



**ASSESSING THE DETERMINANT FACTORS OF  
COMPETITIVENESS IN RIES ENGINEERING  
SHARE COMPANY**

**BY  
WASIHUN NEGUSSIE**

**JUNE, 2019  
ADDIS ABABA**

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**ASSESSING THE DETERMINING FACTORS OF COMPETITIVENESS IN  
RIES ENGINEERING**

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**Declaration**

I, Wasihun Negussie, student of school of graduate studies of St. Mary's University, declare that this submission is my own work towards the Masters of Business Administration prepared under the guidance of Gashaw Tebebe (PhD) and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university, except where due Acknowledgment has been made in the text.

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SGS/0102/2010A

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JUNE, 2019

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## **ENDORSEMENT**

This is to certify that Wasihun Negussie has completed a research entitled, "Assessing the Determining Factors of Competitiveness in Ries Engineering share company ", under my supervision and follow up. I also approve that his work is appropriate enough to be submitted for the award of the Masters Degree in Business Administration.

Dr. Gashaw Tebebe

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(Research advisor)

June, 2019

St. Mary's University

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The Researcher



## ACRONYMS AND ABBREVIATION

<b>GDP;</b>	Gross Domestic Product
<b>CAGR;</b>	Cumulative Average Growth Rate
<b>R&amp;D;</b>	Research and Development
<b>APP;</b>	Assets-Processes-Performance
<b>EFQM;</b>	European Foundation of Quality Model
<b>EVA;</b>	Economic Value Added
<b>IVM ;</b>	Integrated Value Management
<b>TSR;</b>	Total Shareholder's Return
<b>VC;</b>	Value Curve
<b>VP;</b>	Value Pyramid
<b>CMM;</b>	Capability Maturity Model
<b>RoI;</b>	Returns on Investments
<b>ERP;</b>	Enterprise resource planning
<b>CRM;</b>	Customer relationship management
<b>KPI;</b>	Key performance indicators
<b>BIS;</b>	Business information systems
<b>IDMS;</b>	Irium Dealer management soft ware
<b>GP;</b>	Government Policy
<b>FS;</b>	Firm Size
<b>P;</b>	Productivity
<b>S;</b>	Strategy
<b>FP;</b>	Financial Performance
<b>CS;</b>	Customer satisfaction

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## **ABSTRACT**

*The objective of this study is to assess the determining factors of competitiveness in Ries Engineering. For the purpose of the study, quantitative approach was used to analyze competitiveness. Porters model and Asset Process Performance model was used as the basic theoretical frame works for the selection of competitiveness variables. The selected variables for hypothesis testing were government policy and regulations, firm size, productivity, company strategy, financial performance and customer satisfaction. A five point Likert scale questionnaire was used to gather information from forty-eight management staffs and supervisors of Ries Engineering Share Company. Finding of the result showed that although the relationship is very weak, all the variables have relationship with competitiveness of the company. From the variables tested, productivity has relatively higher effect from the variables tested for competitiveness. The findings of the study have practical implications for the company and researchers who needs to study competitiveness on the firm level. Based on the findings, it is recommended that availability of spare part should be given more focus to avoid down time of customers. Besides, effective strategy that can comply with external factors should be designed and implemented. On top of that developing regular market research scheme and making formal review of the information gathered should be performed. Further studies in the area should be conducted using different theoretical frameworks and advanced analytical methods. Besides, involving all stakeholders to get a better insight about situation under study should be done.*

***Key words: Competitiveness, government policy, firm size, productivity, company strategy, financial performance, customer satisfaction***

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Back ground of the Study**

In this chapter definition of competitiveness, machinery importing environment and different previous researches related to competitiveness are discussed. Purpose of the study also presented to give a clear picture about the research.

Competitiveness of a firm as stated by different authors can be considered as a multidimensional and relative concept. Whereas, the relativity is given by the necessity of the determination of criteria, subject or level for comparison. Since the company's capability to compete is always related to the competitors and their competences together with other factors influencing and creating the market conditions and character of market competition (Klapalová, 2011).

Competitiveness is an ability related to prosperity, or “sustained superior performance” and has been used as a broader or narrower term, based on the level of interest. Even at the same level, definitions of the term vary significantly from one study to another. competitiveness at a national level has been viewed as general as “an ability to create welfare as sarcastic as “a poetic way of saying productivity” or as specific as “the ability of a country to realize central economic policy goals, especially growth in income and employment without running into balance-of-payments difficulties.”

Competitiveness also defined as a “set of institutions, policies, and factors that determine the level of productivity of a country”. The versatility of the competitiveness term resulted in its ambiguity and, as a result, to date, there is little consensus on what the term actually means and how it can be measured (Juyoung & Elena, 2018).

Competitiveness can be considered at different levels of aggregation: firm, industry, and country. Firm level analysis focuses on behaviors and performance of firms. Competitiveness is frequently analyzed also at industry level or “cluster” level. The competitiveness of an industry can be assessed by a comparison with the same industry in another region or country with which there is open trade ( Depperu & Cerrato , 2005).

The heavy machinery industry as a whole is moderately fragmented. We see competition in this sector vary heavily between companies depending on geography and even

individual orders. Therefore, comparing companies can become quite difficult when they may compete in complete different areas of the world. As with any industry, price competition is to be expected, however, the machinery industry also competes based on the depth of their product offerings, such as their ability to fulfill the customer's wants and their compatibility with the customer's facilities or needs. (Rosenberger, Lynch, Diaz, & Pan, 2018).

The global construction equipment market size was estimated at USD 76.87 billion in 2017. It is expected to expand at a CAGR (cumulative average growth) of 4.8% from 2018 to 2025. Rising government funding for development of advanced public infrastructure is anticipated to boost demand for off-highway equipment. Additionally, development of rental market for these machineries in Europe and North America is expected to foster market growth.

Residential segment is witnessing high demand for construction equipment owing to rapid pace of urbanization in major countries. Urbanization triggers not only the requirement for residential space but also other infrastructures such as schools, hospitals, roads, and commercial spaces. To cater to demand for these public infrastructures, governments spend a substantial amount on construction activities. For instance, Chinese government spent about 8.5% of its GDP on development of roads between 1992 and 2011.

On the basis of product, the market can be segmented into earth moving, material handling, and concrete and road construction machinery. Earth moving machinery was the dominant product segment and valued at USD 50.83 billion in 2017. Demand for large earth moving machines is escalating with increased requirement from mining sector. This machinery is sturdy and offers enhanced productivity. The concrete and road construction machinery segment is anticipated to expand at the highest CAGR of 7.0% from 2018 to 2025.

Among different large machineries, excavators dominated the market with over 70% market share in 2017. Countries such as U.S., China, and India among others have a huge demand for mini excavators and other such machines, owing to a large number of construction and mining projects. The loader segment is projected to gain much traction by 2025. Demand for material handling machinery such as a crane is high in developed countries. Rise in establishment of enormous skyscrapers and commercial buildings is

expected to drive this demand in near future. Truck-mounted cranes accounted for the largest market share in 2017, with crawler cranes anticipated to expand at a rapid growth rate over the forecast period (Construction Equipment Market Size, Share & Trends Analysis , 2018).

The construction machineries industry in Ethiopia is expanding through time. However, it is challenged by factors like; political unrest, scarcity of finance, shortage of hard currency and shortage of skilled labor. This will have a direct effect on the Import of construction machineries by increasing delivery date and creating shortage of parts supplies. Besides, threats of new entrants, heavy investment, and stiff competition raise the need to conduct competitive study specifically in Ries Engineering.

Studies on competitiveness at international levels have been done for many years in different sectors and countries. To list few of them are; Competitiveness of firms; Review of theory, frame works and models by Ambastha & Momaya (2004), to Indicate the importance of firm level competitiveness. The Examination of the Competitiveness in the Hungarian Small and medium Sector by Szerb & Ulbert (2009), tried to analyze competitiveness on a firm level.

The examination of competitiveness in different sectors in Ethiopia has been done by different researchers among them; The Ethiopian Manufacturing Sector: Competitiveness and the Way Ahead by Alemu & Zerihun (2005), estimate domestic and international competitiveness of the Ethiopian manufacturing industry.

The purpose of this paper is to identify the factors that can affect the competitiveness of Ries Engineering, analyze the type and magnitude of each variable and recommend the possible solutions to increase the performance of the company by collecting data related to the study, analyze the data, interpret it and describe the situation with a detailed manner.

## **1.2 Statement of the problem**

The need to conduct this study is based on different factors. The boom in construction sector of Ethiopia is contributing for the gross domestic product of the country on an increasing rate through time. The construction industry used to make up 9.5 % Ethiopia's gross domestic product until three years ago. Besides, it is growing at an annual rate of 12.6% on average. A scarcity of finance and hard currency, lack of construction machinery, corruption and shortage of skilled work force hit this sector (Sisay, Hailu,

Berhane , & Asrat, 2019). This increases the number of days required to deliver the machineries to the customer, creates customer dissatisfaction and decreases sales effort. To forecast and mitigate this effect competitiveness studies has to be conducted.

Ethiopia spent 14% of its total import bill in 2017/18 on importing machineries and aircrafts, the largest share of all other import categories. According to Sisay.A, etal (2019), there are close to 16,127 machines registered in the country. The number of construction machineries increases by 2,500 per year on average. To gain benefit from this opportunity, Ries Engineering needs to know and assess the factors of competitiveness, which lead to sustainable competitive advantage.

The number of new companies joining the industry every year is the other factor. Zekariyas (2016), quoted that, there are 25 registered construction machinery dealer companies in Ethiopia that sale different product lines of construction machineries. This number is now expected to increase every year. To survive the stiff competition every competitor will have its own strategy, technology and develop the source of competitive advantage. Thus conducting competitiveness study is inevitable. The Construction Machinery import business require high investment to operate. Strategies and decisions made by the top management for competitiveness are very critical for the success and failure of the company. Thus, careful consideration of factors that affect competitiveness of the organization needs to be done.

In Ethiopian context, some studies have been made on competitiveness. “Competitiveness of Ethiopian industries: The case of metal and metal products industry” (Workneh & Desalegn, 2015), focused on analyzing internal capacity, effect of national policy on the industry environment and assessing the platform of competitiveness. However, they did not consider factors like firm size, which have direct effect on scale of economy, firm strategy and financial performance.

A research on “Assessing the determining factors of Competitiveness in Ethiopian traditional cloth manufacturing sector” (Haile, 2016), focused on the macro and meso level of competitiveness. The researchers identified factor conditions, related and supporting industries, demand conditions and role of government as determining factors. Nevertheless, the researchers did not give focus on the micro level factors, which are inputs for the industry level competitiveness.



At the company level, the researcher tried to find any competitiveness related studies conducted however there are no studies conducted in this area thus this can be taken as a contextual gap. Therefore, in this research paper the researcher tried to fill these conceptual as well as contextual gaps by assessing the determinant factors of competitiveness in Ries Engineering.

### **1.3 Research Questions**

1. What are the determining factors that affect the competitiveness of RIES Engineering?
2. What is the effect of government policy on the company's competitiveness?
3. What is the effect of firm size on the company's competitiveness?
4. What is the effect of productivity on the company's competitiveness?
5. What is the effect of firm strategy on the company's competitiveness?
6. What is the effect of financial performance on the company's competitiveness?
7. What is the effect of customer satisfaction on the company's competitiveness?

### **1.4 Objectives of the study**

#### **1.4.1 General objective**

The general objective of the research is to assess the determining factors of competitiveness in Ries Engineering Share Company.

#### **1.4.2 Specific objectives**

1. To determine the effect of government policy on the company's competitiveness.
2. To determine the effect of firm size on the company's competitiveness.
3. To determine the effect of productivity on the company's competitiveness.
4. To determine the effect of firm strategy on the company's competitiveness.
5. To determine the effect of financial performance on the company's competitiveness.
6. To determine the effect of customer satisfaction on the company's competitiveness.

### **1.5 Significance of the study**

The study would have many advantages for all practitioners and academicians by providing useful information about competitiveness of a firm and issues related to its practice. It would also be useful for other companies that compete in the machinery dealer's industry. The study could also be used as an initiation for those who are

interested to conduct a detailed and comprehensive study regarding competitiveness environment of Ethiopia.

### **1.6 Scope of the study**

This research is focused on assessing the determinant factors of competitiveness in Ries Engineering. It tried to assess those factors who have effect on both machinery sales and parts sales departments of the construction machinery. Due to limitations of time and budget, the study only focused on competitiveness regarding to the head office and Caterpillar business unit. The method of data collection was structured questionnaire and referring the company's document to collect additional information. The research data was collected from the management team of Ries Engineering.

### **1.7 Organization of the Paper**

The paper is organized in to five chapters. Chapter one tried to provide the basis of the entire research in the form of background of the study and statement of the problem. The research questions with the general and specific objectives also presented in the chapter. Chapter two constructed the theoretical framework of the paper by revising relevant literature. It also presented the Empirical evidences from previous studies on the area of competitiveness. Chapter three presented the methodological and procedural map of the research. It discussed the sampling technique, the method of data analysis used. Chapter four put forward the analysis of the data collected with the supporting empirical evidences and the implication of each result on competitiveness. Finally, chapter five comprised the summary, conclusions and recommendations of the findings.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.1 Theoretical Literature Review

The concept of competitiveness is a sophisticated category due to its application at various levels of generalization where it takes on various values and has various indicators of measurement. The most debatable issue is an interaction of factors to determine dynamics of competitive relations, with this in mind and as a natural result an opinion is advanced that it is impossible to specify how competitiveness is formed: With reference to any object, subject, process, etc., it changes depending on the purposes, goals, and specific content of research studies; it is revealed from different perspectives depending on the target of research (factors of production, strategy, system, etc.) and the subject of competitiveness (person, enterprises, regions, country, integration associations, etc.) (Chursin & Makarov, 2015).

**2.1.1 Mercantilism-** countries export` more than they import and if successful receive gold from countries that run deficit. Government imposed restrictions on most imports and subsidized production of many products that could otherwise not compete in domestic or export markets. In fact, it is not necessarily beneficial to run a trade surplus nor is it necessarily disadvantageous to run a trade deficit. Today it is made up of by holding the deficit countries currency or investment denominated in that currency. In effect, the surplus country is granting credit to the deficit country. if that credit cannot eventually buy sufficient goods and services, the trade balance may turn to disadvantage for the country with surplus (Daniels & Radebaugh, 2001).

**2.1.2 Neo mercantilism** - The term neo mercantilism describes the approach of countries that try to run favorable balances of trade in an attempt to achieve some social or political objective. A country may aim for increased employment by setting economic policies that encourage its companies to produce in excess of the demand at home and send the surplus abroad. Alternatively, it may attempt to maintain political influence in an area by sending more merchandise there than it receives from it, such as a government granting aid or loans to a foreign government to use to purchase the granting country's excess production (Daniels & Radebaugh, 2001).

**2.1.3 Absolute advantage** – In 1776, Adam Smith questioned the mercantilists' assumptions by stating that the real wealth of a country consists of the goods and services available to its citizens rather than its holdings of gold. This theory of absolute advantage holds that different countries produce some goods more efficiently than others, and questions why the citizens of any country should have to buy domestically produced goods when they can buy them more cheaply from abroad. Smith reasoned that unrestricted trade would lead a country to specialize in those products that gave it a competitive advantage. Its resources would shift to the efficient industries because it could not compete in the inefficient ones.

Through specialization, it could increase its efficiency for three reasons:

- Labor could become more skilled by repeating the same tasks.
- Labor would not lose time in switching production from one kind of product to another.
- Long production runs would provide incentives for developing more effective working methods (Daniels J. R., 2015).

**2.1.4 Comparative advantage** - Although this theory may seem initially incongruous, an analogy should clarify its logic. Imagine that the best physician in town also happens to be the best medical administrator. It would not make economic sense for the physician to handle all the administrative duties of the office, because of earning more money by concentrating on medical duties, even though that means having to employ a less-skilled office administrator. In the same manner, a country gains if it concentrates its resources on the commodities it can produce most efficiently. It then trades some of those for commodities produced abroad. The following discussion clarifies this theory (Daniels J. R., 2015).

**2.1.5 Relative factor endowment-** Swedish economists, Eli Hecksher and Bertil Ohlin argues that the pattern of international trade is determined by differences in factor endowment, rather than differences in productivity. Like the labor - cost model, it excludes economies of scale, takes no account of transport costs, and assumes that tastes are the same everywhere. However, unlike the labor-cost model, it goes on to assume that each country has access to the same technology, and would employ the same methods of production if confronted with identical factor prices.it there by rules out the differences in relative efficiency that served as the basis for foreign trade in the labor cost model.

The Heckscher – Ohlin or factor endowment approach to trade theory proceeds from two suppositions.

1. Products differ in factor requirements – cars require more machine-time (capital) per worker than, say cotton cloth or furniture, and aircraft require more machine-time than either cars or cotton cloth.

2. Countries differ in factor endowments – some have large amounts of capital per worker (the capital- abundant countries) and some have very little (the labor- abundant countries) (Bhalla, 2013).

**2.1.6 The product life cycle theory** - the product life cycle is an important theory in the fields of management and economics. Technological discontinuities cause a period of ferment in which alternative product forms compete for dominance due to the large amount of market and technological uncertainty that exist following a technological discontinuity. New firms enter the market and competition focuses on product innovation. Eventually, however, the process of experimentation between the firm and the users of the product leads to the appearance of a dominant design where standardized parts, software, and manufacturing equipment appear. The appearance of this dominant design causes the competition to change from product or service performance to the effective use of complementary assets such as marketing, distribution, competitive manufacturing (e.g., process innovation), and after-sales support. Firms who are unable to successfully produce the dominant design or do not have the required level of capabilities in the complementary assets often exit the industry (Funk, 2004).

**2.1.7 The new trade theory** – According to the Heckscher – Ohlin factor- factors proportion theory of comparative advantage, international commerce compensates for the uneven geographic distribution of productive resources. This is obvious in some respects but not so obvious in others. It is not a great theoretical triumph to identify conditions under which countries rich in petroleum reserves export crude oil, and it would not be a great surprise to find supportive evidence.

However, it is a theoretical triumph to find conditions under which countries that are richer in labor than land export labor-intensive agricultural products and, as a result of trade, have wages that approach levels prevailing in high- wage labor -scarce countries. In addition, it would be a great surprise to find supportive data (Leamer, 1995).

### 2.1.8 Theories on government rules and regulations

The porter diamond theory - Demand conditions are the first point in the diamond. Companies then start up production near the observed market. Factor conditions influenced both the choice of product to meet consumer demand and the choice of production location. The existence of nearby related and supporting industries was also favorable. The ability of these companies to develop and sustain a competitive advantage required favorable circumstances for the fourth conditions, firm strategy, structure and rivalry.

Governments can play a powerful role in encouraging the development of industries and companies both at home and abroad. Governments finance and construct infrastructure (roads, airports) and invest in education and healthcare. Moreover, they can encourage companies to use alternative energy or alternative environmental systems that affect production. This can be effected by granting subsidies or other financial incentives. Porter also indicates that in most markets chance plays an important role. This provides opportunities for innovative companies that are not afraid to start up new operations. Entrepreneurs usually start their companies in their homeland, without this having any economic advantages, whereas a similar start abroad would provide more opportunities.

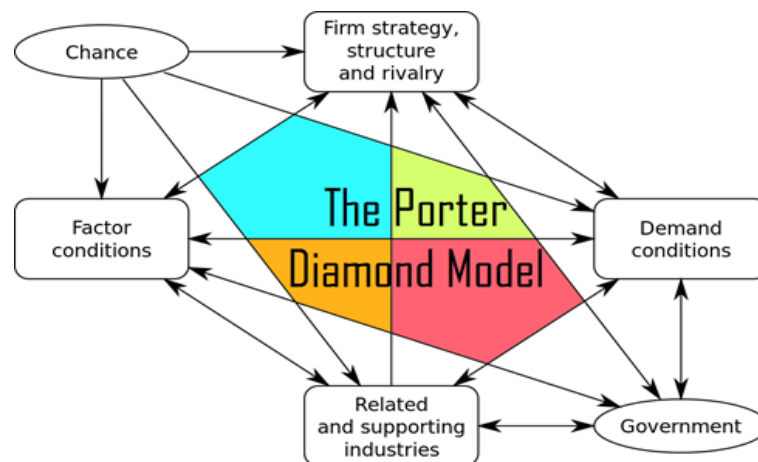


Figure 1, porter diamond frame work of competitiveness

Source: (Porter, 1990)

The first limitation of this theory is that the existence of the four favorable conditions does not guarantee that an industry will develop in a given local. Entrepreneurs may face favorable conditions for many different lines of businesses. The second limitation of the diamond concerns the increased ability of companies to gain market information,

production factors, and supplies from abroad. At the same time, they face more competition from foreign production and foreign companies (John D. Daniels, 2015).

### **2.1.9 Theories on Firm size and competitiveness.**

The basis for any program to develop and foster small- and medium-sized companies is the assumption that these firms have more problems than larger ones. However in theory, small firms do not necessarily have to be worse off than medium and large firms. Depending on the strength of the influence of these forces, different patterns of the relationship between firm size and obstacle levels can be imagined (Schiffer & Weder, 2010).

Business obstacles may be particularly severe for small firms because they represent fixed costs that a large firm can absorb more easily. It is useful to distinguish between the source of the obstacle: whether it is market- or government-induced. Financing could be an example of a market-based obstacle for small firms financing, since there are fixed costs associated with loan review. Government-induced obstacles could include bureaucratic discretion, since small firms may be unable to bribe their way through bureaucracy. Experiments revealed that enormous obstacles in terms of red tape that small entrepreneurs faced when trying to obtain a business license. That study revealed huge entry costs for small entrepreneurs who lacked access to higher levels of the administration and who could not bribe their way through the system (Schiffer & Weder, 2010).

Large firms may have more possibilities of collusion, with other firms as well as with the public sector. Groups consisting of many members are difficult to form if there is a free-rider problem. This means that larger firms might be more successful in influencing politics and obtaining new rules in their favor, and thus gaining advantage over smaller firms (Schiffer & Weder, 2010).

Large firms might also craft special deals with government exactly because of their power and their importance in the economy. For example, in a recession, they might threaten to lay off workers if they do not get tax reductions. Conversely, there are several good arguments as to why larger firms may have more problems than smaller firms. Small firms can more easily slip into informal arrangements, thereby avoiding taxes and regulations. Empirical evidences shows that a high level of corruption and weak institutions increases the size of the informal sector. Large firms may be more exposed

to corruption since they usually have higher profits than small firms, they are more visible, and they may be more interesting targets for blackmailing and kickbacks. Depending on how strong the forces are that cause smaller firms to have higher or lower obstacle levels than larger firms, various patterns of firm size and obstacle levels result (Schiffer & Weder, 2010).

#### **2.1.10 Theories on company productivity and competitiveness**

Higher productivity is the synonym of improved competitiveness. Enterprises are competitive when their productivity of labour and all production factors grow consistently, which situation allows them to reduce the unit costs of their output, etc., but also affects other enterprises at the national and international levels. Higher productivity provides funding for an organization's expansion plans. In the short term, citizens benefit from the better and cheaper products available on the market, and in the medium term from growing employment (Wysokińska, 2003).

Another effect is constant growth in wages in real terms. As a result, a country's living standard goes up when its productivity growth (in macro-terms) is sustained. Therefore, an enterprise plays the primary role in generating revenues and employment, and contributes to a lasting and balanced economic and social development (Wysokińska, 2003).

Productivity is perhaps the most straightforward and easily defined of the three factors. Productivity is economic output per unit of input. The unit of input can be labor hours (labor productivity) or all production factors including labor, machines and energy (total factor of productivity). Despite this, many analysts still use the term incorrectly. Some argue that moving jobs to countries with lower labor cost, raises productivity because it lowers prices. But while these actions might reduce prices, lower prices are not the definition of productivity. In fact, moving jobs to China might actually decrease productivity since firms in China use fewer machines and are less efficiently organized than firms in the United States. To understand the sources of productivity, it's important to understand that economies have three ways to grow over the medium and long term: growth in workers, growth in productivity across-the-board and growth in the share of activity in high-productivity industries. The first, growth in the number of workers, is a non-sustainable strategy and more importantly does nothing to increase productivity or per-capita income growth (Robert, 2013).



### **2.1.11 Theories on company strategy and competitiveness**

The strategies and structures of firms depend heavily on the national environment and that there are systematic differences in the business sectors in different countries that determine the way in which firms compete in each country and ultimately their competitive advantage. Domestic rivalry forces helps firms to be cost competitive, to improve quality and to be innovative ( Smit, 2010).

Firms ultimately compete internationally, but it is the international competitiveness of a country that shapes the international competitive advantage of firms. It is this assumption that a country's competitiveness ultimately determines a firm's international competitive advantage that led to the belief that countries, like firms, compete internationally and thus that the international trade engagement of countries is a negative sum game, as it is in the case of firms. This is in sharp contrast to the general understanding in trade theory that trade is a positive sum game irrespective of the nature of the sources from which such gains from trade are derived ( Smit, 2010).

### **2.1.12 Theories on financial performance and competitiveness**

As competitive, we can call the firm, which can produce services or products of superior quality and lower costs than its domestic and international competitors. Competitiveness is synonymous with a firm's long-run profit performance and its ability to compensate its employees and provide superior returns to its owners. In the context of the above, we measure a firm's competitiveness by its financial performance. When profitable opportunities exist, firms increase their production and sales. Thus, the existence of a good financial performance suggests a firm or industry with increasing competitiveness just as a bad financial performance suggests a firm or industry with falling competitiveness ( Liargovas & Skandalis, 2015).

Various financial performance measures are often used for measuring the competitiveness of firms. For example return on sales reveals how much a company earns in relation to its sales, return on assets determines an organization's ability to make use of its assets and return on equity reveals what return investors take for their investments. The advantages of financial performance measures are the easiness of calculation and that definitions are agreed worldwide. Traditionally, the success of a manufacturing system or company has been evaluated by the use of financial measures ( Liargovas & Skandalis, 2015).

### **2.1.13 Theories on Customer satisfaction and Competitiveness**

The core competencies of enterprises cannot create a profit directly, only to change it to meet the customer's needs of products and services while in the true sense. The orientation of customer value strategy needs to match with the competitiveness of enterprises. Enterprises need to engage in each of the value creation in the value chain to make the final products and services available to customers, the performance of activities constitute the basic elements of competitive advantage, while the focus of activities in different value orientation companies will be different: the leader of the products focus on innovation-oriented activities ( Kwak & Lee, 2009).

Operational Excellence-oriented companies focus on reducing costs in the process of supply chain and internal operations, and the pursuit of Customer Intimacy. Company's focus is to meet customer service and delivery. However, the focus of an event does not mean the neglect of other activities. In other activities, they should at least meet the standard of their industry ( Kwak & Lee, 2009).

Customers don't buy products or services, but they buy the benefits that the product or service can offer to them. They buy offerings that consist of products, services, information and other factors. The value created from the purchase of an offering is dependent on how the customer experiences the benefits created. Customer satisfaction can be developed on its own without any effort, but usually it needs work and planning.

Customer satisfaction is a competition and tool, the competitive advantage received from customer satisfaction is hard to duplicate for other companies, especially if the company devotes more effort into their customer service than their competition. If the company's personnel have outstanding personal chemistry, empathy, helpfulness and they can offer other pleasant gestures towards the customers, qualities that are hard to imitate for other companies. Even the ability to apologize or react correctly to negative feedback can indicate a sense of professionalism to the customer and that the customer is taken seriously. For many companies the situation nowadays is that their core competence needs to be refined into a service offering to develop their competitiveness and that the offering consists of all the value-creating items that customers expect ( Ihalainen, 2011).

Customer satisfaction can provide major competitive advantage, which can directly lead to increase in profitability and growth. They are repeat buying which will reduce cost of doing business: Your products command higher prices leading to higher profits. Gaining

financial and moral support from satisfied customer in times of corporate crisis. Word of mouth publicity from satisfied customer provides new market opportunities. Satisfied customers buy other products and services (N.sheith, 2014).

Normally, a firm can sustain a competitive advantage for only a certain period due to rival firms imitating and undermining that advantage. Thus, it is not adequate to simply obtain competitive advantage but to strive to achieve a sustained competitive advantage which can be done by continually adapting to changes in external trends, events and internal capabilities, competencies, and resources, through effectively formulating, implementing and evaluating strategies that capitalize upon those factors. Pursuit of competitive advantage leads to organizational success or failure satisfaction and enhanced organizational profitability ( A. Adekiya, 2016).

## **2.2 Empirical Literature Review**

In this section revision of Empirical findings, which are made on competitiveness of firms, will be discussed.

(Ambastha & Momaya, 2004) Made a research on “Competitiveness of firms: Review of theory, frame works and models” to indicate the importance of firm level competitiveness. They tried to focus on review of literature at the firm level and study of competitiveness related frameworks and models. They tried to suggest ten frame works for analyzing firm level competitiveness based on firm’s situation and firm’s capability.

The frameworks are: APP (Assets-Processes-Performance) framework, EFQM (European Foundation of Quality Model), Balanced Scorecard, IVM (Integrated Value Management), TSR (Total Shareholder’s Return), VC (Value Curve) model, EVA (Economic Value Added), VP (Value Pyramid), CMM (Capability Maturity Model) and RoI (Returns on Investments). From their findings, they conclude that process perspective has attracted more attention and competitiveness process has to be integrated with strategy. Besides, they suggest that integrated frameworks that can help to select the right tools has to be developed. Finally, the researchers recommend APP framework as a useful and robust tool, which integrates resources to performance through processes.

(Klapalová, 2011) Made a research on “Competitiveness of firms, performance and customer orientation measures empirical survey results”. The study attempted to present results from two empirical surveys concerning selected factors, which can be connected to customer orientation, performance and competitiveness of firms. The surveys was also

to reveal potential differences between sectors arising from not only the different influences of internal but as well as external environment. A survey instrument was developed to analyze the relationship between several variables measuring customer orientation of surveyed firms and between these factors and level of financial performance.

Several statistical methods were applied to analyze the data, specifically descriptive statistics (means and standard deviations), one-way analysis of variance (ANOVA) with Bonferroni post-hoc test using financial performance for clustering firms and for assessment of potential differences of customer orientation criteria evaluation and Spearman rank correlation coefficients to assess the linear bivariate relationship between customer orientation variables. The results of ANOVA show that only the innovativeness is distinctive distinguishing criteria in conformity with the indicators of financial prosperity and that there are some differences between companies from two groups of sectors within the managers' perception of customer orientation performance criteria.

(Ialinsky, 2013) On his paper, "Competitiveness determinants: results of a panel data analysis" combines the results of a questionnaire survey with firm level data in order to better explain firm competitiveness. To do this, survey-based information about perceived factors is used to improve explanatory power of quantitative factors. Results from the firm level panel data model confirm that most of the top individual, sector specific and macro factors of perceived company competitiveness are statistically significant.

Different size of the effect across considered competitiveness indicators (proxied by indicators of profitability productivity, and export performance and market share ) suggests that appropriate policy measures aiming at higher overall competitiveness may vary depending on preferred definition of competitiveness may vary depending on preferred definition of competitiveness. Among the factors they find that perceived impact of energy costs, EU member ship and developed consumer sectors count among the most influential ones.

Habtamu and Gashaw (2015), made a research on "Competitiveness of Ethiopian industries: The case of metal and metal products industry" to analyze their internal capacity, to determine the effect of national policy on environment of the metal the firms, to assess the plat form for competitiveness and identifying the challenges and

opportunities of the industry. They use stochastic frontier production function model, over view of national policies and platform assessment as an approach to assess the competitiveness. The sources of data were both primary and secondary obtained through interview, statistical reports and publications from government institutions.

The researchers found that trade policies are not even boldly formulated as independent documents. Other policies like environmental policy do not explicitly embody issues of competitiveness in their objectives. From the data depicted, its domestic market share of the metal industry deteriorated from year to year and the industry is struggling to compete in domestic market.

Limited innovation and product diversification, low activity in iron ore extraction, lack of credit for working capital, inability to cope up with foreign competition relatively high tariff on imported raw materials, little investment in research and development, power (electricity) fluctuation and weak linkage with universities and research institutions are the major challenges of the industry. Availability of cheap labor force, existence of feasible potential of iron ore, macroeconomic stability, growing construction and power industry, and high demand in the world market are opportunities of the industry. Labor cost showed significant contribution to the production of the industry as compared to other inputs; which means the industry used labor-intensive technologies. The industry efficiency decreased within the five years due to obsolete machinery employed in the production process.

(Akben-Selcuk, 2016) Made a research on “Factors Affecting Firm Competitiveness: Evidence from an emerging market”. The study attempted to investigate the factors affecting firm competitiveness in an emerging market-Turkey. In the paper, competitiveness is proxied by a firm’s financial performance. The empirical analysis was based on firms listed on Istanbul and covers the period between 2005 and 2014. Results from a firm-level panel data model indicate that return on assets is positively related to firm size, international sales, liquidity and growth, and negatively related to leverage and R&D expenditures. On the other hand, gross profit margin is positively related to size and international sales, and negatively related to leverage and research and development expenditures.

Moreover, the results suggest that several firm specific factors are significant in explaining variations in the financial performance and competitiveness of Turkish firms.

Financial managers could consider these results for decision-making and use various instruments to control some of the firm characteristics to obtain more favorable performance outcomes.

(Selamawit, 2016) Made a research on “Assessing the determining factors of Competitiveness in Ethiopian traditional cloth manufacturing sector” to identify the factors that determine competitiveness of the traditional cloth manufacturing sector using porter’s diamond model. The researcher used semi-structured questionnaire as a means for the data collection. The findings of the study revealed that related and supporting industries is the most determinant factor while demand conditions and role of government follows respectively. The researcher also found that factor conditions do not have an effect on competitiveness of the sector.

( Rahimić & Uštović, 2012) Made a research on “Customer satisfaction, as a key factor in building and maintaining competitive advantages of companies” to explore companies’ awareness level about the customer satisfaction as a key element in process of building competitive advantages based on sales policy differentiation. The Research was conducted through individual interview survey based of pre-prepared questionnaire and includes companies engaged in business-to-business sales. The researchers presented the application of customer oriented sales, which includes customer satisfaction like one inseparable variable in sales process. The researchers also emphasized Companies that sell their products and services in B2B sector should especially support and recognize importance of customer satisfaction tools, like a possibility of creating a framework for building COS (customer oriented) Model.

The researchers concluded that Customer satisfaction focused on finding opportunities to create value for the customer is good base for creating COS model. Creating value for customers, firstly based on revenue increasing, not only reducing prices, companies can achieve satisfaction and loyalty of their customers at the same time, and finally achieve strategic plans. Regardless of the strong competition in business to business sales, using the COS Model and customer satisfaction tools, companies can differentiate themselves from competition and become market leader.

(Jahrami & Jassim Buheji, 2013) Made a research on “Competitiveness of Government Organizations through Customer Satisfaction in a Knowledge Economy: Study in the Kingdom of Bahrain”. The study used a cross-sectional research methodology to collect

data for this research from 32 governmental entities in the Kingdom of Bahrain in 2012. The highest areas of competitiveness satisfaction were improved organizational ability to identify new services opportunities and improved Organizational ability to react to customer demands. The lowest areas of competitiveness satisfaction were organization has mechanisms to deal with customer complains. On top of this, Organization has no clear plans for future that would ensure sustainability of services and it does not considers consumer feedback seriously.

The study recommend that Government of Bahrain should be more serious about its customer Satisfaction programs be it customer complaints or customer feedback and satisfaction schemes. Besides, enhanced governmental agility is hampered by its organizations ability to establish mechanisms that would deal with customer complaints and feedback. Also, the government ability to have an autonomous sustainable competitiveness still need to be challenged, as there are no clear future plans as per its customer's point of view. This means that the government need to review its plan of competitiveness and involve the citizen in being aware of these labs and ensure that the execution of these plans reflects clearly on the level of the services provided.

(Williams & Naumann, 2011) Made a research on "Customer satisfaction and business Performance: a firm-level analysis." The study aims to examine the relationships between customer satisfaction and a variety of company performance metrics at the firm level of analysis. The main implication of the study was that the longitudinal findings demonstrate a strong consistent link between customer attitudes and financial performance at the firm level. The study investigated these associations at the firm level, rather than at the aggregate or industry level where some relationships are potentially masked. The study also investigated the links between satisfaction and financial performance in the business-to-business services sector, rather than in business-to-customer services.

The primary research method used in the study was a longitudinal analysis of series of quarterly surveys of customer attitudes, in relation to various company performance metrics of one large Fortune 100 company. The data were collected over a five-year period and were analyzed with several statistical tests of association. The researchers found that there are significant and moderate-to-strong associations between satisfaction levels and a firm's financial and market performance. More specifically, there are strong

links between customer satisfaction, and retention, revenue, earnings per share, stock price, and Tobin's q.

### **2.3 Conceptual framework**

As mentioned earlier competitiveness has different dimensions and perspectives viewed by different authors. In this study, the researcher tried to study competitiveness on firm level.

By far the most established, applied and debated framework on competitiveness is the 'Diamond Framework', introduced by Porter. He investigated why firms based in a particular nation are able to create and sustain competitive advantage against the world's best competitors in a particular field. Porter concluded on a wide range of factors that influence, determine and explain this international success and categorized these factors under four determinants, which in turn were famously arranged in the shape of a diamond (Ericsson, henricsson, & jewell, n.d.).

The other method, which is used for analyzing firm level competitiveness, is the APP model. APP framework integrates resources to performance through processes and it may provide the best tool to link competitiveness with strategy (Ambastha & Momaya, 2004). Among many criteria that can govern selection of a framework or model, firm's capability and its situation have been used to classify the selected frameworks and models (Ambastha & Momaya, 2004).

Siudek & Zawojka (2014), advocates the most relevant approach is to use composite indicators that capture various components of competitiveness. Thus, the main frameworks used to analyze the study would be the combination of porter's model and APP model.

The variables, examined in this study, include those factors selected and modified from different empirical views explained above. These are government policy, firm size, productivity, financial performance, firm strategy and customer satisfaction. Government policy and firm strategy are variables selected from porter diamonds to examine the firm's environment (macro and industry level) competitiveness of the company.

From the empirical studies explained above, these have high effect on competitiveness of any firm operating in any country. Nevertheless, limitations of porters model not to



analyze competitiveness on firm level, initiates involvement of other frame works, which can analyze competitiveness at the firm level, to make the analysis comprehensive.

Firm size, financial performance, productivity and customer satisfaction are used as variables to assess firm level competitiveness. The selection of these variables is based on empirical researches, as described above, made on different small and medium sized companies. Productivity has often been termed as surrogate of competitiveness and good indicator of long-term competitiveness of a firm by many authors (Ambastha & Momaya, 2004). Moreover, Competitiveness as stated on Akben-Selcuk (2016), was proxied by firm size and financial performance.



Figure 2, Conceptual frame work of the study

Source: government policy and firm strategy (Porter, 1990), firm size, financial performance, productivity and customer satisfaction (Ambastha & Momaya, 2004).

## **2.4 Developing a hypothesis**

Here the hypothesis for each variables are listed. The Variables listed above were developed to hypothesis and later tested by using simple linear correlation and regression.

1. H1 -Government policy have an effect on the competitiveness of Ries Engineering.
2. H1- Firm size have an effect on the competitiveness of Ries Engineering.
3. H1- Productivity have an effect on the competitiveness of Ries Engineering.
4. H1- Firm strategy have an effect on the competitiveness of Ries Engineering.
5. H1- Financial performance have an effect on the competitiveness of Ries Engineering.
6. H1- customer satisfaction have an effect on the competitiveness of Ries Engineering

Moreover, each variable discussed in detail for the relationship and magnitude with competitiveness of the company. On Chapter five the conclusion and recommendation how to improve the negative effects and maintain the positive effects of the variables is discussed.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Approach and Research Design**

The research approach this paper followed was both quantitative and qualitative approaches. Quantitative research methods are research methods dealing with numbers and anything that is measurable in a systematic way of investigation of phenomena and their relationships. It is used to answer questions on relationships within measurable variables with an intention to explain, predict and control a phenomenon (Leedy, 1993).

Qualitative business research is research that addresses business objectives through techniques that allow the researcher to provide elaborate interpretations of market phenomena without depending on numerical measurement. Its focus is on discovering true inner meanings and new insights (Babin & Griffin, 2009).

The research design used was descriptive and explanatory type. Descriptive research design is a scientific method, which involves observing and describing the behavior of a subject without influencing it in any way. Descriptive research is often used as a precursor to quantitative research designs, the general overview giving some valuable pointers as to what variables are worth testing quantitatively. Explanatory Research is conducted for a problem which was not well researched before, demands priorities, generates operational definitions and provides a better-researched model.

#### **3.2 Population, Sample size and sampling procedure**

Sampling involves any procedure that draws conclusions based on measurements of a portion of the population. In other words, a sample is a subset from a larger population (Babin & Griffin, 2009).

The target population were those persons who are critical for the firm's success. These were selected managers and supervisors. Purposive sampling used to refine the respondents based on their significance for the study and location. There were fifty-three management staffs in Ries Engineering, which included managers and supervisors. Out of the 53 management staff, four managers and one supervisor were from branch offices, outside Addis Ababa. Based on the scope of the study, which focused only on the head

office due to location advantage, the four branch managers and a supervisor were deducted. Therefore, the total number of respondents became 48.

The composition of the management structure is divided in to four. Top level, middle level, first line managers and supervisors. The top management level has four managers, which include general manager, deputy manager, internal audit manager, and executive secretary. The middle level has eight managers who lead the three business units, rental, and finance department. The first line managers group has twenty-three managers who leads the operation, marketing, sales, product support, and training departments under the middle level managers.

The Composition of the respondents viewed by departments can be grouped into sales department, product support department, parts department, rental department, agriculture business department, finance and administration department, IT department, marketing department, training department, Ford sales division, ford parts division, and ford service division. Table below summarized the number of respondents in terms of managerial position, sex and age.

Table 3.1 Summary of respondents based on age and sex

No	Type of position	Population	Age of selected respondents				Sex of selected respondents		Selected number of respondents
			30-40	41-50	51-60	above 60	Male	Female	
1	Top management	4	1	0	3	0	2	2	4
2	Middle Level Management	8	0	3	5	0	0	8	8
3	Operational Management	23	3	6	6	4	0	19	19
4	Supervisors	18	1	15	0	0	0	17	17
<b>Total Number of respondents</b>									<b>48</b>

Source: own survey,2019

From the above table, there are three female managers including the executive secretary, twenty-eight are male managers and all the supervisors are male. The age composition shows four managers are above sixty, three managers under the age of forty, one supervisor below forty.

### **3.3 Data sources and data collection method**

In this paper, both primary and secondary data were used to undertake the research. The primary data was collected using a questionnaire. The respondents provided their response in the form of extent of agreement (Likert scale) type and Nominal scale type. While the secondary data was collected by reviewing the company document and other related institution's document that focuses on the competitiveness of the company.

### **3.4 Scale Development**

Though there is no explicit "rule" for the stages of scale development, certain steps need to be included for claiming that a scale is reliable and valid. The reliability of a scale is very important and refers to its repeatability and lack of measurement error. This is tested by internal-reliability tests (Cronbach's  $\alpha$ ) and by a test-retest reliability of scores over time.

Questionnaire development were performed first by examining questionnaires of previous works done on different sectors competitiveness. The questions were selected to represent those variables selected for hypothesis testing of competitiveness. Questions for government policy and company strategy derived from a study on "Assessing the determinant factors of competitiveness of traditional close industry". While questions for firm size are derived and developed from the study, "Firm-level Competitiveness and Technology in Vietnam: Evidence from a Survey in 2010". Question for Productivity of the company selected and adjusted from "Competitiveness of Ethiopian Shoe Industry: Response to Export Market". In addition, questions for financial performance and customer satisfaction were derived from "the work place employment relations survey" and "Effects of after sale services on customer satisfaction and loyalty in automotive industry of Ethiopia" respectively. The questions were then organized in the form of a five point Likert scale questionnaire and tested for reliability. Finally, the questionnaire were used to collect the primary data needed by making some adjustments on questions, which have effect on the respondents.

### **3.5 Data analysis method**

The data was analyzed by using SPSS 20 software. Correlation method is used to measure the relation between the variables that determine competitiveness. The coefficient of determination is used in order to evaluate the proportion of common variation between variables. The significance level was also calculated for each correlation to know about the reliability of the correlation. The test of significance is based on the assumption that

the distribution of the residual values (i.e., the deviations from the regression line) for the dependent variable  $y$  follows the normal distribution, and that the variability of the residual values is the same for all values of the independent variable  $x$ . Finally, the analysis is presented in the form of tables and figures to present a clear picture of the study findings at a glimpse.

### **3.6 Reliability and Validity**

The reliability refers to a measurement that supplies consistent results with equal values. It measures consistency, precision, repeatability, and trustworthiness of a research. It indicates the extent to which it is without bias (error free), and hence insures consistent measurement cross time and across the various items in the instruments (Twycross & Shields, 2004).

Some qualitative researchers use the term 'dependability' instead of reliability. It is the degree to which an assessment tool produces stable (free from errors) and consistent results. It indicates that the observed score of a measure reflects the true score of that measure. It is a necessary, but not sufficient component of validity. In quantitative research, reliability refers to the consistency, stability and repeatability of results, that is, the result of a researcher is considered reliable if consistent results have been obtained in identical situations but different circumstances. But, in qualitative research it is referred to as when a researcher's approach is consistent across different researchers and different projects (Twycross & Shields, 2004).

An expert view and Pilot study were conducted to test reliability and validity of questionnaire. These include; consulting experts in the field of the study, consulting an expert in questionnaire design and pretesting the questionnaire by using twenty sample of respondents. In addition, internal consistency method, which measures consistency of respondent's responses across the items on a multiple-item measure, was applied as a tool to check reliability of the questionnaire.

The reliability Test is done on the six competitiveness variables: government policy and regulation, firm size, productivity, company strategy, financial performance and customer satisfaction. Cronbach alpha coefficient, one of the internal consistency measurement method, was the main tool to see multiple question Likert scale questions are reliable. The results of the reliability test for the six independent variables are presented by the table below.

Table 3.2 Reliability statistics

No	Variables	Cronbachs alpha	N of items
1	Government policy and regulation	0.786	6
2	Firm size	0.830	7
3	Productivity	0.855	10
4	Company Strategy	0.911	10
5	Financial performance	0.82	10
6	Customer Satisfaction	0.847	7
Overall Scale Reliability		0.957	50

Source: own survey, 2019

From the above table the researcher found that questions for the company strategy have highest Cronbach's alpha value of 0.911 and questions for government policy and the lowest Cronbach's alpha value of 0.79. The average Cronbach's alpha value for the six variables of competitiveness became 0.84, which is a better value of reliability thus the reliability of the questionnaire is acceptable.

Validity is the extent to which the scores from a measure represent the variable they are intended to. Content validity was applied for the validity test to measure the extent which a measure covers the construct of interest. The content validity usually not assessed quantitatively thus, it was assessed carefully by checking the measurement method against the conceptual definition of the construct.

### 3.7 Study area

Ries Engineering is the leading pioneering dealer organization in Ethiopia. It opened its doors for operation in 1961. Reis Engineering formally represented caterpillar and Massey Ferguson as exclusive authorized dealer in Ethiopia since the commencement of its operations in 1961. Since then its operations have grown exponentially and its product portfolio has been actively diversified to cater for the evolving Ethiopian Construction, Mining, power and Agriculture sectors.

The company is trying to upgrade the different departments by creating different structural and system designs to facilitate and increase efficiency of different system as well as skill of employees. One of the internal strengths of the company is that it gives focus on the Enterprise Resource Planning (ERP) system of the business. The ERP of the

company is now on the conversion process from the old version of IRIUM system to the advanced and efficient of INFOR application.

The other competitive advantage, which the company has, is an operational Excellence. It is a Strategy implemented throughout the company and put into action. It is often complemented by an interactive process to engage managers and employees to ensure the bidirectional flow of goals, feedback, and other information.

Although, the company is trying to improve areas on IT infrastructure and productivity activities like operational excellence and ICRM, other areas of the company like sales and marketing needs some improvement to maintain the competitive advantage. The company now a day is facing stiff competition from existing as well as new entrants. Besides, unstable political conditions and shortage of hard currency are creating inefficiency on sales and delivery of machineries. To overcome these issues and to be able to compete sustainably, identification of competitiveness factors and evaluating those factors are essential.



## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

This chapter represents characteristics of the studied population, analysis and interpretation of the data collected. The sample respondents were management staffs and supervisors who have main roles on competitiveness of the company. For the data collection purpose, the researcher used Likert scale type questionnaire, which tried to comprehend questions that can best describe competitiveness in multi dimensions. Questions were developed from previous research studies and tested for reliabilities of the questions. Census study was performed to take all management staffs and supervisors for the study.

#### **4.1 Sample Characteristics**

The first part of the questionnaire presents general competitiveness questions to access the awareness of the respondents about competitiveness of the company. The second part of the questionnaire include questions, which can represent those variables that can affect competitiveness of the company. The last part of the questionnaire designed to present background information of the respondents.

Pilot study was conducted on fifteen selected respondents, who are senior employees with a lot of experience and assigned on different supervisor positions as an acting supervisor. From the pilot study the questionnaire passes the reliability test and made some adjustments on questions to be more easy and clear. The questionnaire was then given for forty-eight respondents and all of them fill and return the paper.

The demographic profile of the respondents is an important aspect of business research as it indicates respondent behavior can vary with changes in the demographic variables. Questions enquiring about the profile of respondents of business research can be used to make profiles of the respondents that are part of the study.

Profiles of respondents are made using geographical, demographical, psycho graphical and behavioral parameters. Identification of consumer segments remains one of the very first steps of strategic marketing. It helps to identify which group of respondents are more sensitive on specific study area. Besides, it clarifies pattern of the response related with their profile (Saunders, Lewis , & Thornhill, 2009).

Table 4.1, Profile of respondents

Profile of respondents		Frequency	Percent
Gender	Male	45	93.80%
	Female	3	6.20%
	Total	48	100%
Age	25-40	14	29.20%
	41-50	25	52.10%
	51-60	6	12.50%
	above 60	3	6.20%
	Total	48	100%
Educational Level	Vocational School	4	8.30%
	College/university	44	91.70%
	other	0	0.00%
	Total	48	100%
Position in the company	Top level manager	4	8.30%
	Middle level manager	9	18.80%
	operational Manager	10	20.80%
	Supervisor	14	29.20%
	Other	11	22.90%
	Total	48	100.00%
Work Experience	1-5 years	6	12.50%
	6-10 years	5	10.40%
	More than 10 years	37	77.10%
	Total	48	100.00%

Source: Own survey, 2019

Most of the respondents were male respondents with 93.8 percentage and the females accounts for 6.2% of the total population. The frequency table for back ground information of the respondent's displays that majority of the respondent's age is between 41-50 with a percentage of 52.1%. The least percentage 6.2%, which is assigned for the age category of above 60.

From the above table, majority of the respondents educational background falls on the college or university degree category with a percentage of 91.7% followed by vocational school graduates with a percentage of 8.3%. From the total respondents 52.1% accounts for supervisors and other respondents equal level with respondents. Majority of the respondents are well-experienced employees in the organization, with a work experience of more than ten years with 77.1%. It is expected that the respondents have ample amount of knowledge about competitiveness of the company.

#### 4.1.1 General Competitiveness

From the below mean score table, the researcher found that the majority of the respondents believed that the company needs a change. Besides, majority of the respondents indicated that the firm does not operate with its full capacity, by making spare part shortage and government rules and regulations as the main reasons.

Table 4.2, descriptive statistics of respondents for general competitiveness awareness

No.	Factors	Mean of the respondents
1	The current strengths of your company are sufficient to cope with competition	1.23
2	In the next five years the competitive position of your company will be strong	1.86
3	The Firm Operates with its full Capacity	1.06
4	Spare part shortage is one of the reasons for not being fully operational	4.85
5	Lack of market is one of the factors for not being fully operational.	1.45
6	Government rules and regulations is one of the factors for not being fully operational	4.04
7	Working Capital shortage is one of the factors for not being fully operational	1.23
8	The company is profitable	3.88
	Average mean Value	2.45

Source: own survey, 2019

However, the respondents replied that lack of market and shortage of working capital were not the reasons for not being operational. This can be indicated as an internal strength of the company and helps to build its competitive advantage. Based on the survey result, the company is not on the level to compete with other companies even though it is profitable. An average mean score of 2.45 indicates that the company is not performing in its full capacity due to the above factors thus needs to increase its effort to be more competitive in the future.

#### 4.1.2 Government Policy

Majority of the respondents indicated that Government does not provide adequate hard currency for the import of machineries. From the table below, the mean score for adequate hard currency provided by government is 1.27 indicating that most of the respondents agree with the shortage of hard currency. This decreases the efficiency of the company to make products and spare parts timely availability. From the data below, Policies by government also does not help to cushion against cheap import. Moreover, a high control on accomplishment of business operation is also the other problem addressed by the respondents. This might decrease the sales volume of the company and promotes less quality products to be sold with less price.

Table 4.3 Descriptive statistics of respondents for government policy

No.	Factors	Mean of the respondents
1	Policies by government help to cushion against cheap import	1.13
2	Government provides adequate hard currency for the import of machineries	1.27
3	There is high bureaucracy on accomplishment of operations	2.15
4	There is high control on accomplishment of operations	3.98
5	The establishment of local standards and regulations is suitable for the business operation	1.94
6	Taxes by government is adding a significant cost on the company business	4.06
	Average mean Value	2.42

Source: own survey, 2019

Taxes added by government is the main factor with a mean score of 4.06. This might increase the cost of importing a machine thus increase the selling price of the company product. An average mean score of 2.42 means that government rules and regulations have a moderate effect on the competitiveness of the company and needs to be addressed by applying effective strategies to comply with government policy and regulations. Searching for reliable information also helps to mitigate government policies.

### 4.1.3 Firm Size

The market coverage of the company decrease in the past five years. Majority of the respondents indicated that the company does not deliver new products and services based on market changes with a mean value of 1.94 and 1.85 respectively. Moreover, the company is not attentive to external changes that decrease the performance. The above explained factors also linked with the decrease of market coverage of the company in the past five years.

Table 4.4 descriptive statistics of respondents for firm size

No.	Factors	Mean of the respondents
1	The company overcomes the actions of the competitors over the past five years	1.27
2	The market coverage of the company increases in the past five years	1.91
3	The business is growing by facing environmental challenges	2.04
4	The company delivers new products based on market change	1.94
5	The company delivers new services based on market change	1.85
6	The number of customers is increasing each year	1.85
7	The company performance enhanced by being attentive to external changes	1.96
	Average mean Value	1.83

Source, own survey, 2019

From the above table it can be drawn that the company is not using its firm size to create competitive advantage on competitors. On the other hand, the total mean of firm size 1.83 shows that the company's ability to use firm size as a means of competitiveness is below average.

#### 4.1.4 Productivity

Based on the survey data, although skilled labor is available with fair price, the company is not involving employees in planning. A mean score of 1.25 explain this situation. Nevertheless, the company has a good reputation on the usage of advanced communication technologies to communicate with its foreign suppliers. The availability of business infrastructures is also an advantage for better execution of business operations.

Table 4.5, descriptive statistics of respondents for productivity

No.	Factors	Mean of the respondents
1	Company has improved its ability to identify new service opportunities	1.98
2	Skilled labor is readily available	4.12
3	Employees are effectively involved in planning	1.25
4	The delivery of products executed efficiently	1.98
5	The company seeks market by using different sources of information	4.06
6	The delivery of products executed timely	1.9
7	The firm communicates with its foreign suppliers with advanced communication technologies	4.8
8	Company has plans for the future that would insure sustainability of services	4.13
9	Infrastructures are readily available	4.00
10	Skilled labor is available with fair price	4.06
	Average mean Value	3.22

Source: own survey,2019

The strength of the company better explained by its market seeking method. It uses different sources of information for market search. However, the delivery of products does not executed efficiently and timely. This can be a key factor that hinders productivity of the company. A Total mean score of 3.22 indicates that the company has

better attention towards productivity but needs to improve on the development use of skilled manpower.

#### 4.1.5 Company strategy

Data from the survey shows that, the company do not have adequate information about competitor's strategy and features although there is regular meeting on competitor's action.

Table 4.6, descriptive statistics of respondents for company strategy

No.	Factors	Mean of the respondents
1	Information against Competitors actions is regularly discussed to inform the formulation of new strategies	1.31
2	The company applies effective strategies to win the competition in the market	1.92
3	The strategy in the past was effective to improve competitiveness of the company	1.81
4	Competitors feature is well predicated	1.92
5	There is high level of competition between companies in the industry	4.83
6	Competitive strategy regularly reviewed for competitiveness	1.77
7	Competitors strategy are well understood	1.19
8	Market research is regularly undertaken within the company	1.29
9	There is a well-established strategy to attract new customers in the near future	1.88
10	The company has a good image in the market	4.75
	Average mean Value	2.26

Source: own survey, 2019

Moreover, the respondents indicated that market research is not regularly undertaken by the company in the industry characterized by high level of competition. From the table above an average mean value of 2.26 indicates the company strategy is performing below

average and needs to be addressed . From the above data, it is clearly indicated that the company is operating its business due to its good image in the market.

#### 4.1.6 Financial performance

From the SPSS output mean scores, the number of employees and the total capital expenditure is increasing with a mean of 4.08 and 4.02 respectively. This has to be supported by sales growth to cover operational costs needed. However, the survey result shows that the sales is not growing in an increasing rate.

Table 4.7, descriptive statistics of respondents for financial performance

No.	Factors	Mean of the respondents
1	The sales is growing in an increasing rate	1.25
2	The number of employees is increasing	4.08
3	The total capital expenditure is increasing	4.02
4	The total employment cost is decreasing	1.91
5	The company is adequately financially resourced	3.96
6	The company has effective financial management system	4.12
7	Financial resources are effectively and efficiently mobilized and utilized	1.88
8	The company has tools for financial planning, control, measurement and reporting	4.04
9	The average retained earnings increase over the past five years	1.33
	Average mean Value	2.95

Source: own survey,2019

The analysis also shows the company has effective financial management system and has tools for financial planning, control, measurement and reporting. However, financial resources are not effectively and efficiently mobilized and utilized. The effect is also described by the increasing total employment cost. The sales is not increasing in an increasing rate. This has an overall negative effect on the average retained earnings



increment over the past five years. An average mean score of 2.956 indicates that financial performance of the company is above average.

#### 4.1.7 Customer satisfaction

Majority of the respondents replied that customer needs are the basis of Ries Engineering business operations. From the table below, it is shown that efforts are not well coordinated in the company to increase superior value for customers. In addition, customers' expectations are not regularly measured, communicated to employees and meet beyond expectation.

Table 4.8, descriptive statistics of respondents for customer satisfaction

No.	Factors	Mean of the respondents
1	The company has analytical capabilities that leads to learning from mistakes	1.96
2	Efforts are well coordinated in the organization to increase superior value for customers	2.02
3	Customer expectations are regularly measured, communicated to employees and meet beyond expectations	1.23
4	Customer needs are the basis of company operations	4.77
5	Individuals in product support department interact directly with customers to learn how to serve them better	4.1
6	Company offers innovative products and services in a dynamic manner	3.91
7	Company has mechanisms to deal with customer complaints	1.38
8	Company timely adapts to the customer needs	4.1
	Average mean Value	2.93

Source: own survey,2019

Customer complaints are the basis for continuous product improvement and customer satisfaction. However, the company does not have mechanism to deal with this complaints. This can have a direct effect on the sales growth of the company. All the above points indicates that Ries Engineering has low reputation towards customer

satisfaction. An average mean value of 2.93 indicates that the company is on the position that gives focus for customer satisfaction but needs to strive better.

#### 4.2 Correlations Results

Pearson's correlation was performed to examine the strength of relationships between the dependent variable, competitiveness and the independent variables (customer satisfaction, government policy, company strategy, firm size, productivity and financial performance).

Table 4.9, correlations between independent and dependent variables.

Pearson correlation		comp.	Gov.	CS	S	FP	FS	P
COMP.	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	48						
GP	Pearson Correlation	0.085*	1					
	Sig. (2-tailed)	0.040						
	N	48						
CS	Pearson Correlation	0.02*	-0.132	1				
	Sig. (2-tailed)	0.043						
	N	48						
S	Pearson Correlation	0.117*	-0.009	-0.054	1			
	Sig. (2-tailed)	0.031						
	N	48						
FP	Pearson Correlation	0.036*	0.253	-1.57	0.201	1		
	Sig. (2-tailed)	0.045						
	N	48						
FS	Pearson Correlation	0.205*	-0.143	-0.216	0.318	0.155	1	
	Sig. (2-tailed)	0.023						
	N	48						
P	Pearson Correlation	0.318*	0.302	0.097	0.12	-0.043	0.074	1
	Sig. (2-tailed)	0.010						
	N	48						

\*Correlation is significant at the 0.05 level (2-tailed).

Source: own survey, 2019

The survey shows that all variables have significant and a positive correlation with all P values less than 0.05. Competitiveness has relatively higher correlation with productivity than the other variables and has lower correlation with customer satisfaction. Correlation among variables indicated that government policy has negative correlation with customer satisfaction, strategy and firm size. The result also shows that customer satisfaction has a positive correlation only with productivity among the six competitiveness variables.

#### **4.2.1 Government policy and regulation with competitiveness**

Analysis by Samrawit (2016), shows that related and supporting industry is the most determinant factor of competitiveness in the sector, while, the demand conditions and role of government follow respectively. The result also shows that the factor conditions do not have a relationship with competitiveness in the sector. This is highly due to lack of designed product distribution channels, poor supply of quality raw materials with fair price and lack of modernized production and machine technology.

Findings of correlation test indicates very weak relation among the factor conditions and the other variables. Besides, government policy has a weak correlation with competitiveness of the company with a Pearson correlation 0.398. Role of government follow the demand conditions in affecting the competitiveness of the sector. From the analysis, there are good polices which supports the sector. However, problems are raised regarding to effective implementation, follow up and control.

#### **4.2.2 Correlation of Firm size with Competitiveness**

Analysis by Selcuk (2016), approaches competitiveness by financial performance describing it as, the ability of a firm to do better than benchmark companies in terms of profitability, sales, or market share. The results of the study indicates that the size of the firm has been found to have a positive and significant effect on both measures of current profitability, return on assets and gross margin.

The implication is that larger firm size can support the growing of the business at times when there is environmental challenges this can help to maintain competitive advantage of the company. In addition, it implies that the Company can overcomes the actions of the competitors by absorbing short time sales decrease. Increase in Firm size can also maintain competitiveness of the company through expanding the market coverage of the company, adjusting to sudden increase in customer demands with higher operating capacity.

#### **4.2.3 Correlation of Productivity with Competitiveness**

The analysis by Laureti & Viviani, (2010), show that during the period 2002 to 2005 there were significant movements of firms within the competitiveness distributions for both sectors. Considering that 2005 was a year of economic stagnation in Italy, there were not only movements of firms towards the lowest levels of competitiveness as expected but also towards the highest.

Referring to firms in the Textile and Clothing sector it is clear that although about a third of the firms in 2002 kept their position in the FC distribution in 2005, most firms either moved towards the entries near the main diagonal or they moved away from their previous position in rankings. 37.5% of the firms in the top quintile in 2002 retained their quintile position in 2005 as well, while another 21.8% moved down to the fourth quintile and 12.6% even reached the lowest quintile in 2005.

Regarding the firms with low FC indicators in 2002, 33.9% of the firms in the first quintile remained in the same quintile in 2005, while another 25.8% moved up to the second quintile in 2005. On the contrary, 9.5% of the firms in the lowest quintile in 2002 increased their competitiveness reaching the top quintile in 2005. The pattern is similar for firms in Machinery and mechanical equipment industries, which shows that there was a great change in firm competitiveness rankings from 2002 to 2005.

As well as providing a technique for quantifying the concept of competitiveness at firm level. The study found that productivity has a substantial effect on firm competitiveness in both sectors and it is stronger in 2002 than in 2005. These results support Porter's theory as they suggest that the competitiveness and the productivity of a firm are analytical related to each another and therefore they are useful for making better decisions at firm level in order to be more competitive.

The above analysis support the findings of this study that positive correlation of productivity is means the Company has ability to identify new service opportunities to expand its market coverage. Besides, available skilled labor will provide better efficiency and effectiveness on the job. Productivity also linked with employee's involvement in planning and delivery of products executed timely. The company seeks market by using different sources of information. Communication methods with foreign suppliers using advanced communication technologies also have high impact on competitiveness of the company indicating a mean value of 4.8.

#### **4.2.4 Correlation of Company strategy with competitiveness**

A study by Nderitu (2015), sought to establish the effect of competitive strategies on performance of Bamburi Cement Limited. From the findings majority of the respondents strongly agreed that the adoption of right competitive strategies allows the company to develop a plan that enables them to offer the right product to the market as shown by a mean of 4.85. The effectiveness of the competition tools is essential for an appropriate

competitive strategy as shown by a mean of 4.60. The analysis also shows that the company's sales promotion strategy must be very compelling, attractive and unique among competitive offerings as shown by a mean of 4.37.

Effective competition campaign should enable the company to successfully out-brand its competitors as shown by a mean of 4.21 and an effective brand strategy enables marketers to sell more and win the market share as shown by a mean of 4.20. In the case of Ries Engineering, the correlation of company strategy with competitiveness of the company has a positive relationship. This can support the findings of the above study. One of the elements of company strategy is company image in the market. Ries Engineering has good company image in the market with a mean value of 4.75, which is the result of the brand image the company possess. However, Ries Engineering is not in the position that have ample Information against Competitors actions and does not have effective strategies to win the competition in the market. Moreover, the strategy in the past was not effective to improve competitiveness of the company.

#### **4.2.5 Correlation of Financial performance with Competitiveness**

Analysis from the research on Factors affecting Firm competitiveness by Selcuk (2016), suggest that several firm specific factors are significant in explaining variations in the financial performance and competitiveness of Turkish firms. The analysis results derived from the study were helpful in exploring the relationship between firm competitiveness or financial performance and several firm specific variables including leverage, liquidity, firm size, international sales, R&D expenditures and growth. Although, Ries Engineering has effective financial management system and, has tools for financial planning, control, measurement and reporting, financial resources are not efficiently utilized. This has a major effect on the average retained earnings of the company which does not increase over the past five years.

Financial managers could take these results into consideration for decision making and use various instruments to control some of the firm characteristics to obtain more favorable performance outcomes. For instance, liquidity is a desirable factor to improve firms' competitiveness. Similarly, investigating some overseas opportunities could be desirable as exports have a positive effect on financial performance. Expanding the scope of the operations and achieving a larger firm size could also be beneficial. All in all, decision makers should think beyond cost reduction and industry analysis and consider

additional firm specific factors to improve the financial performance of the firms they are running.

#### 4.2.6 Correlation of Customer satisfaction with Competitiveness

Spearman rank correlation revealed that 5 criteria of customer orientation are dominant for firms and managers are probably conscious of their importance for competitiveness. They are: product/service innovativeness, flexible products adaptation to customer requirements, products/services quality, degree of customer care and brand equity (Klapalová, 2011).

Findings by Lingesiya (2012), show a set of five separately identifiable factors that have positive and significant impact on the performance of small-scale industries in Vavuniya district. Although customer satisfactions with managing change, growth in business & income level emerged as the first and second most highly loaded factors for the performance of their industries. Similarly, growth in profitability, growth in turnover, growth in number of employees have been perceived as third, fourth and fifth important factors.

#### 4.3 Normality Test

The researcher took the shapiro-wilk test column, for the normality test of the data gathered, which is used for samples less than fifty. It is used as a test of assumption for the regression analysis.

Variables	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
govtpolicy	0.277	48	0	0.852	48	0
competitiveness	0.202	48	0	0.937	48	0.012
customer satisfaction	0.182	48	0	0.93	48	0.007
strategy financial	0.166	48	0.002	0.954	48	0.057
performance	0.179	48	0.001	0.947	48	0.031
productivity	0.182	48	0	0.935	48	0.01
firmsize	0.156	48	0.005	0.948	48	0.032

Source, own survey,2019

If the Sig. value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution. From the above table, data for company strategy with significance value of 0.057 has a normal distribution. As the number of sample size increases the Normal distribution of the data increases.

**4.4 KMO AND BARTLETT'S TEST**

Kaiser-Meyer-Olkin (KMO) Test is a measure of how suited your data is for Factor Analysis. The test measures sampling adequacy for each variable in the model and for the complete model.

Table 4.11, KMO and Bartlett's Test

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling		.485
Bartlett's Test of Sphericity	Approx. Chi-Square	29.506
	df	21
	Sig.	.102

Source : own survey, 2019

The statistic is a measure of the proportion of variance among variables that might be common variance. The lower the proportion, the more suited data is to Factor Analysis. From the Kaiser – Olkin Measure of sampling adequacy the researcher found that a KMO value of 0.489.which is below the accepted value of 0.5. This means that the results of factor analysis probably would not be very useful.

**4.5 Regression Analysis**

**4.5.1 The effect of all independent variables on the dependent variable, competitiveness.**

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable competitiveness. The variables we are using to predict the value of the dependent variable are called the independent variables (government policy, firm size, productivity, company strategy, financial performance and customer satisfaction). The table below displays the different values of the multiple regression test.

Table 4.12, summary of multiple regression output.

Model	Standardized Coefficients	t	Sig.	Collinearity		Model Summary			
				Statistics					
				Beta	Tolerance	VIF	R	R square	Adjusted R square
(Constant)	0.837	0.993	0.327			R			
customer satisfaction	0.039	0.256	0.799	0.892	1.121		square	R square	Watson
strategy	-0.012	-0.076	0.94	0.852	1.174	0.369	0.136	0.01	1.993
financial performance	0.021	0.134	0.894	0.841	1.189				
productivity	0.295	1.859	0.07	0.839	1.192				
firmsize	0.196	1.203	0.236	0.793	1.261				
govtpolicy	0.024	0.144	0.886	0.764	1.309				

Source: own survey, 2019

From the above multiple regression table, all the tolerance values are higher than 0.1 and all the variance inflation factor values for the independent variables are below 2.5 implies that, the there is no problem in multi collinearity.

The value of Durbin Watson factor is 1.99, which is approximately 2. This implies that there is no auto correlation between residuals. This makes the multiple regression analysis free of making inefficient estimation of the regression coefficients, under estimation of the error variance (MSE), under estimation of the variance of the regression coefficients, and inaccurate confidence intervals.

The R statistic value of 0.369 indicates that there is below average relationship between the independent variables and competitiveness. The R square value of 0.136 indicates that the dependent variable competitiveness is only expressed 13.6% by the independent variables tested above. The adjusted R square value is positive but it is close to zero supporting the above idea. This implies that Competitiveness is dependent on too many independent variables and needs advanced analyzing methods to make an in depth analysis of the study.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Summary of the findings and Conclusion**

The objectives of this study is to assess the determining factors of competitiveness in Ries Engineering Share Company. It is designed to perform firm level analysis, though there were no studies conducted on the competitiveness of the company and to add value on the field of study.

The Study was conducted by selecting and combining factors from two theoretical frame works. These are porter's diamond framework and the APP model. The factors selected and combined from the two frame works are government policy and regulations, firm size, productivity, firm strategy, financial performance and customer satisfaction. The selected respondents were those employees believe to have idea of competitiveness and participates on the formulation of strategies and plans of the company. This includes the management staffs and supervisors of Ries Engineering share company.

From the results of descriptive statistics, it is indicated that Government does not provide adequate hard currency for the import of machineries. This might hinder the efficiency of importing machineries. The other major challenge observed is that Ries Engineering cannot compete with competitors due to inefficiency of product delivery. On top of this, customers' expectations are not regularly measured, communicated to employees and meet beyond expectations. Company does not have mechanisms to deal with customer complaints, which is basic for improving the business operation of the company. This might create customer dissatisfaction leads to decrease in the sales volume.

The strategy of the company might also needs to be revised because the survey data indicated that competitive strategies are not regularly reviewed. In addition, the company does not regularly undertake market intelligence, which is used to understand competitor's strategy, and market research. This might affect the effectiveness of company strategy by limiting information access about competitor's position. Although the company has efficient financial management system and tools, The sales is not growing in an increasing rate and lacks effectiveness and efficiency on the utilization of financial resources.

The focus of the company towards customer satisfaction is also very less as it is indicated by the respondent. Although customer needs are the basis of company operations, efforts are not well coordinated in the organization to increase superior value for customers. On top of that customer expectations are not regularly measured, communicated to employees and meet beyond expectations. This also crosschecked by company's inefficiency to deal with customer complaints.

The results of the study indicates that all of the factors have correlation with competitiveness of the company. However, the strength of correlation was very weak. From the variables tested for correlation, productivity has relatively higher correlation with competitiveness of the company. Firm size and company strategy are the second and third factors that have higher correlation with competitiveness of the company respectively. The rest of the factors that is, government policy and regulations, financial performance and customer satisfaction have the least correlation respectively with competitiveness of Ries Engineering Share Company. Studies from other researchers indicates that correlation value for all of the above factors is expected to be higher as the sample size increases.

From the linear regression output, only productivity is significant for the study and has 10.1% power of explaining the dependent variable, competitiveness. The rest of the variables have a significant value of greater than the alpha value of 0.05. This might be either the size of the sampling or the type of model fit used for the analysis of the study.

Results of regression analysis show that the six main competitiveness indicators are driven by different quantitative and qualitative factors. This finding seems to reflect reality meaning that high financial performance does not necessarily bring high competitiveness. Moreover, a goal of high profitability may naturally be achieved by different measures that high export performance. This indicates that this study can be further study by increasing the sample size by examining different companies, modifying the model and including more variables to explain the situation better.

The above findings have high implications for the company and management staff. It also has high importance for the companies in the industry to assess and implement the proper mitigation, which can optimize the competitiveness of the company. For researcher, it can give some insights and used for an input for further studies.

## **5.2 Recommendations**

The machinery-importing sector in Ethiopia is expanding through time by facing different challenges. Ries Engineering as one of the companies needs to address and mitigate those factors that have a direct effect on competitiveness of the company. Based on the findings of the above study, the following suggestions are given to improve the productivity and competitiveness of the sector.

- Increasing availability of Spare parts to decrease the down time customers machinery.
- Designing and implementing company strategy compatible with government rules and regulations.
- Creating effective human resource strategies and marketing strategies that would insure effective utilization of skilled labor and increase market coverage of the company.
- Developing regular market research scheme and make a formal review
- Enhancing the company performance by being attentive to external factors like change in government policy.
- Further studies in the area must be conducted using different theoretical frameworks like European foundation of quality model (EFQM) and advanced analytical methods like the Generalized Method of Moments (GMM) Besides, involving all stakeholders to get a better insight about situation under study should be done.

### **5.3 Limitations of the Study**

Competitiveness is combination of too many factors that needs to be addressed. In this study the researcher was forced to be limited to six competitiveness variables to determine competitiveness of Ries Engineering. Thus to get a fine detail on assessment of competitiveness it is essential to examine as many variables as possible.

Besides, competitiveness is more a strategic move by nature and managers were not willing to assess the company document as a result the researcher was forced to make the study based on survey questionnaire only. It was difficult to make document review of the company. Document revision is the better way to assess the determining factors of competitiveness as it provides clear indicators rather than respondent opinions. Thus for further studies adding document review will be a good addition to assess and evaluate the variables with a better precision.

Due to limitation of time and budget, the study only tried to analyze firm level competitiveness by selecting Ries Engineering as focal company. However to analyze the factors thoroughly it would be good to have a larger population size by including more companies in the study.

The researcher tried to analyze competitiveness using correlation and simple regression methods. However, due to the complexity of competitiveness, finding a more accurate result is difficult. Thus, other researchers might use a more advanced methods to analyze competitiveness effectively.

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## APPENDIX I



**ST. MARY'S UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

QUESTIONNAIRE (ENGLISH)

### **General Instruction**

The purpose of this study is to investigate the determinant factors of competitiveness in Ries Engineering. This questionnaire is aimed at collecting information from the stakeholders of the company regarding the type and magnitude each variable. The ultimate objective of collecting the information is purely for the academic purpose. The output of the study entirely depends on the accuracy of the information. So, you are kindly requested to fill this questionnaire accurately and truly. Moreover, all of your responses to any of the question will be treated with highest confidentiality and no report of the study will ever expose your identity. I am hereby asking for a little of your time.

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**PART ONE**

**GENERAL AWARENESS ON COMPETITIVENESS (PLEASE TICK YOUR CHOICE)**

Please rate the extent, Tick as appropriate (✓) to which you agree or disagree with each statement.

	<b>FACTORS</b>	<b>Codes</b>				
		<b>Strongly dis agree</b>	<b>Dis agree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	The current strengths of your company are sufficient to cope with competition					
<b>2</b>	In the next five years the competitive position of your company will be strong					
<b>3</b>	The Firm Operates with its full Capacity					
<b>4</b>	Spare part shortage is one of the reasons for not being fully operational					
<b>5</b>	Lack of market is one of the factors for not being fully operational.					
<b>6</b>	Government rules and regulations is one of the factors for not being fully operational					
<b>7</b>	Working Capital shortage is one of the factors for not being fully operational					
<b>8</b>	The company is profitable					

## PART TWO

**EXAMININE THE EFFECT OF EACH VARIABLE (PLEASE TICK YOUR CHOICE)**

**Please rate the extent, Tick as appropriate (✓) to which you agree or disagree with each statement.**

	<b>FACTORS</b>	<b>Codes</b>				
		<b>Strongly dis agree</b>	<b>Dis agree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	Company Has analytical capabilities that leads to learning from mistakes					
<b>2</b>	Policies by government help cushion against cheap import					
<b>3</b>	Information regarding competitors' action is regularly discussed to inform the formulation of new strategies					
<b>4</b>	The company overcomes the actions of the competitors over the past five years					
<b>5</b>	Company has improved its ability to identify new services opportunities					
<b>6</b>	Government provides adequate hard currency for the import of machineries					
<b>7</b>	The market coverage of the company increase in the past five years					
<b>8</b>	The Number of employees is increasing					
<b>9</b>	There is high bureaucracy on accomplishment of operations					
<b>10</b>	The business is growing by facing the environmental challenges					
<b>11</b>	The company is adequately financially resourced					

<b>12</b>	The company Delivers new products based on market change					
<b>13</b>	Your company is applying effective strategies to win the competition in the market					
<b>14</b>	Skilled labor is readily available					
<b>15</b>	The company has tools for financial planning, control, measurement and reporting					
<b>16</b>	Employees are effectively involved in planning					
<b>17</b>	The strategy in the past was effective to improve Competitiveness of the company					
<b>18</b>	Financial resources are effectively and efficiently mobilized and utilized					
<b>19</b>	The delivery of products executed efficiently					
<b>20</b>	Competitors' feature is well predicated					
<b>21</b>	Efforts are well coordinated in the company to create superior value for customers					
<b>22</b>	The company Delivers new services based on market change					
<b>24</b>	There is high level of competition between companies in the industry					
<b>25</b>	Company performance enhanced by being attentive to external changes					
<b>26</b>	The total employment cost is decreasing					
<b>27</b>	Competitive strategy regularly reviewed for competitiveness					

<b>28</b>	The delivery of products executed timely					
<b>29</b>	There is high control on accomplishment of operations					
<b>30</b>	Competitors strategies are well understood					
<b>31</b>	The establishment of local standards and regulations are unsuitable for your business operation					
<b>32</b>	Customer expectations are regularly measured, communicated to employees and meet beyond expectations					
<b>33</b>	Market research is regularly undertaken within the company					
<b>34</b>	The company communicate with its foreign Suppliers with advanced communication technologies.					
<b>35</b>	The Sales is growing in an increasing rate					
<b>36</b>	The number of customers is increasing each year					
<b>37</b>	The Total capital expenditure is increasing					
<b>38</b>	Your company has a good image in the market					
<b>39</b>	Company timely adapts to the customer needs					
<b>40</b>	Company has plans for the future that would insure sustainability of services					
<b>41</b>	The company has effective financial management systems					

<b>42</b>	Taxes by government is adding a significant cost on the company business					
<b>43</b>	Customer needs are the basis of company operations					
<b>44</b>	There is a well-established strategy to attract new customers in the near future					
<b>45</b>	Individuals in product support department interact directly with customers to learn how to serve them better					
<b>46</b>	Infrastructures (power supply, telecommunication, port facility, roads and others) are readily available					
<b>47</b>	company offers innovative products and services in a dynamic manner					
<b>48</b>	Skilled labor is available with fair price					
<b>49</b>	Company has mechanisms to deal with customer complaints					
<b>50</b>	The Average retained earnings increase over the past five years					

**PART THREE**  
**BACK GROUND INFORMATION**

Please Put 'X' for the multiple-choice questions and state your opinions briefly for the short answer questions.

1 Age      1) 25-40       2) 41-50       3) 51- 60       4) above 60

2. Sex      1) Male       2) Female

**3. Educational Level**

1) Vocational School       2) College/University

3) Other  Specify \_\_\_\_\_

**4. Respondents Position in the company**

1) Top-level manager       2) Middle level manager

3) Operational Manager       4) Supervisor

5) Other  specify \_\_\_\_\_

**5. Respondents work experience in years**

1) 1-5       2) 6-10       3) more than 10 years

**THANK YOU FOR YOUR TIME!!!**