

INCREASE EFFECTIVENESS OF DISTRIBUTION SYSTEM IN BOTTLED MINERAL WATER INDUSTRY THROUGH REDUCING MAJOR CHALLENGES

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ABSTRACT

In Ethiopia bottled mineral water manufacturing companies play a great role in economic development of the country through producing a mineral water which is essential for human life for the peoples. In the existing bottled mineral water company 56% losses is due to ineffectiveness distribution system of the companies. Currently the existing bottled mineral water has a major distribution challenges, i.e. low morale of distributor's, lack of maintenance and services of distribution materials, shortage of bottles, less faithfulness between company management system and distributors, increases of product price without management decision, price abuse of distributors, management and distribution system gap, less attentions of marketing channel, inequality of customers and unclear and untruly information on distribution system. Because of those challenges they lose their competitive advantages and existing customers with dissatisfaction. Due to this reason it needs to increase their effectiveness of distribution system by reducing the existing major challenges of distribution, in order to create sustainable competitive advantages for the companies and satisfy the customers with increasing demand of the product. The objective of the paper is to increase the effectiveness of distribution system by reducing the existing challenges of bottled mineral water company through creating distributor's framework, increases of distributor's motivation, effective information transfer, effective management skill, uses of proper market channel and manual distribution centers, investing on bottles and preventive maintenance for distribution materials. The end result of the paper to create sustainable development and competitive advantage for a company with increases of demand and customer satisfaction.



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1. INTRODUCTION

Companies all over the world are pursuing distribution system used to reduce costs, increase customer satisfaction, better utilize assets and build new revenues (Teka, 2019) and in the modern world the effectiveness distribution system is essential for organization in order to compete their competitors with a proper way

(Grozniika & Trkman, 2012). In developing countries there is a series challenges/problems are there in distribution systems of water to the user and also the companies are uncompetitive both local and internationally, because structural distribution systems and government policy it hamper/obstacle its development role and the improvement of the distribution system and cost of distribution of the major

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challenges in bottle mineral water company with unsatisfactory for distributors during distribution system (Kusi et al., 2015). Ethiopia is one of the developing country and it has been providing opportunities for the private sectors to participate actively in investment activities. Competing successfully in any business environment today requires companies to become much more involved in how their suppliers and customers do business. As global competition increases, making products and services that consumers want to buy means that businesses must pay closer attention to where materials come from, how their suppliers' products and services are designed and assembled, how finished products are transported and stored, or what consumers or end product users are really asking for (for instance, many companies may not even know how their products are used in the final products bought by consumers or end users). The aim of any business is to meet the need of customers and subsequently make money. Businesses that are good at satisfying customers' needs have the best chance to grow and prosper, but In fact, for most companies to use effective distribution is cost effective and meets the growing demand is truly a challenge. The character and extent of business competition has altered in a very different way on that companies no longer compete against other companies. This is because the new basis of business competition lies outside the walls of an organization, and is determined by how effectively companies link their operations with their supply chain partners; suppliers, distributors, wholesalers, retailers and end costumers (Tesfa, 2018). In bottled mineral water there are a major challenges i.e. less integration between manufacturer, intermediaries, retailers and end user each other, there is no clear and true information between distributors and manufacturing management, lack of maintenance systems of the distribution infrastructures and distribution system is not fair all over the customers. In order to reduce the exist major challenges in distribution system and to facilitate company for highly competitive market, generating profit with customers satisfaction at a right place, quantity and time it require effective distribution systems with a proper distribution channel (Deneke, 2020). Bottled mineral water manufacturers companies in Ethiopia need improvement as an initiative to attain organizational performance through supplier relationship. This is because the drink manufacturing business is an emerging business and newly booming marketing in the country (Fikrie, 2020). To create business relationships with customers, suppliers and other strategic partners anchored on trust and long-term commitment then becomes a crucial competitive parameter. This is because the bottled water industry plays an important role in connecting various companies and make supply chain management noticeable. As a result, the bottled water industry around the world is attempting to perform their tasks in a more justifiable way, responding to the customers need along with the marketing pressure (Grozniika & Trkman, 2012). In Ethiopian bottled mineral water to create customer

driven, competitive and technology based it needs to implementing of the effective distribution system on their marketing systems and also Because of the collaboration between members of the chain, effective distribution gives significant opportunities to the firms involved in terms of cost reductions, revenue enhancement, flexibility, customer satisfaction, speed and economy of time (Kusi et al., 2015).

To examine the practices of effective distribution system the relationship between each participant is essential for a company i.e. Supplier and customer relationship, internal operations, Information sharing (Teka 2019).

2. LITERATURE REVIEW

Bottled mineral water

Water is essential to sustain life and satisfactory (adequate, safe and accessible) supply must be available to all (WHO, 2008). The purpose of water distribution system is to provide an adequate of water to customer at right place and right time (Van Zyl, 2014). Water is one of the human needs. Problems with effectiveness of the distribution system of bottled mineral water are serious in developing countries because of the existence of the inadequate resources to maintain in distribution system infrastructures and also existence of the illegal relationship/connections to distributions (Moe & Rheingans, 2006).

Distribution system and challenges

Distribution system is an important activity in the integrated supply chain management of the organization those produce a product for user and various people/workers has responsible for properly handling, storage and distribution a product (WHO, 2010) and In a current business, the most companies do not sell their product directly to the end user and it there intermediates to offer the product to market. Market channels is the mediator's link between producer and customer and it has a various activities (Fayyaz & Azizinia, 2016), most company uses intermediaries to bring their product to the final user (Yeboah, 2013), these intermediaries perform a variety of function and constitute a market channel. The importance of the channel for organization to improved level of product, knowledge, technical competence and selling a mass of product to the user through promotion (Guan, 2010) and The major challenges of the any organization is practically implementation of their distribution system it need clear information in the distribution system of organization (from manufacturer to intermediaries to end user and vase verse (Grozniika & Trkman, 2012) and Companies all over the world are pursuing distribution system used to reduce costs, increase customer satisfaction, better utilize assets and build new revenues (Teka, 2019). In distribution it should be emphasized that the customer of the organization is not only the final customers of the products, but also the individual intermediaries in the distribution channel (whole sellers, retailers, purchasing groups, etc.) with different needs (Zimon, 2017). According to Aberden Research the major challenges in

distribution of the product of the organization is lack of communication between each stakeholders and management system (Groznička & Trkman, 2012).

Existence of the improper distribution of the product for the companies it loss their customers and there is dissatisfaction of customers for their product (Yusuf Saleh, 2019). The major characteristics of distribution channel is the retailer is closer to the end customers than manufacturer and currently manufacturer may push products through distribution system without clear view of the exact preferences of their eventual customers (Guan, 2010). To days organization is influenced by advertising system of their products to the users, but some of the company the ways and systems of advertising has a problem (Frolova, 2014).

Effective distribution systems:

In the modern world the effectiveness distribution system is essential for organization in order to compete their competitors with a proper way (Groznička & Trkman, 2012). Effective distribution system play a great role in ensuring that customers get their product at the right place and right time. If there is no effective distribution system in the companies it can erode their competitive advantages of the company and customer retention. In the effective distribution it requires good management skill, synchronization and integration with overall organization and the result of effective destruction system is to achieving a sustainable competitive advantage for company and satisfaction of the user. For any organization to be effective there should be effective distribution management system process to convey finished product from producer to final customers, but without effective distribution the best product will not be delivered to the market and also customers. Distribution channel consists of a group of individual or organization that asses in getting the product to the user at the right place with right time. Distribution play a great role on generating profit for organization and also effective distribution system it provides customers with convenience in the form of availability with the right place and right time with according to the customers' requirements (Yeboah et al., 2013). Effective distribution system play a great role in a company by generating success for a company and maximize their profit with customer satisfaction with distributing the product is a basic companies to meet to the end user (Kabus & Nowakowska-Grunt, 2017).

Effective distribution system is used for individual economic operators, groups or company and country economy. Distribution means in a business in manufacturing is the allocation of products to the recipients and it includes all activities that enable the transfer of a product to end user. Distribution system are acquisition distribution system and logistic i.e. physical distribution system of product but acquisition distribution system management includes the management of distribution routes i.e. distribution channels. Logistic distribution is focused on bridging the space and time by transportation and storage and also order processing and shipment with supply logistics i.e. movement of

materials. There are different types of channels are there in distribution systems, like communication channel, distribution channel, and service channel. Distribution channel is a long route at which product travel from manufacture through marketing intermediaries [such as whole sellers, distributors and retailers] to the final customers/users. The existence of the effective distribution system in a company it used to maximize the value for customers and achieve a sustainable competitive advantage (Segetlija et al., 2011). Designing an effective distribution system requires finding the optimum between the organizing the physical flow of products and developing customer service strategies. Also effective distribution system focused on provide customer with an assortment of product and eliminating time space gaps between customers from the product manufacturer (Zimon, 2017).

In an organization it needs to identify their needs and preferences of not only the end customers, but also of the distributors of their products and market orientation involves all the components of the distribution channel like distributors and customers and also distribution system require effective communication between manufacturer and customers (Guan, 2010).

Managers and official sales always try to find the more efficient and modern methods of distribution through investigating transfer of product to user and appropriate decision on distribution it lead to the enhancement of the transfer speed, convenience of customers and reduction of cost with one of the main tools of company marketing is the efficient distribution system (Fayyaz & Azizinia, 2016). Global market it needs strong relationship between the manufacturer stakeholders with a chain of each department and customers in order to get sustainable development (Der Vorst & Jack, 2004).

In order to optimize the organization product distribution it uses proper distribution channel and the improvement of distribution infrastructures used to manage quality of product, distribution time and operation cost (Groznička & Trkman, 2012). Distribution channels can also describes a company's marketing situation and also it needs to meet and consider on be faithful to the product is to increase the awareness of customers and the purpose of the organization activities to satisfy customer desires because customers are the only reason for life and growth for this reason customer satisfaction to be a top level (priority) of the company, distribution system has a vital role in the movement of goods from manufacture to end user (Yusuf et al, 2019).

Advertising is a personal communication of information about products and their services through the various media and it used to advertising reaches customers living for a part and its public presentation shows to the buyer that the product is not contrary to social norms and the law, advertising plays a great role on the showing of their products to their users and different distribution advertisements are there: multicolor printing, television and others and also proper advertising system has a benefit for a company to becoming more professionally

organized and more quality performed with easy understanding of customers about a products. Doing multiple announcements and when the addressee it gets the message the organization compare their product with other competitive firms. A wide range of promotional activity, run by the company is some kind of evidence of company's popularity and success (Frolova, 2014).

Maintaining the distribution infrastructures is essential in implementation of effective distribution system of the bottled water company. Because it reduce water loss, financial losses, and health risks of the customers and also it increase customer satisfaction by attaining the requirement product to the end user with in the time (Van Zyl, 2014).

In implementation of the effective distribution system it needs proper and effective management organization in order to generate profit for organization with satisfaction of the user of product. In the competition of companies it require effective distribution of their product and better customer satisfaction (Zimon, 2017).

For this study it require assessment exists of the distribution system of the bottled mineral water companies, then identify exist major challenges of distribution system which affect the competitive advantages of the companies. Depend on the title of the paper, it review different relevant articles which related with title and find the ways to reduce those challenges and increase the effectiveness of the distribution system of the company. Then conclude the overall result with increases competitive advantage for company and increases customer satisfaction. Methodology steps are presented on Figure 1.

4. RESULT AND DISCUSSION

4.1 Existing distribution system of mineral bottled water

In the existing distribution system of the company there is direct and indirect distribution system. And also in each direct and indirect there is each branches of station.

3. METHODOLOGY

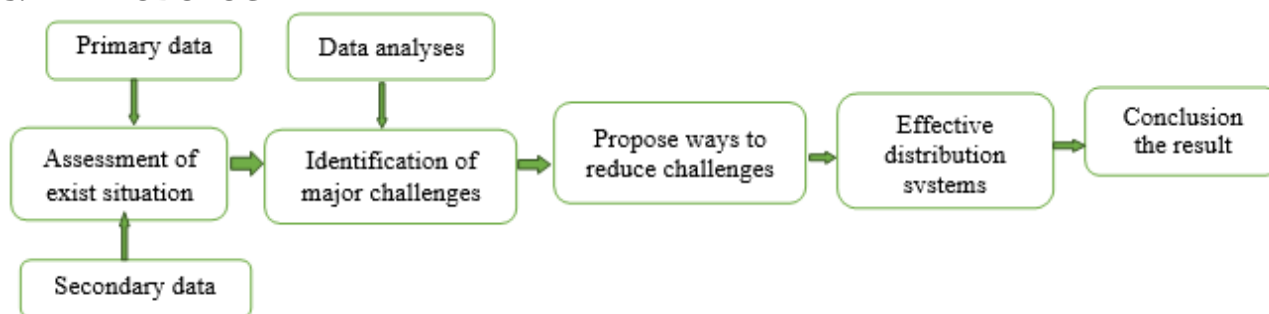


Figure 1. Methodology steps

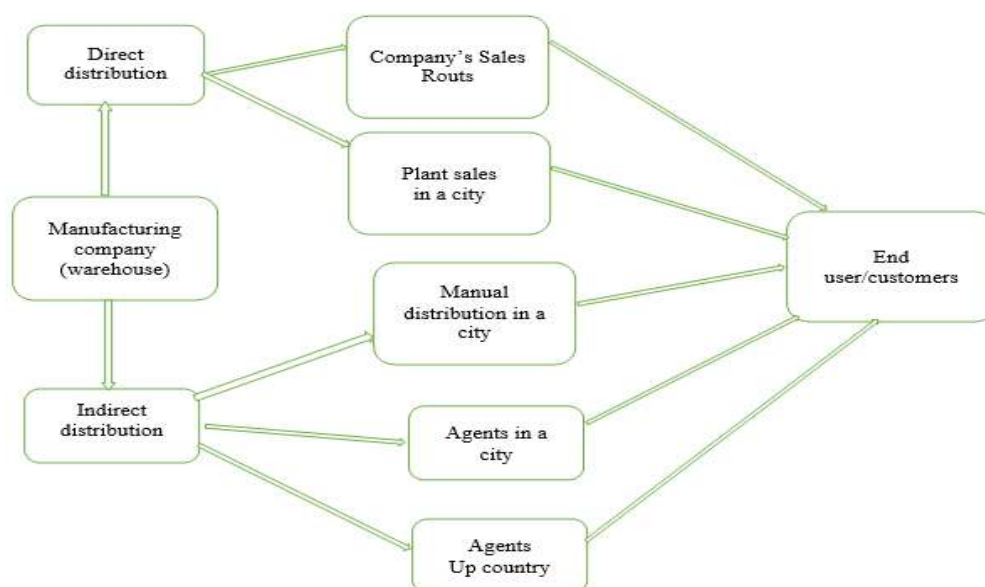


Figure 2. Existing distribution system

Table 1. Exist retailer routes

Sales routes	Number of outlets	Sales routes	Number of outlets
Rout 1	2130	Rout 11	832
Rout 2	987	Rout 12	1980
Rout 3	1369	Rout 13	1870
Rout 4	2467	Rout 14	1552
Rout 5	2088	Rout 15	4721
Rout 6	869	Rout 16	3013
Rout 7	1098	Rout 17	2087
Rout 8	3109		
Rout 9	1008		
Rout 10	979		
Total = 32159			

Bottled Mineral Water company distributor's performance about delivery time, company's representative treatment, supply of product, problem solving capacity and over all support to grow the business, retailers/outlets have rated as follows (Figure 2). Exist retailer routes are presented in Table 1.

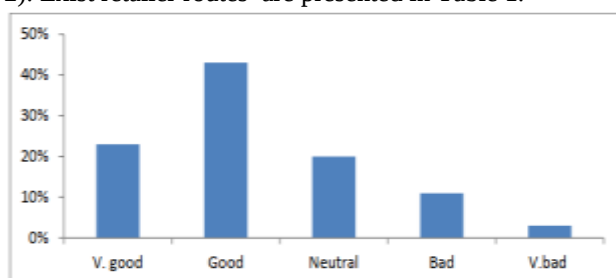


Figure 3. Retailers rating on delivery time

On the figure 3, bad and very bad rating which accounts about 15 percent because of problems related distribution systems i.e. lack of maintenance of infrastructures and transportation systems and it needs more jobs to do to improve its distribution system.

The most cases outlets keep less stock of company's product which eventually affect visibility, availability and at last sales volume.

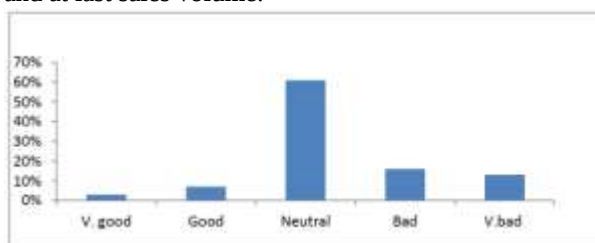


Figure 4. Retailers rating on the treatment of company's representative

Because of unclear and untrue information are there between retailers and management systems and also most of these retailers didn't get proper service from the

company. This indicated 10% as bad and very bad rating combined as 29%. This revolved around understanding problems and problem solving ability (Figure 4).

Bottled mineral water losses 8% money because many consumers haven't known them well as the company has not done marketing enough like TV & Radio commercials, free drinks, point of sales materials, etc. Also on the problem solving ability, the company management system was rated very low.

Sometimes retailers would like to buy products from the company than from distributors or stockiest for price, quality and legal matters and when there was product shortage some distributors were selling at a high price and yet didn't issue receipt with they did sale products whose have expired (Figure 5). Such conditions it affect the overall manufacturing of the company, because all distributors and retailers doing their jobs depend on their interest during this time there is no customer satisfaction for that product. In bottled mineral water 56% is due to ineffectiveness of the distribution systems of the company.



Figure 5. Purchase price from company vs. Distributors

Higher price 12% than what the company has set which eventually leads to price abuse to consumers or end users which subsequently erodes one of its competitive advantage in the company business. This is because distributors benefit is a discount on each crate they buy from the company with more they buy the more they sell and benefit they get, besides they do not have defined sales territory. All this process is unknown to company management system and it is a Cause of the losing their customers through a time

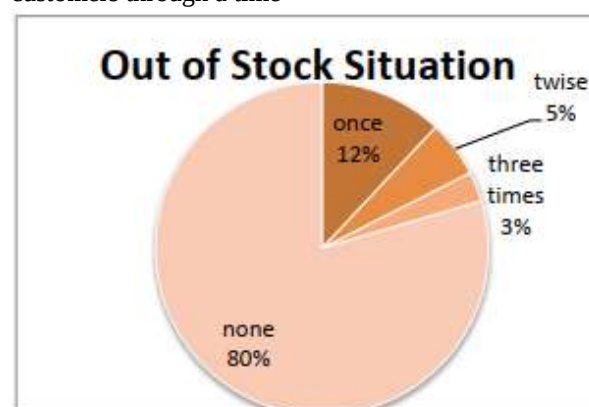


Figure 6. Out of stock situation

From total outlets 20% are running out of stock at least once per week which means it happens in over 6,400 outlets per week from the whole outlets (Figure 6). This is a huge loss in sales which gets to do with poor distribution system of a company.

4.2 Major challenges of Distribution system of the bottled mineral water company

The distributors depicted that bottled mineral water distribution system had many problems areas. For example, the company sales truck would go to the distributors after it had visited all the retailers without even leaving any single outlet for the distributors to sell. Such practice frustrated many distributors and As a result they lost interest in the business and made distribution very challenging.

There is a conflict between the distributors of the company, because of the there is no having map of sales rout to each sales distributor which was a wrong rout configuration. All distributors need their interest in case of that it jump there boundaries and interred to conflict. When the distributors not satisfying the services and payment of the company, it start additional distributing others products of the company competitors. Because distributors were keeping and distributing competitors product there was always conflict with company's officials. And also it's not good for the company, when two and more other manufacturing company products mixed and distributed at the same time by their distributors.

Major challenges of Distribution system of the bottled mineral water company are:

1). Low work moral of sales and distribution:

The moral of the distributors is very low because of they get less payment from the company, dissatisfied distributors with the discount given and sales turnover and Not enough manpower to do the job especially on the distributor's side. during that time it work the distribution of product depend on their interest and hide the information of the distribution situation and also not work their work not according to the goal of the company and satisfaction of the customers.

2). Lack of the preventive service and maintenance:

Frequent distribution truck break down hampered distribution effectiveness and it uses of very old trucks and get broken down frequently. Due to long year service the distribution sales trucks were broken frequently which has got direct impact on distribution effectiveness and frequent machine break down in production unit. The transportation road of the country is may be it is not comfortable for the distribution materials, so it needs periodically maintain and service all distribution infrastructures.

3). Shortage of empty bottles

Because of the different factors the production would cease for days just for not having enough bottles and crates which aggravated the problem in distribution.

4). Most of the companies far apart from main road

These affect the free movement of vehicles in general .i.e. there was high truck turnaround time which is the total time a truck takes to go to the trade and come back to the plant or depot.

5). Increases of prices of the product by distributors without agreement of the company management.

This is related with low morale of work and getting lees payment from company, due to this reason the demand of the product slowdown through the time.

6). Price abuse

Which related were not selling the product on the agreed price and they were either selling lesser or higher than the company's selling price.

7). Produced products

Serious bottles and crate shortage has made production as well as sales and distribution difficult and Poor quality product (.e.g. bad test, poor packaging etc.) caused high return from the trade, handling cost and product to expire.

8). Management and distributors gap

Existence of the less integration between management of the manufacturing company and distributors, during that time there is no proper plan of distribution and information.

9). Less attention for marketing systems

The company has given little or no marketing support such as TV and radio commercials, free drink to increase the demand of the product.

10). Distribution of product based on relationship.

In this case distributors distribute the product only for peoples has good relationship and more related each other's. Not see customers in equal form when it distribute, such conditions make a difference between a customers.

11). Improper distribution channels

When it use advertising their product only showing the bottled of the water and specking brand of the product or company, the there is no detailed showed about contents, uses and about prices to customers and others.

4.3 Reduce challenges and increase effectiveness and quality of distribution system of bottled mineral water

Reducing of the major challenges of the distribution of the company used for the company itself through getting more profit, sustainable competitive advantages and customer's satisfaction. In case of marketing channel with effective transfer of information in each stages, strong relationship between them and increasing of moral of all distributors (Figure 7).

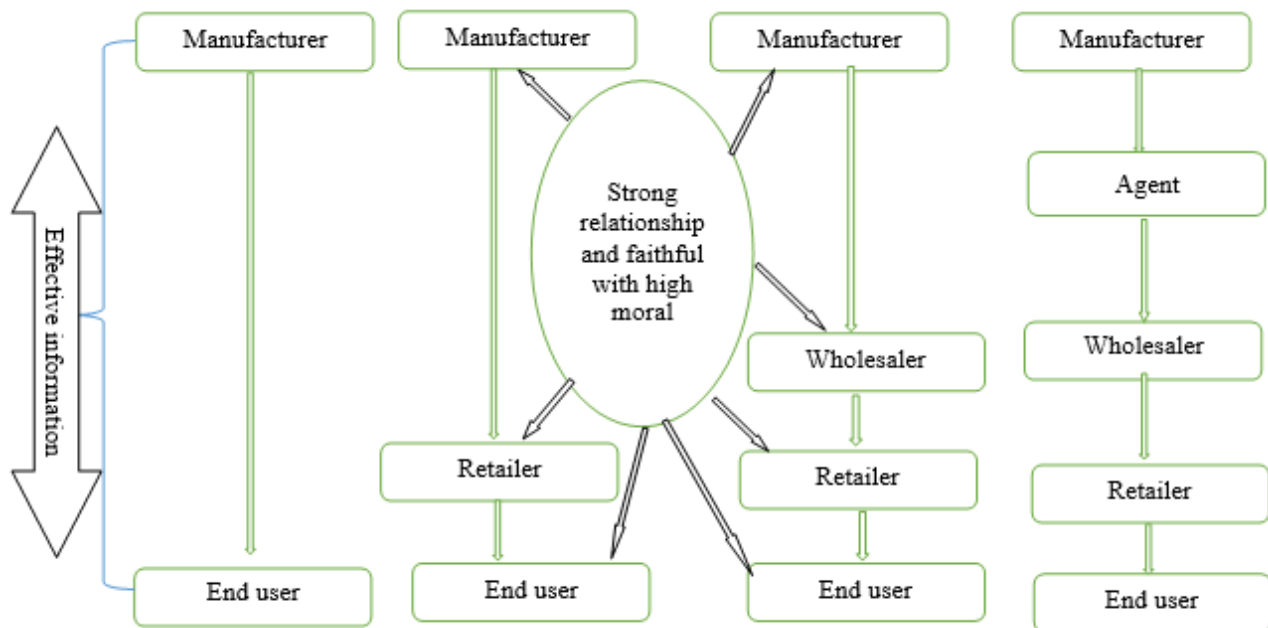


Figure 7. Proper market channel

The overall ways to reduce challenges of the distribution is through (Figure 8):



Figure 8. Overall ways to reduce challenges

A). *Preventive maintenance (PM) system on distribution infrastructures/materials.*

In both its distribution trucks and machinery so that the distribution effectiveness shall improve and PM is a regular inspection to be conducted on an asset before any brake down occurs and identify their root cause analysis and take corrective action accordingly with Scrap the old asset and replace it with the new one.

B). *Invest on bottles in order to reduce bottle shortage:*

Company has to invest on bottles and crates so that it will meet the growing demand in market place as well as in production unit.

C). *Creating distributors framework:*

Company believes that it can do distribution better with intermediaries, then the number of distribution centers are supposed to be enough to cover the number of outlets found in the market which is also one of the necessary

steps mentioned in the distribution frame work .i.e. designing distribution structure.

D). *Appointing manual distribution centers (MDCs):*

Preparing a document which has to be with appropriate criteria, not just based on relationship during distribution of the product.

E). *Increases of distributor's motivation:*

In case of motivational aspect, the channels members, MDCs or retailers must be given fair discount and number of outlets to serve with defined sales territory, better marketing support, quality products, etc. so that they exert effort without complain and help to achieve distribution objective.

F). *Effective management skill:*

Distribution management model also tells about how channel members like MDCs should be evaluated and controlled. It is known that any distribution strategy is as good or bad as its execution and to ensure this there must be proper evaluation and controlling mechanism. Also Sales and Distribution manager must regularly monitor distribution effectiveness through such tools as rout card, product availability and customers and have also suggested that channels performance must be measured against agreed target such as sales volume, average inventory level, customer service in terms of delivering the right type and quantity of product on time at the right price etc.

G). *Uses proper marketing channel and advertisement:*

Uses of different channels and showing what the products looks like to the user. In this case not only speaking the name or brand of the product or company, it show detail contents of the product to the user in order to increase the demand of the product and compete with the company competitors.

H). *Stakeholders understand the objective/goal of the manufacturing company:*

All participant of the companies understand the main objective the company, these is used to do any activity according to the attainable of that goals and it make full responsible about the company product distribution system.

G). *Effective information transfer:*

Clear and truly information transfer between manufacturing management and all participant including distributors. Because if there is full information easily identify the root Cause of the problem and take action accordingly.

5. CONCLUSION

In order to increase competitiveness advantages and sustainable development with customer's satisfaction for Ethiopian bottled mineral water manufacturing company, the effectiveness of distribution system is very essential for company. Getting of the effective and quality distribution system is through reducing exists of the major challenges of the distribution of the company. lack of the clear information between management and distributors, maintenance of distribution materials, low morale of work, price abuse, improper marketing channel, management and distributors gap, less effective management and shortage of bottles are a major challenges of distribution system of the bottled mineral water which affect competitiveness advantages of the company and dissatisfaction of the customers. Then those challenges reduced through implementations of the clear and truly information transfer between management and each participants of distribution, preventive maintenance and services of distribution materials, understanding of the objectives of the company, appointment of manual distribution centers, invest bottles, creating distribution framework, increase distributors motivation, effective management skill and uses of proper marketing channel. After that the effectiveness and quality of distribution system of the company is increase. Generally, the effectiveness and quality of the distribution system for the companies it used to increase competitive advantages and sustainable development and increase the demand with customer satisfaction.

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