



ORIGINAL RESEARCH PAPER

Management

A study of Demonetization and its effect on Supply Chain Performance metrics with special reference to milk and vegetables in Jaipur region

KEY WORDS:

Akshay Patidar

Assistant Professor, School of Business and Management Jaipur National University, Jaipur

ABSTRACT

This paper is about the introduction of supply Chain Management, Metrics used for evaluating performance of Supply Chain Management, Demonetization Step implemented in 2016 by Indian Govt. and their inter-relation with special reference to milk and vegetables. The objective of the study is to understand the impact of the demonetization step on the performance of Supply Chain Management under study i.e. Milk and vegetables products. Demonetization step was to cancel the currency notes of INR 500 and 1000 as legal tender. The decision affected daily life very much. Market scenario was altogether changed. Businesses was affected, they found themselves incapable of satisfying customer needs.

Introduction

More recently, in 2014, the RBI had demonetised all banknotes printed before 2005. After facing flak even from his own biggest supporters for not keeping the 2014 electoral promise of bringing back all the undeclared funds stashed abroad, Honorable Prime Minister had given enough indications that he meant business on the question of tackling black money in the country.

Talking about the Income Declaration Scheme, which ended on September 30, 2016, Honorable Prime Minister had been quite forthright: "For all those who are still willing to come in the mainstream, I have said this in public that 30th of September is your last date. You may have made mistakes with whatever intentions. Whether it has been done willingly or unwillingly, here is your chance. Come into the mainstream...no one should blame me if I take tough decisions after the 30th Sept."

Eventually, more than Rs 65,000 crore was declared under the scheme, which is expected to yield tax collection of Rs 29,400 crore. But despite such warning signs, the move to demonetize came as a shock, particularly given how common Rs 500 and Rs 1,000 notes have become in daily lives. To put things in perspective, these two denominations account for a whopping 86% of all banknotes in circulation, as per the RBI's Annual Report for the financial year 2015-'16.

India's real Gross Domestic Product at constant (2011-'12) prices for the year financial year 2015-'16 stood at Rs 113.5 lakh crore, indicating that Rs 500 and Rs 1,000 banknotes accounted for nearly 12% of India's GDP, showing how integral these banknotes are to India's economy.

What accounted for this move was the rapid rate at which these notes have grown in circulation in the last five years – the Rs 500 notes by 76% and the Rs 1,000 notes by 109% over the 2011 numbers, said Economic Affairs Secretary, Shaktikanta Das. Rise in these numbers have direct or indirect impact on supply chain of various organisations operating in the country which leads large profits or huge losses.

The average Supply Chain management professional measures their Supply Chain by reviewing cost reduction. Is cost reduction all that there is in measuring Supply Chain performance? Sure, supply chain cost reduction is important in reducing the cost of goods sold (COGS) and increasing profit, but there are other measurements which should not be forgotten. Every CEO must always be concerned with the competition. In today's economy the battlefield is shifting from individual company performance to what we call *Supply Chain Performance*. Supply Chain Performance refers to the extended supply chain's activities in meeting end-customer requirements, including product availability, on-time delivery, and all the necessary inventory and capacity in the supply chain to deliver that performance in a responsive manner. Supply Chain Performance crosses company boundaries since it includes basic materials, components, subassemblies and finished products, and distribution through

various channels to the end customer. It also crosses traditional functional organization lines such as procurement, manufacturing, distribution, marketing & sales, and research & development.

To win in the new environment, supply chains need continuous improvement. To achieve this we need performance measures, or "metrics," which support global Supply Chain Performance improvements rather than narrow company-specific or function-specific (silo) metrics which inhibit chain-wide improvements.

Major metric which are under our study are as follows:

Supply Chain Performance Metric	Implementation/Impact
Delivery	Delivery is critical to the supply chain; so on time delivery can be a very useful metric to measure. Schedule Adherence can be measured for both supplier and customer deliveries.
Cost	Costs should be a common metric because cost is imperative to the efficacy of the supply chain. The costs need to be looked at in terms of the purchase costs, travel and transportation costs, the costs of storing items when they are delivered, the cost of administering supplies and revenue/capital costs as well.
Quality	Right first time is a critical feature within the supply chain. Deliveries, not just on time but also in terms of quality are vital; Were rejects kept to an acceptable level? A standard measure is PPM or Defects in Parts Per Million.
Stock Outs	Stock outs are expensive because they cause delays in the supply chain and affect its overall performance to the customer. The number of stock outs will impact greatly in terms of costs, transportation issues etc, so it deserves to be listed as a specific metric to be used within any analysis of the supply chain.
Demand Forecasting	Forecasting the needs for items to be supplied in the supply chain is critical if the supply chain is to operate effectively. Inaccurate forecasting will lead to a number of problems later down the line, so there is a real need for accurate forecasting and for the accuracy to be measured to ensure that it is as accurate as possible.

Objective:

- 1) To study key metrics of supply chain Management having impact on customer satisfaction.
- 2) To study the impact of demonetization on the supply Chain metrics.

Research Methodology

The framework presented by Gunasekaran et al. (2001) was used to study performance measures and metrics used in a supply chain

environment. There are many performance indicators of a Supply Chain, but because of limited resources study is confined to five parameters i.e. **Delivery, Cost, Quality, Stock outs, Demand Forecasting**. These five parameters correspond to the basic activities or processes in a supply chain—plan—source—make/assemble—delivery.

Since the sector is majorly unorganized source of Data will be secondary and personal Observation and Personal Interview of various persons involved in the process, since most of the respondents are illiterate or less qualified. Area of study is limited to Jaipur region only.

Analysis will be done on the data collected and will be interpreted by the researcher himself under the purview of his knowledge.

Analysis

Due to a major decision by Honorable Prime Minister of India on 8th November 2016, INR 500 and 1000 currency notes were declared not to be a legal tender. Because of this decision many business got an impact over them. The goods those were in transit got tucked, the payments were tucked, purchasing power of people was affected because major people were having 500 and 1000 currency notes with them. The businesses which work on daily used commodities like milk and vegetables were majorly affected. The supply Chain of local businesses was affected and is studied and the impact is summarized in the table given below:

Supply Chain Performance Metric	Implementation/Impact
Delivery	Products were not delivered timely for few days because of non availability of currency and logistics was also delayed and when timely delivery was started eventually, peoples low purchasing power leads to decrease in the sales.
Cost	Cost of the products increased with the decision because of non availability of currency initially but with the passage of time customer's low purchasing power leads to piling of the stocks and increased supply which led to decrement in the price and lower bids by the suppliers.
Quality	Impact on Quality was also noticeable because of low purchasing power and stock piles the quality of the product also degraded since the nature of the products was perishable therefore they require quick and fast rotation without piling of stock.
Stock Outs	Initially stock out was faced by the business because of logistic issues and non currency availability but eventually stock out issue was resolved and stock piling got started or we can say bullwhip effect was monitored.
Demand Forecasting	Forecasting the needs became difficult over all the levels of supply Chain and bullwhip effect was observed because of low purchasing power of customers as well as non availability of currency.

Conclusion

The objective of the study is to understand the impact of the demonetization step on the performance of Supply Chain Management under study i.e. Milk and vegetables products .Demonetization step was to discontinue the currency notes of INR 500 and 1000 as legal tender. The decision affected daily life very much. Market scenario was altogether changed. Businesses was affected, they found themselves incapable of satisfying customer needs.

The initiative proved boon to some people at the same time bane for some persons. Life of common people affected very much, price of commodities shown abrupt fluctuations in pricing but still people believe that it was a good initiative and will give results in long run.

Supply Chain metrics were also affected delivery was not available timely, cost increased, Stock out situations arise to many places in rural areas, At the same time forecasting the future demand became very tedious because of instability and unpredictability in the market.

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