Are you satisfied with the result you have got so far with the use of Target costing technique as a cost management tool?
1. Yes
2. No

2.5 If no, please indicate reasons
……

SECTION C:
TO ASSESS THE CONTRIBUTION OF TARGET COSTING TECHNIQUE IN PROFIT GROWTH.

1.1. The following are the known profits drivers in any organization. Kindly rate them on a scale of 1 -5 where 1 is strongly disagree and 5 strongly agree.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a	Competitive selling price					
b	Reduction in a products unit variable cost					
c	Reduction in a products unit fixed cost					
d	Increased sales volumes					

1.2 From the above listed profits drivers, which one do you perceive to the single most important and why?
……
1.3 Any other profit driver that you know and is used in your organization and is not is listed above
1. Yes
2. No

1.4 If 'yes', briefly explain.
……..

1.5 What was the main goal your company aimed to achieve through the use of target costing technique?
1. Profit growth
2. Cost reduction
3. Efficient operations
4. Quality products
5. Others:……

1.6 Is there a significant increase in profits from when your company adopted target costing technique?
1. Yes
2. No

1.7 If 'yes' can you attribute this change in profits growth to the use of target costing technique?
1. Yes
2. No

1.8 What can you assess from using this technique as a profit driver?
1. Very efficient
2. Very difficult to understand and use
3. Manageable
4. Other:……..