

A Case Study on Supply Chain Agility of Popular E-Retailers in Odisha

Dr. Somabhusana Janakiballav Mishra, Debasish Rout, Dr. Ranjan Kantha, Suman Gope

Assistant Professor, Amity Global Business School, Bhubaneswar

Assistant Professor, Amity Global Business School, Bhubaneswar

Dean, Amity Global Business School, Bhubaneswar

Student, BBA, Amity Global Business School, Bhubaneswar

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ABSTRACT

Supply chain is an essential part of business success. The journey from idea creation to end product is a complicated process with many moving parts. How well a company manages this process can directly translate into increased revenues. In this article, we discuss what supply chain management involves and why it's so important. No other segments of the business can have the impact of the supply chain agility on reaching the market, improving the service levels, lowering retail prices and building value for both the business and the customers. Market often expects great products and services. They utilize lots of financial assets to satisfy the needs of the market. The products should be delivered on time and without any damage received to the product. In the modern day, customers can share their negative feedbacks on social media so easily and to convince people on social media is so easy that if their products have not been delivered on time this can be so damaging to the brand reputation.

Key words: Supply chain, Supply chain agility, E-Retailers, Social media, E-Commerce

I. INTRODUCTION

Supply chain agility refers to how fast and efficiently an e-commerce supply chain can respond to changes in the customer demand and market. It also relates to the ability to predict, counter, and recover from uncertain events. To make a fast moving supply chain, an enterprise must have the resources to improve and to do better logistics operations precisely. Easily implement the latest trend. Having the right technology and processes in place is what keeps customers satisfied and an e-commerce business financially secure, despite unforeseen setbacks.

An agile business model has always been important across all industries, but agility plays a key role in e-commerce, from meeting customer expectations to optimizing operational costs.

One of the biggest benefits of having an agile supply chain is that it enables you to consistently meet customer demand around fast, affordable shipping, despite fluctuations in order volume.

However, to meet ever-changing market demands takes deliberate supply chain planning and execution. To build supply chain agility; you have to consider different ways to ensure you can meet customer expectations despite potential disruptions or unexpected changes in market demand. Supply chain efficiency is what will establish agility, and it's important to constantly look for ways to make your supply chain leaner. By streamlining supply chain processes, you are able to improve efficiency, reduce human error, and save time and money in the long run. An effective way to streamline processes is to introduce automation to reduce manual work. Though automating time-consuming processes such as order processing and automated shipping, doesn't necessarily replace the need for human effort, it does help you streamline your operations and increase productivity. Some businesses even implement warehouse automation using their own homegrown technology and tools. Customers expect fast, consistent, and reliable shipping.

These expectations have led to the rise of on-demand logistics, which involves the ability to expand customer reach geographically and fulfill orders across multiple channels quickly.

To meet customer expectations by building an agile supply chain requires a robust distribution network, flexible fulfillment solutions, and the latest technology that enables speed and

improves order accuracy. Alertness' refers to the ability to quickly identify changes, opportunities, and threats.

It's important for online retailers to be able to quickly detect and react to any changes (good or bad) throughout the supply chain. This involves identifying changes in the market ahead of time, even how competitors are approaching the market, and keeping an eye on the industry as a whole.

Staying alert protects an online brand from losing out on sales or offering products that are no longer in demand. This might mean it's time to discontinue certain items from your product line or find ways improve your shipping strategy. By offering high-demand products and fast delivery, you are more likely to build customer loyalty and continuously meet profit goals. While 'alertness' allows a business to be proactive, 'accessibility' refers to the amount of supply chain visibility you have. And the amount of visibility you have relies on real-time data. For example, having access to real-time data and insights into past historical data make it easier to forecast demand, allocate inventory efficiently, and find ways to improve the fulfillment and shipping process. Decisiveness' refers to the ability to make informed decisions. As your supply chain grows, the harder it is to make informed decisions in an efficient manner. However, implementing supply chain technology that automatically records data throughout your supply chain can make it easier for you to be proactive and make the right decisions based on the data. For example, ShipBob's technology includes a merchant dashboard with an advanced data and analytics reporting tool, which provides visual insights to help with everything from year-end inventory reporting, to better supply chain management and decision-making. With the right technology in place, you can easily record and access data and improve supply chain planning without ever slowing down operations. Swiftiness' refers to the ability to implement changes efficiently.

It's one thing to be able to identify changes and ways to improve, it's another to be able to implement changes quickly. As you build your supply chain, make sure you leave room for supply chain optimization. By doing so, you can focus on making small incremental improvements in a consistent manner to reduce inefficiencies and save on overall costs whether it's slowly expanding into additional fulfillment centers or diversifying your carrier network. Flexibility' refers to the ability to modify supply chain operations based on necessary changes and decisions made. Being able

to amend and adjust operational tactics efficiently is important for all supply chains as it provides more flexibility and enables growth. For instance, working with multiple manufacturers or suppliers can help you meet customer demand, introduce new product items based on popularity, and ensure enough inventory is in stock at all times. Another way to stay flexible is to partner with a 3PL like ShipBob that provides operational infrastructure and technology to easily expand into new channels, regions, and fulfillment center locations.

II. LITERATURE REVIEW

Organisations and companies are facing high pressure to improve the effectiveness and efficiency of the supply chain, as a strategy to deliver the best value to their customers within the shortest time possible. The effectiveness of the supply chain is becoming an important tool for companies to remain competitive. Heikkilä (2012) and Ellinger et al. (2012) explain that the competitive advantage of an organization over the rivalry in the market depends heavily on its ability to effectively handle the multiple challenges to rein in enhanced product quality, cost, and excellent customer service levels.

A very compelling reason for this position is attributed or connected to the fact that the competition in the market today is being waged across or between supply chains, and not just confined between organizations anymore. Heikkilä (2012) and Ellinger et al. (2012) add that the customers are significant stakeholder's business organizations and their happiness and satisfaction should remain a top priority for management. Customer satisfaction and loyalty have become subjects of great interest to organizations and research individuals because of how they influence not only the performance of an organization but also its profitability and the overall bottom line.

The level or extent of service quality is connected to customer happiness, which is a key ingredient for customer satisfaction and loyalty. Heikkilä (2012) and Ellinger et al. (2012) further explain that meeting the pre-purchase expectations of a customer is a significant aspect of keeping them satisfied. The supply chain relationship plays such a vital role in achieving customer satisfaction as one of the major goals of most business management.

Supply chain management systems help to plan, implement and control the operations of the supply chain to ensure that the needs and demands of the customer base are met and exceeded in some circumstances. According to Jacobs, Salisbury, and Enns (2013), Ellinger et al. (2012) and Heikkilä

(2012), supply chain management coordinates the flow of materials, finances, and information between and among all those participating in the business from the manufacturer to the final user of the product or service. Heikkilä (2012) further add those customer relationship strategies and activities can generate organizational success in supply chain and distribution management efforts as well as its overall performance. The success of an organization's supply chain management encompasses integration of customers at the downstream and integration of suppliers at the upstream, considering that each of these entities in the chain is a customer and a supplier at the same time (Laosirihongthong, Adebanjo Choon Tan, 2013; Jacobs, Salisbury & Enns, 2013; and Kibbeling, Van Der Bij & Van Weele, 2013). In the competitive business environment, Heikkilä (2012) explains that having better relationship management with the customer base is significant for the success of the organization.

Having better relationships with business partners like suppliers and customers play a significant role in ensuring the success of the supply chain. The ability of supply chain has an influence on customer satisfaction and shareholder value. In a study titled "The influence of supply chain management competency on customer needs and satisfaction and shareholder worth" Ellinger et al. (2012) look at how the relationship between supply chain management and customer satisfaction can be derived from the performance of an organization.

Supported by Jacobs, Salisbury, and Enns (2013), Ellinger et al. (2012) explains that supply chain management plays a critical role in the creation of value for the shareholders by influencing customer loyalty and satisfaction and a key driver of organizational financial and operational performance. However, Jacobs, Salisbury, and Enns (2013) explain that since supply chain management affects each of the key drivers of firm financial and operational performance, lack of appropriate metric for quantifying the influence or impact of supply chain management restricts organizations from optimizing their supply chain models.

The purpose of the study by Ellinger et al. (2012) was to address the existing gap between supply chain competency and firm performance by examining the influence of supply chain management competence on two vital organizational performance metrics: shareholder value and customer satisfaction. Supply chain management competency is described here as a means through which firms can create competitive

advantage but it must also be noted that few business enterprises have highly competent supply chain management systems. According to Jacobs, Salisbury and Enns (2013), supply chain management competency's primary function works to integrate between and within supply chain member organizations. The ability of an organization to create higher levels of customer satisfaction is considered a significant differentiator and therefore has become a key aspect of business strategies for improved organizational performance. Jacobs, Salisbury, and Enns (2013) and Ellinger et al. (2012) explain that customer satisfaction is a measure, which looks at how the services and products offered by the organization are meeting or exceeding the expectations and demands of the customers, and the supply chain plays a massive role in this.

Objectives of the study

The main objectives of the study is to understand the importance of supply chain agility on customer satisfaction. To achieve the main objective of the study the study highlights some specific objectives that can be in the following manner.

- 1) To find Customers satisfaction towards supply chain agility of different E-Retailers.
- 2) To find the fastest supply chain.

Scope of the study

The study covers scenario of current supply chain agility of different companies.

Limitations of the study

A few difficulties were faced in organizing this study. An avid effort was used to conduct the study to bring a reliable and effectual result despite of that exists some restraints, which as a hurdle to conduct the study.

- 1) Duration of the study was very short
- 2) Detailed analysis of literatures and published works could not be made due to time constraints.

Methodology of the study

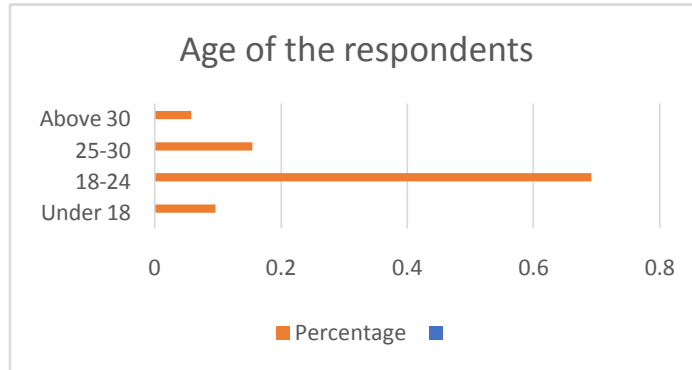
For smooth, unambiguous and bias-free study, this was made using secondary sources to maintain the authenticity as well as to reflect the customer's perspective in this paper. This study also involves the impact of supply chain agility on customer satisfaction so to do an in-depth analysis and to know the feedback of the customers and their loyalty towards the company and also to know the competitors. The report will be made through

the questionnaire and the responses to it, by visiting to the official sites and gathering information from

already published papers present on internet.

III. DATA ANALYSIS AND DATA INTERPRETATION

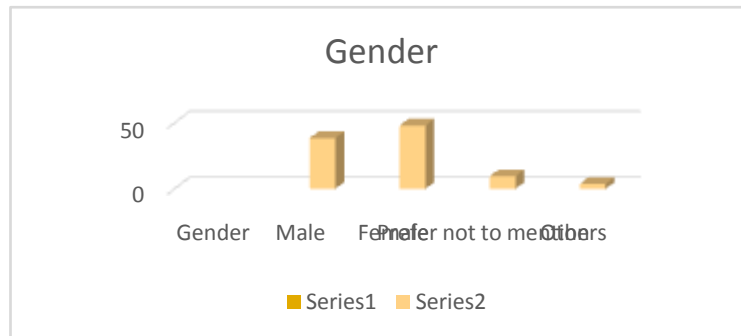
Figure 1



The particular questionnaire has been formed to understand about the delivery experience of different persons. Data analysis allows understandings different patterns and associations between variables. Here 52 respondents were taken

and it was observed that there were 69.20% respondents who were of 18-34 age, then comes the respondents who were of 25-30 age who were 15.40%, 9.60% were of under-18, and above 30 there are 5.80%.

Figure 2



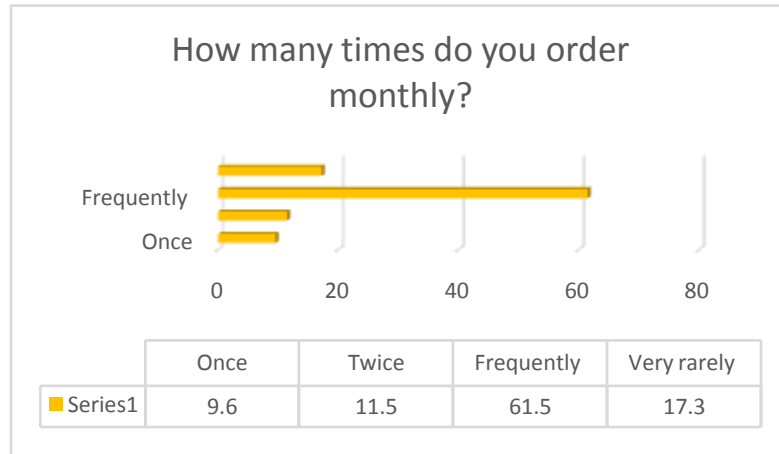
It was found that 38.5% people out of the total respondents were male, and 48.1% respondents were female, 9.6% of the respondents have chosen prefer not to mention, and 3.8% are others.

Figure 3



In the pie chart it clearly says that the majority of the people have ordered something which includes delivery services which is 90% , and only 10% people says that they haven't experienced the delivery services yet.

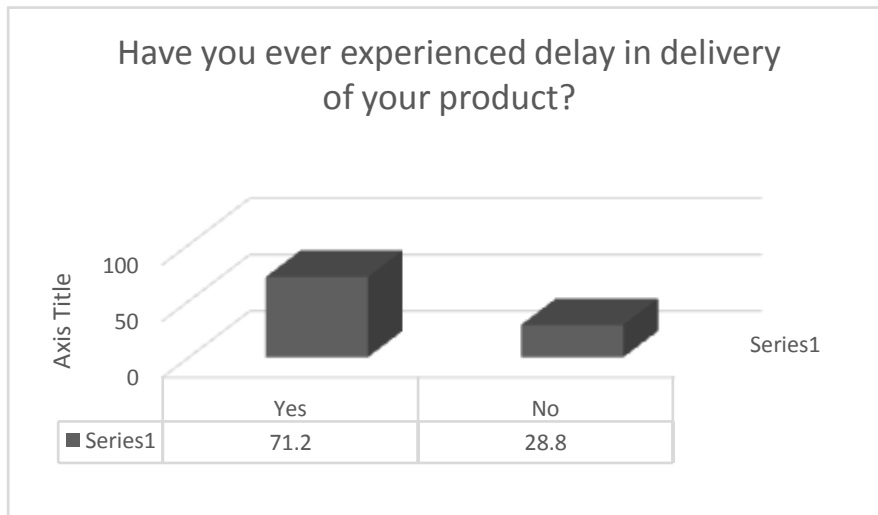
Figure 4



This data shows that how many times do a person order monthly and maximum respondents told that they order frequently which is 61.5%, 17.3 % of respondents told that they order very rarely, almost

11.5% people said that they almost order twice in a month , and only 9.6 % people told that they order once in the month.

Figure 5.

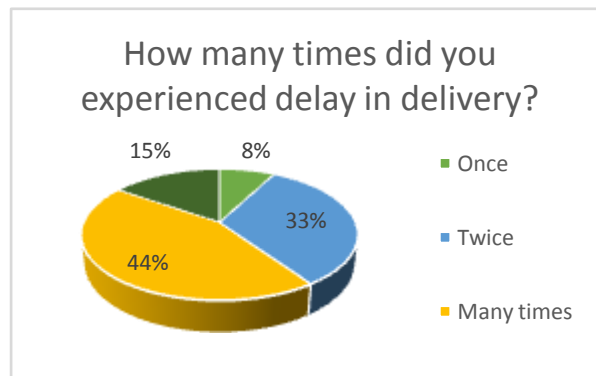


So this is the data which shows that the respondents have experienced delay in delivery of products or not and majority of people agree to the fact that yes they have experienced delay in the

delivery services which is almost 71.2% and only 28.8% people said that they haven't experienced delay in delivery services.

Table1

Count of How many times did you experienced delay in delivery? *	Column Labels				
Row Labels	Many times	Never experienced	Once	Twice	Grand Total
BlueDart	6	1		8	15
Ekart	6	12	1	6	25
Gateway distriparks	1	1		1	3
Transport corporation of India	4		2	2	8
(blank)			1		1
Grand Total	17	14	4	17	52



The table shows that the number of delays faced by different people according to the e-commerce platforms they have chosen. And according to the table we can see that most people have experienced delay in case they have chosen Ekart as their delivery partner which is directly the delivery services of flipkart.

This data is collected to know the frequency of number of times a person have

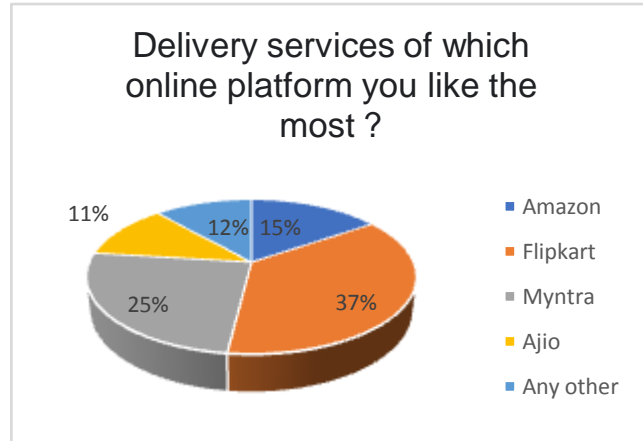
experienced delay in delivery services. And maximum people said that they have experienced delay in services many-times which is 44%, then comes the people who said that they have experienced delay twice till yet,

And 15% people have said that they have never experienced delay in services, and only few said that they have experienced once in delay services which is only 8%.

Table2

Count of Delivery services of which online platform you like the most ? *	Column Labels					
Row Labels	Ajio	Amazon	Any other	Flipkart	Myntra	Grand Total
BlueDart		4	2	3	6	15
Ekart	3	1	3	13	5	25
Gateway distriparks	2		2			4

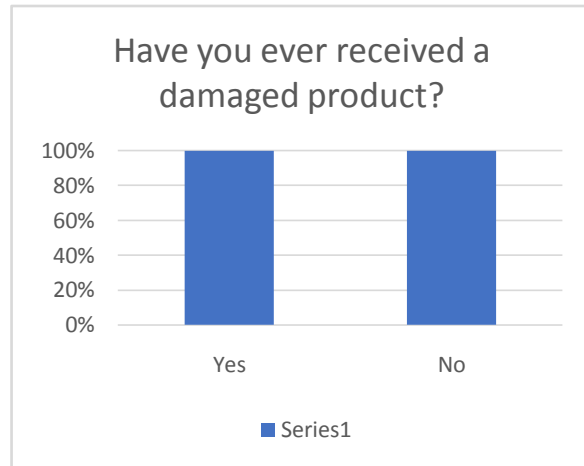
Transport corporation of India	1	2		3	2	8
Grand Total	6	7	7	19	13	51



This figure shows that which online platforms delivery services you like the most and maximum people said that they like ekart which is logistics of flipkart and the number is 37% ,

secondly about 25% people said that they like myntra , followed by AJIO and Amazon which is 11% and 15%.

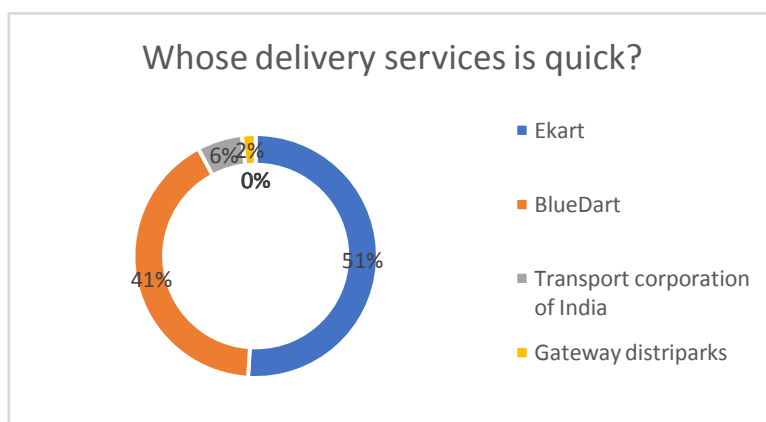
Figure 8



Next questionnaire was prepared to know that if because of delivery process they have ever received damaged products and maximum people responded that yes they have received a damaged product which is 53.8% and 46.2% people said that

they haven't received any kind of damaged products till now.

Figure 9



This figure shows that whose delivery services are quick and 51% people have told that E-kart are the fastest among all, followed by BlueDart

which got 41.2% positive responses, then transport corporation of India got 6% support, and lastly only 1.8% people said that gateway distriparks are quick.

Table 3 - Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
AJIO	13	4.00	1.080	.300	3.35	4.65	2	6
AMAZON	13	4.15	1.772	.492	3.08	5.22	2	7
FLIPKAR T	13	5.54	.967	.268	4.95	6.12	4	7
MYNTRA	13	4.08	1.441	.400	3.21	4.95	2	6
Total	52	4.44	1.461	.203	4.04	4.85	2	7

Table 4 - ANOVA

Ratings	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.981	3	6.994	3.821	.016
Within Groups	87.846	48	1.830		
Total	108.827	51			

Table 3 and 4 shows the result of one way ANOVA for knowing whether the ratings provided by the consumers for supply chain agility of different e-retailers are same or different. From the above table it can be seen that mean ratings for flipkart is different than other e-retailers. ANOVA result shows a significance value of 0.016, it refers that the mean ratings are not the same. There is a significant difference between the mean ratings

provided by the consumers for supply chain agility of different e-retailers.

IV. FINDINGS

1. The study found that maximum people have at least ordered something which includes delivery services, as this is a digital age in which we are into it there is more usage of

internet and ultimately more people are introduced to the e-commerce platforms.

2. The survey highlighted that there are more active people nowadays and because of which more people are ordering frequently every month.
3. The study also found that because of heavy activeness of people on e-commerce platforms indirectly or directly a hefty traffic is created because of which many people have experienced delay in their services.
4. The study also highlighted that because there is continuous shopping done in e-commerce platforms the number of delays received by people have increased gradually.
5. According to the research done most respondents agreed the fact that flipkart is the most liked platform by everyone followed by Myntra, Amazon, and AJIO.
6. The research found that as supply chain is very much vast in case of delivery services the chances of getting damaged products have increased.
7. According to the research we have found that E-kart have the quickest delivery services as they have focused mostly on supply chain agility and improvement of it followed by BlueDart whose delivery services are also good but not good as ekart and then followed by transportation corporation of India and Gateway distriparks.

V. CONCLUSION

After analysing the data itclearly visualise the fact that most people are aware of online platforms and are using them in their regular basis.And because they liked the e-commerce platforms according to different preferences they are doing multiple orders regularly. The study also says that as maximum are continuously ordering from the e-commerce platforms many of them are facing delay in delivery servicesand this problem have gradually increased. And as supply chain agility is one of the most important aspect of any company every company who want to do well in their long run they need to master the supply chain agility and as maximum people have said that the most accurate and fastest delivery services are of E-kart which shows that they have cracked the supply chain agility. Supply chain process is so delicate that if not done properly a organisation can loose their customers,and according to our researchmany people says that they have received damaged products.Future research may consider a comparative analysis of the two giants of e-commerce platforms by taking case studies of

supply chain agility from the two indifferent categories.

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