



Research Article

OPERATIONAL PERFORMANCE OF ASELLA MALT FACTORY WITHIN THE VALUE CHAIN: ASELLA, ETHIOPIA

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ABSTRACT

Value Chain Analysis reviews all the activities that an organization performs to deliver its products or services to determine the value that each adds to the ultimate product or service. Value Chain Analysis provides a mechanism by which organizations can evaluate core and non-core activities, and help to expose and prioritize transformation possibilities. This study focused on Asella Malt Factory as it is one of the production corporations operating in the country. Although the scope of value chain is broad, this paper investigated the role of operation within the value chain of malt production in Asella Malt Factory. One of the specific objectives of this research was to evaluate the factory's operational performance within the value chain. Asella Malt Factory was selected purposively for this study. Asella Malt Factory was established in 1984 and situated 167 km southeast of Addis Ababa. The study collected data from 20 per cent of the total population (248) which was high sample size determination. Accordingly, the sample size was determined as 50. It was proportionately allocated as follows: managing directors (5), supply and production workers (18), quality controlling workers (5), commercial workers (18), planning workers (2) and finance management workers (2). The research employed both primary and secondary sources of data. The researcher gathered primary data through questionnaire to assess the role of the operation in malt production value chain. The data gathered were organized, tabulated, presented, analyzed and interpreted by using descriptive statistical analysis such as mean, frequency and percentages. Concerning to the factory's operational performance within value chain, the research result has found a gap regarding the understanding of core and non-core value chain activities, performing of activities in operating within value chain, understanding linkages among the company's individual activities as well as meeting the customer requirements and expectations. The factory did not understand value chain activities and linkages among them; this results the factory unable to meet consumers demand. However, Asella malt factory has performed well relating to focus on improving the regularity and consistency of production, improving the safety of products and reducing the time needed to reach the customer, and improving the capacity of chain actors to follow and take in technology and market development.

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INTRODUCTION

Value Chain Analysis (VCA) reviews all the activities that an organization performs to deliver its products or services to determine the value that each adds to the ultimate product or service. It considers primary activities, such as inbound and outbound logistics, operations, marketing, sales and services; and support activities like facilities management, human resources, technology, and procurement (Porter, 1985). VCA provides a mechanism by which organizations can evaluate core and non-core activities, and help to expose and prioritize transformation possibilities (Stratton, 2009).

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VCA describes the activities within and around an organization, and relates them to an analysis of the competitive strength of the organization. Therefore, it evaluates which value each particular activity adds to the organization's products or services. Amanuel (2011) quoted that the term 'margin' implies that organizations realize a profit margin that depends on their ability to manage the linkages between all activities in the value chain. In other words, the organization is able to deliver a product or service for which the customer is willing to pay more than the sum of the costs of all activities in the value chain. Linkages between activities that are crucial for corporate success are flows of information, goods and services, as well as systems and processes for adjusting activities. Broadly the area of the study focused on the role of operation in Asella Malt Factory; specifically it emphasized on assessment of the role of

operation within the value chain of malt production in AMF. Asella Malt Factory (ASM) was established in 1984 and situated 167 km southeast of Addis Ababa. Malt is the major input for beer production and the company currently supplies around 40 per cent of the requirement of Ethiopian brewers. The barley for the malt production is supplied by small holder farmers living in the locality of the factory (AMF Bulletin, 2012). Brewers are importing 60 per cent of their malt requirements, creating a significant market potential for high quality domestically produced malt barley. Currently, Asella is the only domestic supplier of malt. Imports are a fast growing source of reliable malt for brewers in Ethiopia, companies such as Boortmalt and Malteuropare supplying malt due to the shortage and the poor quality of malt from Asella (Monitor Group, 2012).

Statement of the Problem

Analyzing the value chain provides a mechanism by which organizations can evaluate core and non-core activities, and help to expose and prioritize transformation possibilities as well as creates an agile organization. Donovan (2011) showed that value chain stakeholders have access to the range of services required for improved business performance. With the proper training, more value can be added as the research showed. The analysis of the literature and discussions with practitioners brings to light questions for further discussion, action-research in value chain projects, and shared learning in networks of chain actors and practitioners (Seville *et al.* 2011). Another study also recommends for further research focusing on deeper insights of the process of the value chain and the actors in the chain by Kodigehalli (2011).

As the studies mentioned above show the gap and advocate further studies on the operation within the value chain; the condition that further discussion, research in value chain projects, and shared learning in networks of chain actors as well as more study focusing on deeper insights of the process of the value chain and the actors in the chain made initiation to conduct this research. This study focused on AMF as it is one of the production corporations operating in the country. Although the scope of value chain is broad, this paper investigated the role of operation within the value chain of malt production in AMF. One of the specific objectives of this research was to evaluate the factory's operational performance within the value chain.

MATERIALS AND METHODS

Asella Malt Factory (ASM) was selected purposively for this study. Asella Malt Factory (ASM) was established in 1984 and situated 167 km southeast of Addis Ababa. Malt is the major input for beer production and the company currently supplies around 40% of this growing Ethiopian market. The researcher employed quota sampling method which is a non-probability sampling method to ensure that the various sub-groups in a population are represented on pertinent sample characteristics to the exact extent that the investigator desire. During the study the company contained 248 permanent and temporary employees, 15 per cent of whom are women. To determine the sample size, the investigator preferred to use a technique developed by Carvalho (1984). Thus, the study collected data from 20 per cent of the total population (248) which was high sample size determination.

Accordingly, the sample size was determined as 50. It was proportionately allocated as follows: managing directors (5), supply and production workers (18), quality controlling workers (5), commercial workers (18), planning workers (2) and finance management workers (2). The research employed both primary and secondary sources of data. The researcher gathered primary data through questionnaire to assess the role of the operation of AMF in its malt production value chain. Secondary data were collected from the Asella malt factory bulletin and relevant published literature. The data gathered were organized, tabulated, presented, analyzed and interpreted by using descriptive statistical analysis such as mean, frequency and percentages.

RESULTS AND DISCUSSION

The Factory's Operational Performance within the Value Chain

From Table 1 it was observed that majority of the respondents (62%) were disagreed that AMF has effectively and efficiently performed the activities in operation within the value chain. To the statement 2, majority of the respondents (58%) were of the view that the organization has not well understood which value chain activities are core and non-core to its business performance. Regarding item 3, 66.00 per cent of the respondents agreed that the improvement in value chain performance has focused on improving the regularity and continuity of production. It was found that 50.00 and 38.00 per cent of the respondents agreed and disagreed respectively that the operating performance within the value chain has improved the safety of products and reduced the time needed to reach the customer. It is evident from the table 1 that 68.00 per cent of the respondents have agreed that the factory's value chain has improved the capacity of chain actors to follow and take in technology and market developments. Almost an equal percentage of respondents (42% and 44 %) have agreed and disagreed respectively that to deliver continuous performance improvement there is a clear understanding of the linkages between the organization's individual activities. It was clear from the result that 66.00 per cent of the respondents agreed that the company has efficiently met the customer requirements and expectations in its operating performance within the value chain.

What is the Factory's Operational Performance within the Value Chain?

In relation to the above research question, as presented in Table 1, 62.00 per cent of the respondents disagreed with item 1 that Asella malt factory has effectively and efficiently performing the activities in operating within the value chain. As concluded by Bonney (2009), value adding activities should be targeted for investment; whereas necessary but non-value-adding activities should focus on efficiency and only attract investment for cost reduction. The firm's profit depends on its effectiveness in performing the value chain activities efficiently, so that the amount the customer is willing to pay for the products exceeds the cost of the activities in the value chain, and it is in these activities that a firm has the opportunity to generate superior value (Recklies, 2001). This indicates that the factory's operational performance within the value chain has a gap regarding effective and efficient performance of the activities in operating in its production value chain.

Table 1. Operational Performance of the Company within the Value Chain

S/Ns S.No.	Items Statement	Respondents' Responses										Mean	St. Deviation
		Frequency and Percentage											
		SA		A		N		DA		SDA			
		N ₀	%	N ₀	%	N ₀	%	N ₀	%	N ₀	%		
1	Asella malt factory has effectively and efficiently performing the activities in operating within the value chain.	-	-	15	30	4	8	27	54	4	8	3.40	1.01
2	The organization has well understood which value chain activities are core and non-core to its business performance.	2	4	15	30	4	8	23	46	6	12	3.32	1.15
1.3	Improvement in value chain performance has focused on improving the regularity and continuity of production.	16	32	17	34	4	8	9	18	4	8	2.36	1.32
4	Operating performance within value chain has improved the safety of products and reduced the time needed to reach the customer.	13	26	12	24	6	12	16	32	3	6	2.68	1.33
5	The factory's value chain has improved the capacity of chain actors to follow and take in technology and market developments.	12	24	22	44	7	14	7	14	2	4	2.32	1.13
6	To deliver continuous performance improvement there is a clear understanding of the linkages between the organization's individual activities.	6	12	15	30	7	14	19	38	3	6	2.96	1.19
7	The company is efficiently meeting the customer requirements and expectations in its operating performance within value chain.	3	6	10	20	4	8	25	50	8	16	3.50	1.16

Key: SA= Strongly Agree, A= Agree, N= Neutral, DA= Disagree, SDA= Strongly Disagree
Source: Field Data

For the same research question, as presented in Table 1, 58.00 per cent of the respondents answered 'disagree' to item 2 that the organization has well understood which value chain activities are core and non-core to its business performance. This showed that AMF has not well understood which value chain activities are core and non-core for its business performance. According to Stratton (2009), applying VCA will enable the organization to understand which activities are core and non-core to its business. Further, he discussed that understanding non-core value chain activities may attempt to reduce costs that are associated with them. The study specifies that the factory's operational performance within the value chain was weak in relation to understanding of core and non-core value chain activities. He also stated that this might increase costs that are related to non-core value chain activities.

To answer the research question that concerned with the company's operational performance within the value chain, for item 3, 66.00 per cent of the respondents agreed that improvement in value chain performance has focused on improving the regularity and continuity of production. The UNIDO (2009) discussion also supported the above result as follows: improvement in value chain performance has focused on improving the regularity and continuity of production. From the results of this study, the investigator identified that the factory's operational performance within the value chain was well in relation to improvement to emphasize on regularity and consistency of production.

For item 4, 50.00 per cent of the respondents responded positively which indicates operational performance within the value chain has improved the safety of products and reduced the time needed to reach the customer. The research conducted by UNIDO (2009) in Vienna shows that operating performance improvement results in improving the safety of products and reducing the time needed to reach the customer. This finding is in line with the finding of this study. For item 5, 68.00 per cent of the respondents have agreed which shows that the factory's value chain has improved the capacity of chain actors to follow and take in technology and market developments.

Improvement in value chain performance will result reducing transactional costs and improving the capacity of chain actors to follow and assimilate technology and market developments as explained by UNIDO (2009). The research result indicates that AMF's operational performance within the value chain was in a good way in improving the capacity of chain actors to follow and take in technology and market development. Item 6 focus on to what extent the AMF has been clear in understanding of the linkages between the organization's individual activities in order to deliver continuous performance improvement. It was found that 44.00 per cent of the respondents were disagreed with this item.

But, Fearné *et al.* (2009) discussed that a clearer understanding of the linkages between product attributes and individual activities allows organizations in the chain to identify specific actions and management negotiation to deliver continuous performance improvement. In this regard, it was possible to understand that the research result contradicts with the finding of Fearné *et al.* (2009).

Thus, the researcher found that there was a gap with the factory's operational performance in its production value chain in terms of clearly understanding the linkages among the organization's numerous activities to identify specific actions for the purpose of sustainable performance improvement. It was further revealed from the study that 66.00 per cent of the respondents disagreed to the statement that the the company has efficiently met the customer requirements and expectations in its operating performance within the value chain.

The study conducted in Canada by Wong (2012) indicates that modern value chain relations are fashioned to achieve a high level of efficiency and consumer responsiveness. The investigator identified that value chain relations need to be created to attain consumer responsiveness i.e., meeting the customer requirements and expectation. This shows that AMF has not efficiently reached the customer requirements and expectations in its operational performance within value chain.

Conclusion

Concerning the factory's operational performance within value chain, the research result has found a gap with AMF regarding the understanding of core and non-core value chain activities, performing the activities in operating within value chain, understanding linkages among the company's individual activities as well as meeting the customer requirements and expectations. The factory did not understand value chain activities and linkages among them; this results the factory unable to meet consumers demand. However, Asella malt factory has performed well relating to focus on improving the regularity and consistency of production, improving the safety of products and reducing the time needed to reach the customer, and improving the capacity of chain actors to follow and take in technology and market development. As literatures indicate improving consistency of production, safety of products and capacity of chain actors are crucial to follow technology and market development as done by AMF.

Recommendation

The research result suggests that Asella malt factory needs to improve the role of operation in its malt production value chain regarding: Understanding of core and non-core activities, performing the activities, understanding linkages among the chain actors and meeting the customer requirements and expectations. The factory should understand the activities by clearly identifying which activities are core and which activities are non-core to the factory. Each value chain actors should effectively perform by knowing which activities are belongs to them. Through efficient allocation and utilization of resources the factory should reach the customers demand, especially in quantity.

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