A Survey On Marketing Performance of Small Scale Vs Large Scale Vendors Using Big Data Analytics

Shahanaz. J.

Lecturer, Dept. of Information Technology, Key skills Department, Vocational Training Center, Sur,

Sultanate of Oman.

ABSTRACT: The role of large scale vendors (LSV) and small-scale vendors (SSV) have always been supported globally around the world for various reasons such as employment, equality, latent useful resource, insurance coverage against social tension, distributive effect, the making of the social eco-system, decentralization, and so on, The other arguments in favor of these reasons are a creation of self-employment and adding to capital formation. In recent times, the big data concept has been seen as a new solution to help the policy and practice in all kinds of application domains and context. By using big data concepts such as data mining and also by manual survey, this survey analyzes and compares the marketing performance, and marketing problems faced by both large scale and small scale vendors.

KEYWORDS: marketing, small scale industry, large scale industries, big data.

I. INTRODUCTION

Governments of both developed and developing countries offer a wide variety of programs to assist Small Scale Vendors (SSVs) and Large Sale Vendors (LSVs). Despite the success of SSVs and LSVs' strategies in a few countries, the majority of developing countries has found that the impact of their LSV and SSVs development programs on enterprise performance has been less than satisfactory. Since the government is looking at more effective ways of assisting SSVs and LSVs, the World Bank is being asked to offer lessons of experience and guidelines for intervention. As a result, the increasing focus on big data and how it has the potential to influence almost every industry, gives it an often deterministic presence that presents it as a tool to achieve useful solutions for enterprises. However, many LSVs and SSVs often fail to implement the technology and organizational frameworks required to build capabilities. The early uses of gathering a large variety of data had mostly been in large corporations for the purpose of fraud detection and by retailers for coupon systems. Organizations of small scale or size have applied or in the process of implementing Enterprise Resource Planning (ERP) in order to achieve the benefits of integration in the field of finance, customer order information, supply chain and to stay competitive in the market. ERP allows an organization to use a system of integrated applications to manage the business.

Figure 1: Importance of big data analytics.

The concept of big data has been around for several years; most enterprises now understand that if they take all the data that streams into their business, they can apply analytics and get meaningful and substantial value from it. However, even in the 1950s, a long time before people uttered the term "big data," basic analytics were used by the businesses (essentially numbers in a spreadsheet that were manually tested) to uncover insights and trends.

The advantages that big data analytics brings are efficiency and speed. A few years ago, a business would have accumulated information, run analytics and unearthed information that could be used for future decision making; however, today the same business with the help of big data, can identify insights for immediate decisions. The ability to stay agile and work faster gives organizations a competitive edge, which they did not have before.

II. CLASSIFICATION OF VENDORS

Micro/Cottage vendors:
This is an industry with total capital employed of not more than 15 million working capital, but excluding the cost of land and or a labor size of not more than 10 workers.

Small Scale vendors:
An industry with total capital employed of over 1.5 million, but not more than 50 million, including working capital, but excluding the cost of land, and or a labor size of 11 – 100 workers.

Medium Scale vendors:
An industry with a total capital employed of over 50 million, but not more than 200 million, including working capital, but excluding the cost of land, and or a labor size of 101 – 300 workers.

Large Scale vendors:
An industry with a total capital of over 200 million, including working capital, but excluding land cost or a labor size of over 300 workers. Comparatively, most advanced countries agree to have a maximum limit of 500 employees for a small Firm.

Related works:
The discussion reveals the importance, role and the need of LSV and SSV. In this context, a good number of studies have been carried out by various authors with respect to the development of SSVs and LSVs in both developed and developing countries. The magnitude and the extent of studies differ. Some studies have attempted on the growth and development at micro and macro levels; however, most of the studies focused on the causes of sickness of the sector. Some other studies examined the role of institutional finance in promoting the small sector.

1. Studies related to the importance of SSVs and LSVs.
2. Studies concerned with growth and development of SSV and LSV through various promotional policies.
3. Studies relating to institutional and financial support to SSV and LSV.

In **Semistatus Hussein Mashimba and Rainer Kühl, 2014** paper makes two major contributions. First, it gives empirical evidences regarding the growth of MSEs in developing countries. Second, it builds a basic step in understanding how the SME's policy of Tanzania is. Especially, the food processing sector can be transformed to grow fast to bring significant impact on the Tanzanian economy [1].

Mbugua Stephen Kamunge, Dr. Agnes Njeru, and Ondabu Ibrahim Tirimba, 2014 study must establish the factors affecting the performance of small and micro enterprises (SMEs) traders at the Limuru town market in Kiambu County, Kenya. The study employed a descriptive research design to achieve the objectives. The target population under study was the 965 licensed SMEs by Limuru sub-county operating in Limuru Market in 2014. The study used a questionnaire to collect the required data from a sample of 274 SMEs. The data collected was coded, quantified and analyzed quantitatively and qualitatively. Quantitative data were analyzed by the use of Statistical Package for Social Sciences (SPSS) [2].

Dr. MBA Okechukwu Agwu and Dr. Cletus Izunwanne Emeti, 2014, paper discussed Issues, Challenges and Prospects of Small and Medium Scale Enterprises (SMEs) in Port-HarcourtCity, Nigeria. This was informed by the high rate of unemployment in the society and the poor performance of SMEs in employment generation [3].

Carl Johan Rising, Michael Kristensen, And Steffen Tjerrild-Hansen, 2014 The main objective of their project is to investigate the following research question: How might SMEs build their technological infrastructure and set up their organization in order to derive value from big data to strengthen their strategy formation? [4].

Ayozie Daniel Ogechukwu, Dr. Jacob.S. Oboreh, Dr. Umukoro. F and Ayozie Victoria Uche, 2013 in their paper identifies the historical development and orientation of SMEs in Nigeria, tackles the operational definition and scope, describes the role of the Nigerian government as a participant, regulator and facilitator, both legally and politically in the growth of SMEs. It identifies the marketing problems of SMEs in Nigeria, the provision and enactment of beneficial and supportive laws, the provision of infrastructural facilities, constant manpower and development, direct financial assistance and the establishment of financial institutions to support SMEs [5].

Research Objectives:
The following are the main objectives of the present research work.

- To analyze the marketing performance of LSV and SSV.
- To identify the marketing problems of LSV and SSV.

III. MARKETING PERFORMANCE OF SSV VS LSV

Sources of data

Data are collected from both primary and secondary sources.

Primary Sources

The study is empirical in nature and it is totally based on the data. These data were collected with the help of a questionnaire. All attempts were made to extract the correct information through informal discussion with entrepreneurs.

Secondary Sources

The secondary data were collected from the annual reports and the information available from the District Industries Centre. The information was collected from various books, journals, research reports, magazines, manuals and newsletter reports on small and large scale industry and entrepreneurship.

Tools of Analysis:

The primary data is collected from the sample. From these samples, small scale units and large scale units has been tabulated using various well-known tools and techniques such as growth rates, percentages, mean and also Google analytics tool is used to collect the data from websites.

Google Analytics:

Small, medium entrepreneurs need expensive software to collect the data. Google Analytics, Google's free Web-traffic-monitoring tool, provides all types of data about website visitors, using a multitude of metrics and traffic sources. With Google Analytics, you can extract long-term data to reveal trends and other valuable information, so you can make wise data-driven decisions. For example, for tracking and analyzing visitor behavior such as where traffic is coming from, how audiences engage and how long visitors stay on a website (known as bounce rates). With this information, you can make better decisions when striving to meet your web sites or online business goals. Another example is analyzing social media traffic, which will allow you to make changes to your social media marketing campaigns based on what is working and what is not working. Mobile visitors can also help you extract information about customers when they are browsing the site using their mobile devices. Likewise, Google analytics are used for collecting the data of SSVs and LSVs, for betterment of their performance.

Sales Forecasting

In today's world, data mining gives several advantages to businesses. Here, we take a look at some of the most common benefits for adopting data mining techniques.

By using data mining techniques, both LSV and SSV can analyze behavioral characteristics of customers and thereby they can predict future sales. By this way, SSVs can determine complimentary products or services which vendors can offer. Entrepreneurs can also use it to determine the number of customers in the market, who will buy from them. This is useful for SSVs for development of their business.

Merchandise Planning

Merchandise planning is a very important aspect and data mining can be immensely useful in for SSVS can getting the right inventory and warehouse options. Factors that are considered in merchandise planning are choosing the right product, price, stock balancing, and so on. This can be done by data mining techniques that will definitely improve the decision making of SSVs by considering financial performance, personnel performance, customer satisfaction, process management, strategy measurement and Customer Relationship Management.

Customer Relationship Management

In the current scenario, where competition is dynamic, keeping customers happy is no longer an option, thus, Customer Relationship Management (CRM) is seen as an important factor in business, where SSVs should focus on. Retaining customers is the number one target for all business, and data mining presents ways to get this done efficiently. By using Google analytics tool, we can track employee data, social media data, and other relevant data which can help SSVs to improve their growth and increase customer satisfaction.

Marketing performance of LSV vs SSV:

The below chart shows the types of marketing performance measurement systems, of both LSV and SSVs. LSVs performance in finance, personnel performance, and process management are greater than SSVs, when compared. However, with regard to customer satisfaction LSVs lags behind SSVs. It is agreed that, marketing performance measurement tools must improve their job effectively.
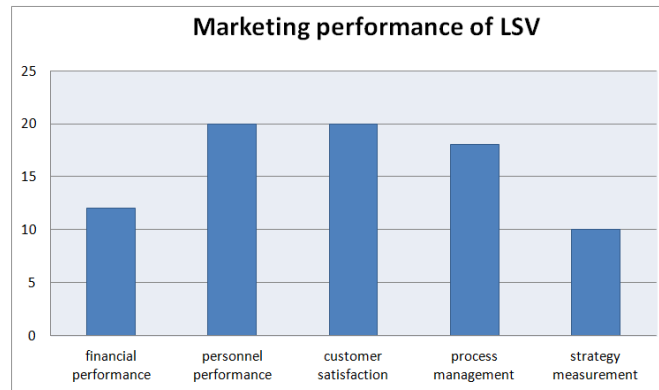
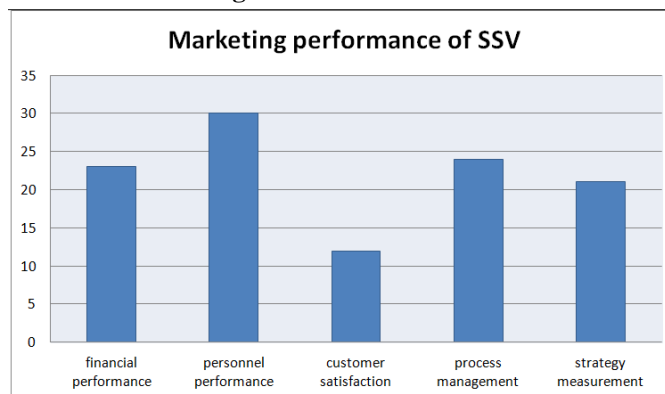**Chart 1: Marketing Performance Measurement of LSVs.**

Chart 2: Marketing performance Measurement of SSVs.

According to Amaratunga and Baldry (2002), performance measurement tools will give the basis for an organization to examine how well it is moving towards its predetermined objectives, it helps to identify areas of strengths and weaknesses, and makes a decision on future initiatives, with the goal of improving organizational performance. It is also stated that overall performance measures should be developed from strategy. Therefore, performance management combines both top-to-bottom and bottom-up approach for strategy formulation, implementation, and monitoring for organizational effectiveness, efficiency, and successful output [6].

Marketing Problems Faced by SSVs:

Marketers are increasingly recognizing the importance of formal approaches to market planning, to meet the challenges of growing competition, rising material costs, declining profit margins and limited cash reserves. Market decisions made by entrepreneurs at a particular time influence the direction and fate of SSVs for a number of years. Successful market planning involves an analysis of market opportunities and assessment of the firm's ability to take advantage of these opportunities. The success of an industrial unit depends on the marketing of its finished products

S. No	Marketing Problems	SSVs Percentage	LSVs Percentage
1	Price Fixation	71.05	50.12
2	Improper Positioning	60.53	40.29
3	Improper Segmentation	42.11	26.33
4	High Cost of Marketing	50	68.33
5	High Cost of Marketing Personnel	55.26	45
6	Sales promotion	60.53	30.55
7	Distribution Channels	73.68	40.11
8	Non Availability of Packing Material	65.79	20.77
9	Competitors	89.47	50

Table 1: comparison of marketing performance of LSVs and SSVs.
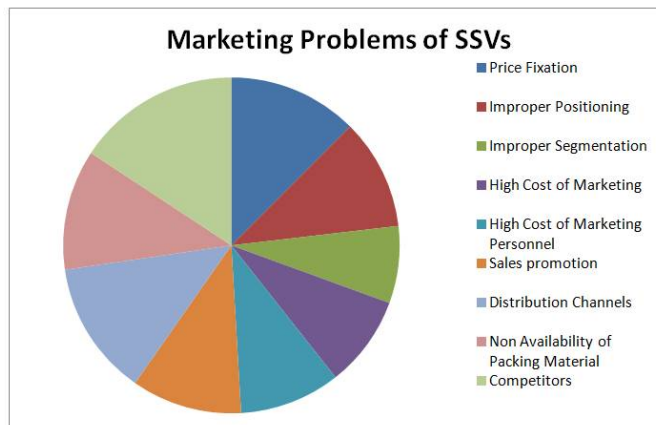

Chart 3: chart for the marketing problems of SSVs
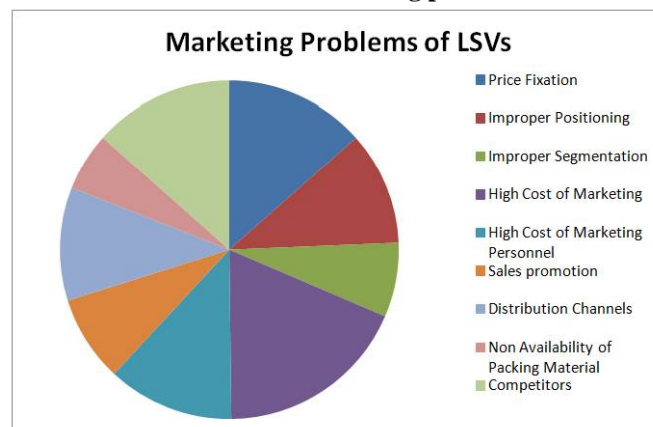

Chart 4: chart for the marketing problems of LSVs

The marketing problem faced by both LSV and SSV:

SSVs face a major problem in marketing performance when compared to LSVs. In price fixation and distribution channels SSVs faces the maximum problem. In marketing LSVs faces more problems compared to SSVs. While 50 percent of SSVs face the high cost of marketing, 68.33 percent of LSVs faced the high cost of marketing. In non-availability of packing material, only 20.77 percent of the LSVshad problems.

A very high percentage, i.e. 89.47 percent of SSVs faced major problems created by their competitors when compared to LSVs, which is 50 percent. Other problems like lack of awareness of product design, packaging, branding, Indian Standard Institution (ISI) mark, and non-availability of packaging materials, were faced by 65.79 percent of SSVs [8].

IV. CONCLUSION

In recent times, big data is considered important to business and society, as the Internet has become more accessible to everyone. More data may lead to more accurate analyses. More accurate analyses may lead to more confident decision making. And better decisions can mean greater operational efficiencies, cost reduction and reduced risks to SSVs. Therefore, in this paper, we determined the extent to which SSVs can benefit from using big data and implementing the same in analytical practice. We surveyed some big data analytics that can enhance SSVs regional growth. We also considered the potential usefulness of big data to SSVs. SSVs should see the fundamental potential of big data for better decision making and policy creation in markets and business models, and begin to explore the opportunities. The Big data value represents an extremely strategic and profitable opportunity for SSVs. In order to succeed very well in a world that is driven by innovation and competitiveness, it is necessary to foster the development and wide-scale adoption of big data value technologies, successful use cases and data-driven business models.

76 per cent of SSVs are facing marketing problems. Analysis and interpretation comprise of all the problems related to the marketing mix. Market forces are governed generally by the criteria of efficiency, productivity and competitiveness and this is much more in the present era of liberalization and globalization. Performing the marketing functions satisfactorily and successfully in the global context is the major hurdle for SSVsand their development.

BIOGRAPHY

[1] Semistatus Hussein Mashimba and Rainer Kühl, "Performance of Micro and Small-Scale Enterprises (mses) in Tanzania," Journal of Applied Economics and Business Research JAEBR, Volume 4,Issue 2, PP. 120-133,2014.

[2] Mbugua Stephen Kamunge, Dr. Agnes Njeru, and Ondabu Ibrahim Tirimba, "Factors Affecting the Performance of Small and Micro Enterprises in Limuru Town Market of Kiambu County, Kenya," International Journal of Scientific and Research Publications, Volume 4, Issue 12, December 2014.

[3] Dr.Mba Okechukwu Agwu and Dr. Cletus Izunwanne Emeti, European Journal of Sustainable Development,2014.

[4] Carl Johan Rising, Michael Kristensen, and Steffen Tjerrild-Hansen, "Is Big Data too Big for SMEs?" 2014.

[5]Ayozie Daniel Ogechukwu, Dr. Jacob.S. Oboreh, Dr. Umukoro. F and Ayozie Victoria Uche, Global Journal of Management and Business Research Marketing, Volume 13, Issue 9, Version 1.0, Year 2013.

[6] Dr. Ebenezer Ankrah and Collins Christian Yaw Mensah "Measuring Performance in Small and Medium Scale Enterprises in the Manufacturing Industry in Ghana," International Journal of Research in Business Studies and Management, Volume 2, Issue 12, December 2015.

[7]Kanagarathinam.M and A.Sukumar, "A Study on Marketing Strategies in Small Scale Industries," A Journal of Nehru Arts and Science College (NASC) Research Article, Volume 1,PP. 1- 4, June – Dec 2013.

[8] S.N. Arjunkumar"AStudy of Small Scale Industries: Marketing Strategies," TRANS Asian Journal of Marketing & Management Research, Volume1, Issue 1, September 2012.

BIOGRAPHY

SHAHANAZ. J, D/O JAMAL MOHAMMAD, Lecturer in Information Technology, Key-skills Department, Vocational Training Center, Sur, Sultanate of Oman.